

THE
IMPACT
OF THE
DIGITAL WORLD
ON
MANAGEMENT
AND
MARKETING



THE IMPACT OF THE DIGITAL WORLD ON MANAGEMENT AND MARKETING

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1. INTRODUCTION





Grzegorz Mazurek, Jolanta Tkaczyk

Introduction

The turn of the 20th and the 21st century is considered to mark the onset of social changes referred to as the emergence of information society, founded on the basis of contemporary information and communication technologies and of its impact on the modern social and economic way of living. At present, the statement may seem to be hardly revealing, but it still – paradoxically – true and valid. The reason for the constant emphasis of the impact of the aforesaid technologies found in both popular and scientific literature appears to be their still unexplored potential and the growing influence thereof on the global social and economic space.

Many phenomena talked of well over ten years ago (such as e-market, e-commerce, e-customers) can still be regarded as novel, mainly because of their increasing importance and of the changes they induce – not only in the context of corporate operations and marketing management, but also with respect to the concept of business operations and the ways of creating value. A paradigm of network, a partnership-based cooperation between various entities, or sharing resources is slowly becoming a foundation for a discussion about the ways to manage an enterprise and about how enterprises can create value. The issue, however, takes on a slightly different meaning than only a few years ago.

The economic situation of today is determined largely by the growing significance of the virtual environment, built upon technology and fed with information, which changes the way enterprises operated and are managed. Businesses find it increasingly harder to define their own borders – structures and hierarchies become blurred, followed by appearance of temporary ‘creations’ related not to particular enterprises,

but certain projects to be undertaken. More and more activities are pursued outside the material sphere of our world, characterized by impermanence and elusiveness. What's more, the role and functions performed by market entities are changing as well. Value is now created in a non-material environment, which is elusive and hardly definable because it is expressed through relationships, knowledge, bonds, and cooperation. Both theoreticians and practitioners are looking for solutions that would make it possible to sketch the directions of organizational development in today's age, dominated by information and modern technology.

In response to the aforesaid transformations of the social-economic situation there appear new concepts and ideas of management, which are based on digitalization understood as e.g. a process of dynamic utilization of the Internet and modern ICT. This new approach triggers not only an evolution, but also a revolution in both theory and practice of marketing and management. These changes not only affect the instruments in use and the activities pursued, but also lead to emergence of new concepts of operation or forms of organizing, planning, and executing different undertakings. Virtual space has made it possible to 'deeply network' all such activities, leading to their physical detachment and acceleration. Digitalization involves appearance and creation of new possibilities and ways to act on the Internet, to render objects non-material, or to transfer some functions and methods of operation to the virtual environment.

It is necessary to stress that despite the major significance of strictly virtual projects – given all their advantages and merits, their appearance on the market does not have to necessarily entail a failure of the more traditional organizations, especially if they are able to make good use of the Internet and the digital world. Likewise, there is no guarantee and certainty that innovations may be offered only by strictly virtual entities. Again, a unique combination of traditional and virtual resources may produce a bundle of potentially great value and interest to customers.

The book aims to give an insight into the multifacetedness of changes the Internet – referred to here as the digital world – triggers in both theory and practice of marketing and management. The book has been divided into 5 subject areas, i.e. management, strategy, communications, brand, and consumer, all of which act as the main themes of subsequent chapters.

The first chapter, devoted to the impact of the digital world on management, starts with the role and significance of big data in the context of decision-making, moving on to discuss the idea of creating value, the potential behind the Internet of Things, and the major importance of privacy and personal data as seen from the point of view of both enterprises and customers. Another highly interesting aspect covered in the next article is the issue of determinants of value creation in ICT industry. We also present methods of managing organizations and projects through virtual teams, moving eventually to the matter of the role and significance of design thinking in management.

The second chapter focuses on the impact of the Internet on building organizational marketing strategies. The articles included therein discuss topics like: new tools and trends in acquiring data in marketing research (neuromarketing, eye tracking), the importance of the Internet in building business strategies and marketing communications, and marketing automation as not only a new marketing method, but also a novel holistic concept of pursuing marketing campaigns. This is followed by a closer look at the topic of affective computing and a presentation of interesting findings concerning the use of social media among small enterprises.

The Internet has considerably changed the way we communicate – conventional, one-way communication has been replaced with symmetrical and social communication, and the information exchanged between various entities does not only carry value, but is a value itself. And this is what the third chapter of the book focuses on. It opens with a discussion on the challenges marketing communications faces in the Internet era, effective and efficient utilization of the most popular social network platform – Facebook, and the ways in which information and innovation spread across social media. An interesting topic explored in the chapter is surely the aspect of motivation that engages social media users, or the ways of taking advantage of websites in creating and shaping user experience.

Digital world wields an immense influence on brands. It is a ‘place’ where new contemporary market leaders are created (Google, Facebook, Yahoo, Twitter, and so on), but it also changes the way we perceive brands in general and the way we build them. The first text included in this part of the book is devoted to the issue of personal brand building using LinkedIn – a powerful recruitment and professional networking tool. Further on, we move to the impact of mobile applications on brand building. Then, we explore the matter of creating content on the Inter-

net and involving users in the process, to proceed to a presentation of findings of a very interesting research concerning creating food brands on the Internet.

The final chapter discusses how the digital world changes consumer behaviour. The first text presents findings of studies concerning the perception of e-commerce among Poles and Germans. This is followed by a presentation of a tri-factor model of behaviour of e-consumers in Poland. The chapter continues with an article devoted to the issue of changes in the process of making purchase-related decisions induced by utilization of contemporary communications technology. The next article provides a deeper insight into the challenges faced by enterprises trying to reach digital consumers. The chapter ends with an interesting text covering findings of studies on utilization of modern Internet technologies in the context of consumer behaviour on the cultural market.

We would like to take this opportunity to thank all 32 authors and co-authors of the texts included in the book. They make a wonderfully diverse team of management and marketing science enthusiasts coming from different countries and representing different universities, who have devoted their time and put a lot of effort to contribute with fascinating and engaging content. The book itself is also an example of presenting knowledge, research, opinions, and viewpoints of both world-famous professors and scientists and young academics, who are just at the stage of striving for academic titles and degrees. They are all people who have at least two things in common: scientific interests in the area of virtualization of management and marketing and a willingness to contribute to a publication that will offer compressed knowledge about how virtual environment can affect the principles governing competitive markets, instruments, marketing tools, different market entities, and whole corporate strategies - including the ways of managing organizations and enterprises.

We would also like to thank the reviewers of this book, Prof. Lechosław Garbarski and Prof. Sławomir Smyczek, for their insightful feedback and suggestions that have certainly improved the quality of the book.

Last but not least, we would like to stress that it would be impossible to publish this work without the support of the EEA and Norway Grants. *The impact of the digital world on marketing and management* is supported by a grant from Iceland, Liechtenstein and Norway through the EEA and Norway Grants and co-financed by the Polish funds, and is an outcome of a big three-year project entitled Cyberman – Real manage-

ment in virtual reality, which has also made it possible for Kozminski University to launch an innovative Master's-level specialization – Management in virtual environments (www.emanagement.kozminski.edu.pl); another contribution of the project includes co-financing of studies with the said specialization, thus benefitting a group 40 students from all over the world (from Saudi Arabia, Australia, Austria, Belarus, France, the Netherlands, India, Germany, Poland, the USA, Turkey, Turkmenistan, Italy, and the Ukraine) pursuing this specialization; furthermore, another outcome of the project involved opening of Cyberman Research Centre – an interdisciplinary research centre whose mission is to pursue research and scientific activities, as well as to promote the latest findings in the scope of the impact of the Internet and ICT on marketing, management, economy, and the society (www.cyberman.kozminski.edu.pl).

Wishing you a pleasant reading experience, we hope this book will become both a source of inspiration to scientists, students, and business professionals, as well as an aid in understanding the impact of the digital world on the management and marketing of today.



Andreas M. Kaplan

O Brave New World That Has Such Creatures in: How Digital Media Shape Corporations, Organizations, and Society at Large

In a time where, according to business press, YouTube reaches more people in the 18–49 age segment than TV (*International Business Times*)¹, many young consumers choose messaging applications like WhatsApp over email, which now has a flair of formality and outdatedness, (*The Mercury News*)², and 58% could not go more than a day without checking their mobile phone while 72% could easily live a day without talking to their spouse (*The Sun*)³, it is no longer necessary to argue that the Digital World has shaped Management and Marketing in fundamental ways. While in the early days new technologies and social media mainly had an impact on companies (Kaplan and Haenlein, 2010) – look at the entertainment industry as a prominent example (Kaplan, 2015; Kaplan and Haenlein, 2012) – they nowadays also impact other sectors such as education and even public administration. The objective of this brief essay is to outline some of those evolutions and to give

¹ <http://www.ibtimes.com/youtube-says-it-reaches-more-viewers-18-49-tv-thats-not-whole-story-2365728>.

² http://www.mercurynews.com/breaking-news/ci_29686073/studies-show-young-people-choosing-messaging-apps-over.

³ <http://www.thesun.co.uk/sol/homepage/news/6915891/Public-lost-without-their-mobile-phones.html>.

a first glance how fundamentally these new forms of communication influence our daily lives.

Impact on Companies – Big Data

Big Data is arguably one of the most talked about topics among managers today. It is generally characterized by three characteristics, each of which result in a unique set of challenges for companies: The first one is *data volume* which today can reach unprecedented levels: according to some estimates the volume of business data doubles approximately every 1.2 years.⁴ The second one is *data velocity* which refers to the speed of change in which data is updated or newly generated – a phenomenon particularly visible when looking at the abundance of data that mobile devices generate about consumers and their movements (Kaplan, 2012). And the last one is *data variety* which describes the fact that Big Data is not only available in forms of figures but also as pictures (e.g., on Instagram), videos (e.g., on YouTube) or text (e.g., on Twitter). Firms who want to make use of Big Data not only need to face technical issues (such as finding appropriate ways of storing data and managing the input/output flow) but also statistical ones since classical techniques can no longer be applied due to the larger sample size and unstructured format of input information.

Three questions will likely shape this debate over the coming years. The first one are issues related to privacy. How do consumers perceive data ownership and privacy in a time of Big Data? How does the market punish firms who do not respect these implicit rules of conduct or, even worse, who are subject to data breaches and leaking? And how can firms remain ethical when operating in this space, for example by maintaining and updating their own presence on Wikipedia (Kaplan and Haenlein, 2014). Second, which analysis algorithms should be used for Big Data analysis? While there are many success stories of companies using Big Data for targeting (e.g., the US supermarket chain Target who supposedly can estimate based on purchase pattern whether a customer is pregnant or not), there is much less information on the misclassification rate. Which ways do exist that allow to extract knowledge from Big Data

⁴ <http://www.unified.com/blog/2015/03/12/ustats-bytes-and-billions-10-stats-you-need-to-know-about-big-data>.

without making too many errors? And finally, how much Big Data is indeed necessary? Do firms need to store all input data generated by their operations or are summary statistics sufficient to draw meaningful conclusions?

Impact on Education – MOOC and Blockchain

Digital Media not only influence for-profit companies but also non-profit institutions such as universities, which have started to face a series of unique strategic challenges in recent years (Pucciarelli and Kaplan, 2016). The increasing emergence of online distance learning formats such as MOOC (Massive Open Online Courses) and SPOC (Small Private Online Courses) allow education providers to reach new targets far beyond what would have been possible before. While these forms of teaching might not be adapted to all types of student populations or teaching staff (Kaplan and Haenlein, 2016), they can generate significant benefits for all involved parties. Universities can increase flexibility, choice, brand awareness and cost while students can benefit from pedagogical innovation previously inaccessible to them. Providers such as “No-Pay MBA”, for example, offer the possibility to combine MOOCs offered by top business schools such as Harvard, Yale, MIT, and Wharton into a curriculum equivalent to that of a full-time MBA program, for less than \$1000. Many challenges arise for education providers in this new environment. Business schools in Europe, for example, have a unique cultural identity (Kaplan, 2014) that needs to be carefully shielded and maintained in such an increasing globalized setting.

Interestingly, it is not only the transmission of knowledge that is influenced by Digital Media but also the way in which those who have acquired this knowledge are certified. In future printed diplomas and certificates which are often cumbersome to store and difficult to replace when lost, will likely be replaced by digital versions stored in distributed blockchain databases. What started as a mathematical idea to generate electronic cash without the need for formal institutions (like central banks) and which resulted in the creation of Bitcoin (Nakamoto, 2008), can today easily be extended to other forms of information that need to be stored in a secure manner. Such information includes land ownership certificates (especially in countries where no central repository

of such information exists), but also possession of precious metals or, as in the aforementioned case, academic diplomas. The specific way in which blockchains are maintained and modified ensures that information stored in them is essentially free of being manipulated in a fraudulent way.

Impact on Public Administration – Connected Objects

On first glance, few fields might be perceived as so far from each other as marketing and public administration. Nevertheless, previous research has shown that there are many ways in which public administration agents can and should use marketing to increase overall welfare (Kaplan and Haenlein, 2009). It is therefore not surprising that digital technologies, especially the ones related to connected objects, are starting to impact public administration, governments and society at large on a local and global level. Cities like Bristol in the UK and Boston in the US already use systematically collected data to optimize waste disposal (e.g., by installing sensors in public trash bins), limit pollution (e.g., by triggering automatic discounts on public transportation when traffic reaches certain thresholds) and define health policies (e.g., by linking data on air quality collected through sensors on street lights with hospital admissions of respiratory diseases).

Since the scope of these activities and their impact on overall wellbeing is usually larger than in the aforementioned two cases of companies and universities, the risks tend to be larger as well. This most obviously relates to questions of privacy as highlighted before since the data available to public administration agents can be more sensitive than the one that firms have access to. But it has broader implications as well. In Boston, for example, car drivers can install an app on their smartphone that automatically detects potholes through the vibration in the car and gives feedback to the city council. If a sufficient number of alerts have been received street repairs will be triggered. But what if the people who own smartphones and install the app tend to be a specific group (e.g., live in certain neighborhoods, be particularly affluent or educated)? How to ensure that street repairs, which are financed by everyone, are not favoring those areas over others where this type of feedback is less available?

Conclusion

Market research has always been considered as a cornerstone of marketing strategy and market orientation can even be defined as the generation of marketing intelligence combined with disseminating this knowledge through the organization and acting on it (Kohli and Jaworski, 1990). Historically firms have always found it challenging to obtain sufficient information to base their decision making on and the focus used to be where to invest a limited budget to obtain the best possible information. Today this situation has changed fundamentally. Companies, universities and public administration agents find themselves confronted with a situation where too much (instead of insufficient) data is at their disposal. A simple viral marketing campaign (Kaplan and Haenlein, 2011), for example, can result in hundreds of thousands of comments, tweets and response videos posted by consumers. This paradigm shift has already started to impact decision making in fundamental ways and will continue to do so in future. It is still too soon to fully grasp the impact that this new digital world will have on management and marketing. But marketing ten years from now will likely be very different to what we know today.

References

- Kaplan, A.M. (2012). If You Love Something, Let It Go Mobile: Mobile Marketing and Mobile Social Media 4x4. *Business Horizons*, 55(2), 129–139.
- Kaplan, A.M. (2014). European Management and European Business Schools: Insights from the History of Business Schools. *European Management Journal*, 32(4), 529–534.
- Kaplan, A.M. (2015). Social Media, the Digital Revolution, and the Business of Media. *International Journal on Media Management*, 17(4), 197–199.
- Kaplan, A.M. and Haenlein, M. (2009). The Increasing Importance of Public Marketing: Explanations, Applications and Limits of Marketing within Public Administration. *European Management Journal*, 27(3), 197–212.
- Kaplan, A.M. and Haenlein, M. (2010). Users of the World, Unite! The Challenges and Opportunities of Social Media. *Business Horizons*, 53(1), 59–68.
- Kaplan, A.M. and Haenlein, M. (2011). Two Hearts in 3/4 Time: How to Waltz the Social Media – Viral Marketing Dance. *Business Horizons*, 54(3), 253–263.
- Kaplan, A.M. and Haenlein, M. (2012). The Britney Spears Universe: Social Media and Viral Marketing at Its Best. *Business Horizons*, 55(1), 27–31.

- Kaplan, A.M. (2014). and Haenlein, M. Collaborative Projects (Social Media Application): About Wikipedia, the Free Encyclopedia. *Business Horizons*, 57(5), 617–626.
- Kaplan, A.M. and Haenlein, M. (2016). Higher Education and the Digital Revolution: About Moocs, Spocs, Social Media and the Cookie Monster. *Business Horizons*, Forthcoming.
- Kohli, A.K. and Jaworski, B.J. (1990). Market Orientation: The Construct, Research Propositions, and Managerial Implications. *Journal of Marketing*, 54(2), 1–18.
- Nakamoto, S. (2008). *Bitcoin: A Peer-to-Peer Electronic Cash System*, <https://bitcoin.org/bitcoin.pdf>.
- Pucciarelli, F. and Kaplan, A. (2016). Competition and Strategy in Higher Education: Managing Complexity and Uncertainty. *Business Horizons*, 59(3), 311–320.

Artur Kurasiński

Video Takes the Lead

In 2011, a recognized American investor, Marc Andreessen, wrote an essay entitled “Why Software is Eating The World”, published in *The Wall Street Journal*¹, arguing that we were witnessing a change of the paradigm in technology. Software is becoming increasingly dominant in many areas of our life – even in some we would not expect to be affected so strongly by software, which turns the majority of them into working environments for programmers. Software is everywhere because we are surrounded by computer equipment, mobile devices, household appliances, and many different sensors, which all function on the basis of an operating system based on software.

In 2016, such thesis is neither controversial nor revealing – the amount of data and industries where programmers and engineers become their backbone grows year by year. But another big game-changer seems to be looming on the horizon – video content. It is fair to say that to some extent, every business will be a technological enterprise based on production and management of software.

But why is video, being just one of the many forms of expression in the digital world, growing to become such an important medium? What is the reason for the tremendous increase in the number of Internet users consuming content delivered in this form?

According to a report by Cisco, video content will account for 80% of the world’s total internet traffic by 2019.² What does it all mean to

¹ <http://www.wsj.com/articles/SB10001424053111903480904576512250915629460>.

² http://www.cisco.com/c/en/us/solutions/collateral/service-provider/ip-ngn-ip-next-generation-network/white_paper_c11-481360.html.

telecommunications infrastructure? Cable businesses and telecom and Internet service providers need to significantly improve the offered equipment capacity. Advertising agencies, brands, and marketers have to learn how to employ video content – as one of the most effective ways to reach audience – in their operations.

Video content consumers turn to YouTube for ‘how-to’ tips, log in to Facebook to browse through the latest news, and visit Instagram and Snapchat to view the videos shared by their favourite brands and influencers. In the USA alone, adults aged 18–34 watch more videos on YouTube than on cable platforms. All this offers completely new possibilities of interacting with and reaching new audiences, consumers, and customers. Let us take a look at the factors behind the remarkable success of video.

Social Media

At present, nearly 40% of the global population has access to the Internet. It is possible to make different predictions as for the time when everyone who wants to use the Internet is able to do it, but we should not underestimate the fact that almost half of the world’s population can use their devices to browse the global on-line resources. Including viewing video content.

But let us start from the beginning. It’s April 23, 2005. Jawed Karim, co-founder of an on-line file hosting service, is uploading a file to the server of his start-up. Jawed is waiting with his friend, Yakov Lapitsky, who filmed Jawed on their trip to a zoo, for the video to upload to see how it plays on-line. They don’t realize they’re making history at this very moment; they’re publishing the first ever video on YouTube³, a site known very little at the time.

Their work becomes soon noticed by top players and one year later, YouTube is acquired by a company known for the best search engine in the world – Google. YouTube founders receive a check for 1.65 billion dollars, which the industry press, bloggers, and investors refer to as “a completely absurd and incomprehensible amount”.

³ <https://www.google.pl/webhp?sourceid=chrome-instant&ion=1&espv=2&ie=UTF-8#q=me+at+the+zoo>.

People have been always fascinated with moving images. Since the time of cave paintings, through the era of Renaissance painters, and ending with the invention of camera in the 19th century, people have always wanted to record the reality surrounding them as faithfully as possible. With the arrival of modern digital photo cameras, video cameras, and now mobile phones equipped with amazing lenses, and with the reasonable pricing of mobile transfer, it has appeared that video is a natural stage in experiencing and saving memories in a digital format, so to speak. The barrier to enter the video world has never been as low as today. Another important ingredient of the revolution that lets video conquer the world step by step are social networking sites. Facebook, Twitter, Instagram, and the fully mobile Snapchat (designed as if to address the needs of the Millennials) are becoming places where billions of people exchange, share, comment, and store video files.

Smartphones

At present, over 50% of the traffic on YouTube is generated by smartphone users. When Steve Jobs showed the world the first iPhone in 2007, the telecom industry (among others) tore the concept of the Cupertino-based business to pieces. Steve Balmer tried to humiliate Jobs in public, holding Apple's phone, which didn't even have a feature to send an MMS, up to public ridicule. Nokia, Blackberry, Sony Ericsson – these were the companies considered business tycoons of the time, expected to rule the industry for decades to come. Nobody in the telecom and phone manufacturing industry suspected that the market would change completely in less than several years because of the preference of consumer who would vote with their wallets for a touchscreen-based computer called iPhone.

How have smartphones changed our lives? First of all, they've taught us to use applications and the Internet. Before the arrival of iPhone, mobile transfer services were very expensive, and many mobile technology users considered WAP to be the only right solution when it came to standards of accessing computers over a wireless network.⁴ Operators didn't believe that the access to the Internet could be a lure to purchase further services.

⁴ https://en.wikipedia.org/wiki/Wireless_Application_Protocol.

But this was until the time Steve Jobs followed up on the launch of iPhone with the “App Store”. In order to install any app, it was necessary to have access to mobile data. In order to use apps, play games, or listen to music, it was necessary to buy a data package that would make it possible.

Although it may be hard to believe, 1 MB of data used to cost even a few zloty 8 years ago. In 2011, the global volume of sales of mobile devices exceed the amount of sold PCs.⁵ Business commentators started using a term of “post-PC” to define the times when mobile devices would play a dominant part.

Global Effects

In 2010, Chris Anderson, the originator of the “TED” conference series, said that “what Gutenberg did for writing, on-line video can now do for face-to-face communication”, and stated that on-line video creators “may be about to launch the biggest learning cycle in human history”.⁶ Videos made it possible to initiate meetings and debates focusing on interesting products and technologies.⁷ During the Arab Spring, protesters used to record and upload videos showing the actual scale of protests, the actions of the police, and other details that could escape the Western reporters because of the difficulty in moving in the areas of riots and through the crowds. Apart from YouTube, the organizers of manifestations used other platforms, including Facebook or Twitter, to organize and coordinate their activities.

The government made occasional attempts to prevent such practice, aiming to block various social networking sites.⁸ In Syria, the government wanted to use video with records of demonstrations to identify and arrest rebels; YouTube turned out to work in favour of the rebels because in 2012, it started offering a tool to blur faces in the uploaded videos, which made it impossible to recognize people featured in such videos.

⁵ <http://fortune.com/2011/02/07/industry-first-smartphones-pass-pcs-in-sales/>.

⁶ https://www.ted.com/talks/chris_anderson_how_web_video_powers_global_innovation?language=en.

⁷ <http://www.nytimes.com/2008/10/26/business/26proto.html>.

⁸ <https://opennet.net/youtube-censored-a-recent-history>.

Video appeared also helpful to LGBT activists fighting for their rights⁹, to the West in the fight against terrorists from Al-Qaeda¹⁰; moreover, the format played an important part in the political debate between the candidates for US President¹¹, in the real-time transmission of the 2012 Summer Olympics¹², and has enabled businesses to secure new contracts and establish new partnerships in the context of marketing activities.¹³

Creators

In 2007, YouTube started a partnership programme making it possible to earn money on own content uploaded to the site. In 2012, there were 30 thousand partner accounts, and Forbes found that the best earning YouTube ‘content providers’ could make even 2.5 to 12 million dollars.¹⁴

Apart from the money earned through the partner program itself, YouTube filmmakers gain additional benefits from product placement and other ways of working with different brands. PewDiePie, a YouTuber with the biggest number of subscribers (44 million subscribers), is an example of a one-man-institution operating through YouTube, whose fame and recognisability can become an object of envy even among rock stars.

Apart from being a money-maker (with earnings estimated to amount to 7.4 million dollars)¹⁵, PewDiePie is an example of a typical influencer who has grown to become popular thanks to video content. A digital influencer who has media under their control at their disposal, ‘fuelled’ by their own content, does not have to be afraid they will become a flash in the pan, suffering the same fate as many TV stars or favourites of tabloids.

⁹ <http://www.sfgate.com/news/article/Dan-Savage-overwhelmed-by-gay-outreach-s-response-3171312.php>.

¹⁰ <https://www.youtube.com/watch?v=VanFYSGcstA>.

¹¹ <http://www.nytimes.com/2016/01/18/us/politics/transcript-of-the-democratic-presidential-debate.html>.

¹² <http://www.businessinsider.com/key-turning-points-history-of-youtube-2013-2?op=1>.

¹³ <http://www.nytimes.com/2008/02/05/business/media/05adco.html>.

¹⁴ <http://www3.forbes.com/business/the-worlds-top-earning-youtube-stars-2015/>.

¹⁵ <http://www.forbes.com/sites/michaelthomsen/2015/07/11/pewdiepie-doesnt-make-anywhere-close-to-what-he-should-be-making/#172929814a26>.

Influencers have a faithful community of followers whom they stay in regular touch with, which makes them different from celebrities from the era of traditional media, who used to become known when something spectacular happened to them – a divorce, a bar fight, or a new haircut. Influencers are not afraid of Snapchat, Facebook, or YouTube – they live for and thanks to the services and communities present there.

Marc Andreessen concluded his essay with the following words:

“Instead of constantly questioning their valuations, let’s seek to understand how the new generation of technology companies are doing what they do, what the broader consequences are for businesses and the economy and what we can collectively do to expand the number of innovative new software companies created in the U.S. and around the world. That’s the big opportunity. I know where I’m putting my money.”

It’s enough to replace the words “technology” and “software” with the word “video”, and we get a full vista of the future.

Titbits and Facts

- According to Ipsos, almost 60% of Internet users in the UK look for ‘how-to’ tips on YouTube, and 83% of people aged below 35 believe that YouTube is the right place to find anything you need to learn;
- According to Ipsos, 66% of UK consumers looking for information about some product using their phone, considered purchasing a brand they would not take normally into account exactly because they received the right information at the right time. Also, 23% of respondents discovered new products or brands by watching videos on-line;
- 34% of viewers watch videos when they are outside their home;
- 98% of people aged 18–34 admitted to using smartphones to watch videos;
- It was enough for Libresse to add its logo visible from the first frame in its TrueView commercial on YouTube to make the brand recognition grow by 300%. It made it also possible to avoid an increase in expenditure on the campaign and maintain user engagement at a satisfactory level;
- Since 2011, Land Rover has increased the digital share of its marketing budget from 15% to 37%, and watched sales rise by double digits

each year. Today, an impressive 15% of Land Rover’s sales come from the digital channel, and cross-channel marketing is taking a growing role. “Cross-channel digital marketing has become a cornerstone of our growth as a brand”;

- The growth in on-line display will be driven largely by increased spending on video advertising, Forrester said. For example, video advertising on desktop devices alone is expected to grow 21% annually until 2019, when it will contribute 54.6% of total desktop display ad revenue across the Web;
- An analysis of around 50 campaigns of brands featured in Fortune 100 ranking, and of category leaders running on Google Preferred (the most popular channels on YouTube) showed that 94% of campaigns drove a significant lift in advert recall (80% on average);
- It was found that 65% of adverts displayed in Google Preferred saw an increase in brand awareness (17% on average);
- Food lovers from Generation Y are a loyal audience – they account for a 280% growth of food channel subscriptions in the last year. They often view the content available in the subscribed channels when they’re not at home – a 75% of the increase in YouTube food viewership comes from mobile devices;
- Only in recent year the number of views of content related to food and recipes grew by 59%, and the social engagement (e.g. likes, comments, shares) across food channels rose by 118%;
- Pepsi Max brand’s Marketing Director says that switching from a TV-focused model to digital content has led to ROI growing by 43%;
- At the beginning of 2015, 69% of Internet users used mobile devices, while in February 2016, the findings pointed to 75% (mShopper2.0 “Polacy na Zakupach Mobilnych”, March 2016);
- 60% of millennials prefer to watch a company video than read a newsletter;
- 80% of millennials find video helpful during initial purchase research;
- Millennials are 150% more likely than baby boomers to comparison shop using video even in-store;
- 76% of millennials report following brands or companies on YouTube;
- 2/3 millennials lose interest in a video if it’s too promotional;
- Video now appears in 70% of the top 100 search results listings;
- 75% of business executives watch work-related videos weekly;
- 54% of business executives share work-related videos weekly;

- 65% of executives have visited a vendor's website after watching a video;
- Visitors who view videos stay on a website 2 minutes longer than those who don't;
- Homepage video usage is shown to increase conversion by 20% or more;
- Using video on landing pages can increase conversion by 80% or more;
- The State of Video Marketing 2016 report published by Wyzowl has found that 61% of responding businesses currently use video for marketing purposes. Additionally, 91% claim that they will increase or maintain their spending on it in 2016;
- Research showed that 84% of B2B marketers expected their video marketing budgets to increase within the next 12 months. About 83% believed that videos were effective in meeting content marketing goals;
- Through video marketing, 91% stated that they would like to increase brand awareness. About 69% said they wanted to accelerate lead generation, while 66% claimed that they wanted to position themselves as thought leaders;
- 84% respondents expect their video marketing budget to increase in the next 12 months;
- 83% respondents agree videos are effective in meeting their content marketing goal;
- 79% respondents use social media for distributing videos;
- 77% respondents say their customers prefer video content to text.

2. MANAGEMENT IN THE DIGITAL WORLD





Kevin Blasiak

The Business Value of Data: The Correlation Between Information Growth and Business Performance

Abstract

The paper investigates the business value of data and the current position of data within organizations, as data has become one of the driving forces in the business world. Data mining and analytics have become far more than business functions; they have become business differentiators, and an opportunity for organizations not only to cut costs and run operations more efficiently, but also to make use of a turning point for building a competitive advantage. A part of a successful implementation is accurate valuation of data, although it still not recognized by international accounting standards. As research shows, data itself and decisions based on high quality data do – in fact – lead to a better business performance, and to a larger-scale organizational success in the end. This highlights the many advantages to be taken into consideration when exploring the issue.

Keywords: business value of data, information growth, business performance

Introduction

Sun Tzu's *The Art of War* has been quoted repeatedly as one of the most influential books in business, with the most often quotation being "To succeed in war, one should have full knowledge of one's own strength

and weakness as well as those of the enemies”; we are now able to find the possibility to apply this wisdom to the sphere of data analytics and business performance management.

Business operations and supply chains are becoming increasingly complex, simultaneously with the growth of the number of possibilities of collecting and analysing data. At this point, we are able to store and analyse amounts of data incomparable to the storage capabilities of only a few years ago. Big data and analytics have become buzzwords in business and technology, triggered by the vast possibilities promised by advancements in this field of technology. An organization’s capability to store data and utilize it effectively in the decision-making process using various tools of data analysis has become a differentiator for organizations within the ability to build competitive advantage in an increasingly competitive environment.

Questions which remain are what factors influence the performance of an organization most, how data is analysed effectively, and how information is managed in an efficient way. As organizations invest millions into projects enabling them to extend their data collection and analysis capabilities, this research is to determine whether the amount of data collected and utilized has any direct link to the business performance of organizations. While IT spending has already been linked to more efficient operations (Senn, 1995), in this paper we will focus in particular on the data aspect of IT and namely on the extracted information which is in turn used in decision-making processes on various levels of a given organization.

In business performance management, this is of particularly increasing significance. Looking at data as part of a value chain that creates economic value for business, it influences financial results, creating therefore significance for all business owners and stakeholders. Data involves information-based assets (Waltho, 2010) of an organization, so the extent and form of its utilization is therefore crucial to every company’s success. Effective utilization and management of such assets, comparable to any other business asset, are the cornerstone of any modern successful business.

Data Usage Within Organizations

31 mid- and senior-rank managers with at least 5 years of professional experience have been asked to answer a 21-question survey investigat-

ing their attitude towards data in decision-making, as well as the position of data in their organizations for the purpose of this paper, which intends to evaluate the current use and function of data within organizations, as well to serve as an introduction into the topic. The respondents come mostly from the insurance (30%) and logistics & transportation (23.5%) industries, and are based mostly in Poland (35.3%) and Germany (23.5%).

The reporting tools and the general use of data have been widely accepted and established, and most managers claim to have good access to data and reports in terms of both scope and frequency. When evaluating the quality of reports and data, about half of the respondents indicated that the selection of metrics is the most important criterion in a report, followed by the issue of visual presentation of the results. Three-thirds of the sample population claim that more access to data and better-quality reports would make them able to make more informed decisions and thus increase the profitability of their organization. The grounds of their decisions are, however, mostly based on a combination of experience and hard facts (data).

Interestingly enough, most respondents indicate that their organization does not follow a data strategy (47%), or that they are not aware of a data strategy being in place (23.5%). At the same time, most of them wish for improvements to be made in the way data is used within their organization (88%).

We can assume that some sort of data analytics is utilized in day-to-day operations and decision-making of most organizations. However, most organizations, at this point, considering the limited scope of this research, do not follow a structured approach to data, to utilization of data, and to its value for the organization. It is rather considered to be part of the business infrastructure and not a competitive element of the organization. Nevertheless, at the same time a vast number of individuals consider the possibilities and advantages that can be gained from a more focused approach towards data.

Defining a Data Strategy & the Appearance of the Chief Data Officer

There is no doubt that data collection and its analysis in any form are essential for any business to become successful. This has remained un-

changed for decades, and organization all over the world have been taking advantage of insights of any kind of data that they have been able to collect. What is changing is the velocity, the veracity, and the variety – different kinds of data that we are able to store and analyse, as well as the sheer volume of data, thanks to the growing computing power of our systems. This has resulted in a need for specialized management functions to concentrate on data and information, extending the scope of responsibilities of the CTO.

Strategies are developed in order to create competitive advantage and to sustain superior performance (Porter, 1998), so it should come as no surprise, remembering that data holds immense value for business, that organizations have started establishing data and information strategies. As a result, the Chief Data Officer position has been created, but at this point in time, according to the primary research conducted for the purpose of this paper, the matter will be covered exclusively later on. The majority of the respondents said that their organization did not have a data strategy; it's also possible that individuals are not aware of the fact that a data strategy has been actually implemented.

In practice, the basis of a successful implementation of a data strategy within an organization starts with acquiring skills in the organization, which in turn make it possible to implement the designed data strategy overall. Doug Laney of Gartner, who kindly agreed to answer a few questions for the purpose of this research, splits data strategy into two fundamental parts. The first part is, in many instances already recognized by various US and internationally active corporations, hiring people with a specific skillset placed between IT and Business. These skilled specialists come with knowledge of big data technology and analytics, while maintaining focus on strategic business objectives of the organization.

This reflects very well the notion identified in research conducted by major consulting firms such as PwC and Gartner. The number of organizations that apply data strategies actively is extremely limited, though. However, one sign of the technological change that is happening within organizations of all kind is the increasing number of CDOs, which stands for Chief Data Officer. While the Chief Technology Officer (CTO) and, to some extent, the Chief Information Officer (CIO) were positions created to become established and respected roles within organizations, the CDO is a somewhat new role within the top management, involved directly in the development of data strategies.

Gartner estimates that by 2017, over 50% of all companies in regulated industries will have assigned a CDO in charge of data governance. This is, according to Gartner, a result of CEOs' increasing realization of the immense value that lies with data (Logan, Popkin and Faria, 2016).

The objective of the CDO role is relatively clear and outlined in a recent report by PWC, 2015:

- to enhance customer experience by delivering personalized products and services,
- to navigate shifting and growing regulatory demands, manage risks, and meet regulatory requirements,
- to drive innovation to enable disruptive change across customer, product, sales, and distribution channels,
- to reduce costs and redundancy that result from multiple isolated data programmes across lines of business.

The abovementioned second element of a successful data strategy, as outlined by Laney, involves implementation of data governance and defining data collection, processing, and analysis, as well as sharing the designed methods within the organizational framework (Savelloni, 2015).

The range of responsibilities includes also management of data architecture, which determines sourcing, integration, and consumption of data, aligned with the general strategy of a given organization. It also involves data analysis understood as the process of gaining information from the body of data collected by a given organization. However, as shown in the PWC research, the CDO role is still at its early stage of development, as 77% of financial institutions questioned indicated that the main responsibility of their CDO lied within the range of governance. Governance is the basis to enable organizations to drive value from the collected data.

Speaking in numbers, 31% of CDOs are responsible for data governance, data architecture and technology, and data analytics, while 41% are responsible for data governance and data architecture and technology. The majority of CDOs (77%) are currently limited in their responsibilities to data governance only. However, as indicated earlier, this is most likely about to change in the near future.

DDD: Data Driven Decisions and the Impact On Business Performance

The essence of applying a data strategy is the creation of competitive advantage, as well as the establishment of formal processes related to data and information management, with an ultimate aim to increase the overall business performance. This should in general lead to enhanced data quality, accessibility of data, standardized processes, and – eventually – resourceful data, with the intention to make such data become the foundation of business decisions. Going forward, we can take for granted that better decisions lead to better utilization of resources and, thus, to better end results.

A popular starting point for the development of models that describe the value of information in general is, according to Erik Brynjolfsson (2011), Blackwell's 1953 work on *Equivalent Comparisons of Experiments*. The said work points out that if a decision maker is able to determine the current state of the situation being given perfect information, the decision-making process becomes an optimization problem. In reality, however, this is rarely the case as decision makers strive to gain as much insight and information on a given situation as possible – to make a possibly most accurate decision. Furthermore, the more information is available to a decision maker, the more they are able to narrow down the possible outcomes of a given decision, eliminating the effects of information that would distort the decision-making process and lead to poorer decisions. Therefore, perfect information leads eventually to better performance.

The study “How Does Data-Driven Decision making Affect Firm Performance?” (Brynjolfsson et al., 2011) includes a profitability analysis of 179 large publicly traded firms.

The key independent variable of this study, Data-Driven Decision-Making (DDD), was determined using three questions in the initial survey that was conducted in the abovementioned 179 firms.

DDD was created by first standardizing (STD) each factor with a mean of zero and standard deviation of 1, and then standardizing the sum of each factor:

$$\text{DDD} = \text{STD} (\text{STD} (\text{use of data for creation of a new product or service}) + \text{STD} (\text{use of data for business decisions in the entire company}) + \text{STD} (\text{existence of data for such decision}))$$

In general, the results of the study suggest a positive connection between data driven decision-making and business performance of organizations, especially in terms of ROE and asset utilization. Furthermore, the results of the study suggest that DDD can function as an intangible asset which may be reviewed by investors in order to evaluate a given organization's performance.

Speaking again in numbers, companies in the industry-specific top three in terms of the use of data-driven-decision making were, on average, 5% more productive and 6% more profitable than their competitors, even after accounting for several confounding factors (Frick, 2014). While these numbers seem surprising, it all comes down to picking the right metrics for a given organization, and channelling the analytical capabilities into a direction that suits the company's ambitions.

Devaraj and Kohli (2003) have linked the actual usage of Information Technology within an organization to better performance. While the general opinion has been that a higher IT spending would in turn improve the performance of an organization, it is the actual usage and the efficiency of usage that is of greater significance for the organizations' performance along the line. Earlier studies did not compare the actual use of technology to business performance, leaving out the managerial aspect of introduction of IT systems into organizational framework.

In popular business press we can also find a variety of case studies and illustrations that highlight success stories of organizations after they improved their business performance through the use of databases and decision-based analytical tools. Furthermore, organizations that reported to intensify their efforts in business information collection and analytics to differentiate themselves from the competition are, according to Brynjolfsson, twice as likely to be top performers in their respective industries (Lavalle, Hopkins and Lesser, 2010). Organizations that have admitted to have improved their data collection and analytics efforts, which translated into improved business performance include well-known global organizations, such as the FMCG giant Procter and Gamble.

Looking at the Journal of Economic Perspectives from autumn 2000, computation was only at the beginning of making its way into businesses to significantly change the way business would operate and utilize the available data. Certainly, the computational capabilities were relatively limited back then compared to the possibilities offered now. However, the team of researchers working with Eric Brynjolfsson found that the

signs were clear that computerization had a significant impact on business performance. Especially when we take the relatively low financial input required to equip businesses with hardware and the resulting performance output into account. The study suggests considering the various intangible positive effects computation and the utilization of data has for business, which are reflected in improved customer convenience and tailor-made solutions based on more customer information available to organizations – apart from data acting as a means to understand business internal processes much better. Company case studies show that early adopters outperformed companies that developed such capabilities later, being ultimately able to build competitive advantage through innovation in the use of data analytics. Once the basic infrastructure of data operations is set, it is comparably easy to scale up and extend its capabilities.

Building IT infrastructure and focusing on improved data collection and analytics does not make a business profitable overnight, even if it is assumed that an organization is perfect at implementing IT into its framework and systems, as well as that data sets are available immediately. An empirical investigation into the impact of Enterprise Information technology adoption on operational performance led by Andrew McAfee (2002) pointed to a performance gap, contrary to the general view of improved performance after implementation of IT and data analytics units. The phenomenon of performance gap describes situations where after implementation of advanced new IT systems, the performance of an operational business decreases after an initial increase, creating a dip in performance level charts. This stresses once more, that data and technology itself may be regarded as valuable, but formation of a data driven culture and development of data skillsets are just as important.

Gary Cokins (2012) draws the same conclusion draws, revealing the importance of change management practices in organizations implementing new IT systems. Cokins furthermore links strategy to operations. Performance management, which includes integration of IT and data, reveals the effectivity of processes within an organization. In general, Cokins' work shows that organizations are usually successful in strategy formulation; therefore, performance measurement is directly linked to strategy execution. This makes perfect sense, going back to Devaraj and Kohli's work, suggesting that the actual real usage of IT, data, and information is crucial to generating value for organizations.

BPM & Data Value Chain

The realization that data gains value throughout a process, finally offering information that can be extracted to create real – financial – value for an organization, may be a breakthrough in determining the value of data. At a relatively early stage of the “big data evolution”, Ranjan and Bhanagar (2009) indicated that data mining, as a skill within an organization, may as well be regarded as a value driver. Considering their work, which found value drivers as the key to the success of a business, data mining as a value driver can greatly affect organizations’ performance. Business intelligence, defined as the owner of data mining skills, may therefore be considered as one of the key functions within an organization’s success and its value creation for customers. In this case, data mining (DM) is defined as a technique to help and find hidden and unknown information within a greater mass of data that an organization collects. Thus, data mining helps organizations understand their internal processes and their external environment better, aligning the key value drivers of the business.

The effects of data warehousing on decision performance, as studied by Park, imply that organizations maintaining a data warehouse outperform organizations that do not, or that only have partially implemented data warehouses. The difference between no data warehouse at all and only a partial implementation was found to be insignificant (2013).

Going deeper, Arora and Malik (2015) take a closer look at analytics, in particular at the key of data generation in order to derive business value from the data gathered.

What we find at the core of most approaches to data in business is the value that data brings to organizations. Michael Porter designed a well-known value chain, which is a concept that breaks down business activities into a set of activities that create value for business. Miller and Mork (IEEE, 2013) take this approach further and redesign the value chain for (big) data. The model consists of three stages with seven processes. Data discovery, including data collection and annotation, preparation, and data organization. This is followed by data integration and – finally – data exploitation. The final step adds value to organization by utilizing the available data through analysis, data visualization, and data-based decisions.

Miller and Mork find that data fragmentation is a significant obstacle in the process of creating value, mostly due to the fact that not

all shareholders within an organization contribute equally to the data collection process. Low data quality or inconsistent collection can distort data analysis results significantly and decrease the potential value of the available data in general. Therefore, it is suggested that data strategy, from discovery, collection, and integration on to its exploitation, be thoroughly planned and executed according to the plan. The results should be visible in the form of more efficient operations and reduced costs.

Neely and Jarrar (2009) call this model ‘performance planning value chain’, shortened to PPVC, following the same general approach to data collection, its analysis, and informed data-based decision-making. The key difference in their model is the stress on creating a hypothesis as the first step within the model, to determine the objective of the data analysis rather than to blindly analyse data by searching for clues within not pre-defined problems or issues. PPVC is therefore a tool in the process of finding solutions for known problems or performance improvement of existing processes. Application of the analysed data and performance insights are then the added value for stakeholders.

Infonomics: Information (Data) as an Asset

Models like the data value chain demonstrate how data is processed in organizations and how it creates economic significance to business. At the bottom line, it comes down to monetizing information that is gained from structured data collection and processing. However, information, gained from collection and analysis of data is currently not recognized as an asset according to international accounting standards such as FAS/IAS 38. Nevertheless, information holds immense value for any organization, even when it is not used. Therefore, it is necessary to investigate the real value of information for a given business, even though it might be not officially recognized as an asset.

An asset is defined as “any economic resources (tangible/intangible) that can be owned or produce value. Assets have a positive economic value” (American Institute of CPAs) or “a resource controlled by an enterprise as a result of past events and from which future economic benefits are expected to flow to the enterprise” (International Accounting Standards Board). According to these definitions, one might assume

that data and information may qualify as intangible assets, but looking at organizational balance sheets, such entry or valuation is nowhere to be found. The question remains whether information can be defined as an asset. One will surely fail to find information in balance sheets, and, by definition, information is not a consumable good and unlike other assets, it does have an exchange value.

At the core of infonomics we find data valuation methodologies that have been developed as a result of the increasing need for putting a price tag on data and being able to evaluate it as a variable relative to other objects within an organization. As argued by Doug Laney, the key valuation methodologies are to define the Intrinsic Value of Information (LVI), which helps to put an emphasis on the quality of information – in contrast to the availability of data outside a given organization. In the context of this paper, the Business Value of Information (BVI) plays a more interesting part, especially from an operational point of view as it determines the relevance of data to a specific business process. LVI determines the cost of replacing or restoring data and information if lost, which draws a connection to insurance of data and estimation of insurances sums. Coming back to the essence of this research project, the Performance Value Information (PVI) methodology highlights, in numbers, the worth of information to an organization, and how it contributes to reaching certain KPIs set by the management, ultimately defining the success of the company. It is supported closely by the Economic Value of Information (EVI), which is – in fact – the actual financial value of data minus all the cost of generation and acquisition of this data. The Market Value of Information (MVI) determines then the actual price tag of data, and is possibly the most interesting methodology for business partners.

There is no doubt that all of the variables used to determine the value of data from different perspectives are interconnected and may all together be used to determine the real value of data within a given organization. Confronting data and its value with real business value in numbers, it can also be said that the volume of data utilized within organizations does have a positive correlation with business performance. However, it cannot be generalized as the number of variables, such as the effectiveness of usage, the relevance of data, and its accessibility, play an important part in data valuation (Laney, 2011).

Conclusion

Data has become one of the key pillars of financially successful organizations. Regardless of the industry, corporations have integrated data and analytics in various form into their operations. However, while being essential to business and given that businesses are not able to exist in their current form without it, data is often not specifically valued as an organizational asset. As shown in interviews and surveys, most organizations were not yet able to create a data driven culture where data sits at the heart of every decision and operation. And this is still despite the fact that it has been proven by researchers such as Brynjolfsson that there is a positive correlation between data driven decisions and better business performance. As decisions are made based on information, data is the key enabler of sound decision-making and can serve as business differentiator and ultimately lead to the establishment of competitive advantage for any organization that is able to effectively implement a well-designed data strategy. Unused information is an expense. Leveraged information, on the other hand, is a valuable asset which may not be visible on the balance sheet as per accounting standards, but might still be expressed into real measurable numbers.

References

- Arora, D. and Malik, P. (2015). *Analytics: Key to go from generating big data to deriving business value*. IEEE First International Conference on Big Data Computing Service and Applications, March 29–April 1 (pp. 1–7). Oxford, UK: IEEE Computer Society.
- Blackwell, D. (1953). Equivalent Comparisons of Experiments. *The Annals of Mathematical Statistics*, 24(2), 265–272.
- Brynjolfsson, E. (2011). MIT, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1819486 (05.05.2016).
- Brynjolfsson, E. and Hitt, L.M. (2000). Beyond computation: Information technology, organizational transformation and business performance. *Journal of Economic Perspectives*, 14(4), 23–48.
- Cokins, G. (2012). *Making business analytics work: Lessons from effective Analytics users*, http://www.sas.com/content/dam/SAS/en_us/doc/whitepaper2/making-business-analytics-work-105809.pdf (05.05.2016).
- Devaraj, S. and Kohli, R. (no date). *Performance impacts of information technology: Is actual usage the missing link?*, <https://pdfs.semanticscholar.org/031a/8ebd24acae25120d4b06cc25e2cb2bc33a83.pdf> (05.05.2016).

- Frick, W. (2014). *An introduction to data-driven decisions for managers who don't like math*, <https://hbr.org/2014/05/an-introduction-to-data-driven-decisions-for-managers-who-dont-like-math> (05.05.2016).
- IEEE (2012). *Smart it*, http://www.hs-schmalkalden.de/Englmeier-p-790/_/ValueChainBigData.pdf (05.05.2016).
- Laney, D. (2011). *Infonomics: The economics of information and principles of information asset management*, http://mitiq.mit.edu/IQIS/Documents/CDOIQS_201177/Papers/05_01_7A-1_Laney.pdf (05.05.2016).
- Lavalle, S., Hopkins, M. and Lesser, E. (2010). *Analytics: The new path to value how the smartest organizations are Embedding Analytics to transform insights into action in collaboration with IBM institute for business value*, <http://c0004013.cdn2.cloudfiles.rackspacecloud.com/MIT-SMR-IBM-Analytics-The-New-Path-to-Value-Fall-2010.pdf> (05.05.2016).
- Logan, D., Popkin, J. and Faria, M. (2016). *First Gartner CDO survey: Governance and Analytics will be top priorities in 2016*, https://info.talend.com/rs/talend/images/WP_EN_TLD_Gartner_CDOSurvey.pdf (05.05.2016).
- Mcafee, A. (2009). The impact of enterprise information technology adoption on operational performance: an empirical investigation. *Production and Operations Management*, 11(1), 33–53.
- Neely, A., Jarrar, Y. and DeepDyve, I. (2004). Extracting value from data – the performance planning value chain. *Business Process Management Journal*, 10(5), 506–509.
- Park, T., Kim, H. and DeepDyve, I. (2013). A data warehouse-based decision support system for sewer infrastructure management. *Automation in Construction*, 30, 37–49.
- Porter, M.E. (1998). *Competitive advantage: Creating and sustaining superior performance; with a new introduction*. New York: Simon & Schuster Adult Publishing Group.
- Ranjan, J., Bhatnagar, V. and DeepDyve, I. (2009). Aligning value drivers with business operations by data mining for strategic advantage in business organisations. *International Journal of Value Chain Management*, 3(3), 316–330.
- Savelloni, M. (2015). *The Evolution of the Chief Data officer*, <https://www.pwc.com/us/en/financial-services/publications/viewpoints/assets/pwc-chief-data-officer-cdo.pdf> (05.05.2016).
- Senn, J.A. (1995). *The relationship between IT spending and corporate revenue*, <https://www.computer.org/csdl/proceedings/hicss/1995/6945/00/69450747.pdf> (05.05.2016).
- Waltho, D. and Higon, C. (2010). *Valuing information as an asset*, <http://www.eurim.org.uk/activities/ig/InformationAsset.pdf> (05.05.2016).



Ewa Frąckiewicz

Internet of Things: Marketing Aspects

Abstract

Nowadays, the Internet is not only broadly used, but it seems to be a natural and essential tool for both various types of organizations and their customers. Its constant development is manifested across many dimensions, including the type of devices connected thereto and the way they operate together. This has led to a significant shift from human-to-human communication to human-machine, or even machine-to-machine communication (Internet of things, IoT). The study presents the concept of IoT, including the areas of its application and the key issues related to the field of management and marketing on a strategic and operating level of business activities.

Keywords: Internet of things, companies' strategy, marketing issue

Evolution of the Global Network

The Internet, the origins of which date back to 1983, changes virtually all spheres of human activity in a way incomparably more significant to any previous information-related revolutionary phenomena (Table 1). The process of expansion of the global network can be expressed in the number of its users, the amount of the available information resources, the overall performance of the network, and the number of new solutions designed to be used with it. What is more, it is information that is created by technology – and the other way round (Castells, 2000, p. 70). This breakthrough is special in that the world has expanded, “stretched” outside the computer into the cyberspace. The extent of these changes

is definitely different from that of the changes taking place in earlier periods, which is reflected in e.g., shorter design cycles and product lifespans, dynamics of the number of acquisitions and mergers, price wars, competition in the area of quality, and a shift of the role of customers and their position towards companies.

Table 1. Information-related revolutions

No.	Revolution	Time	Place
1.	early forms of books	4000 BC	Babylon, Assyria, Sumer, Greece, Rome, China, India
2.	handwritten books	300 BC	Early Medieval Europe, China
3.	Gutenberg's printing press	mid-15 th century	Germany
4.	The Internet	the 80s of the 20 th century	the USA

Source: Frąckiewicz, 2010, p. 22.

At first, the Internet was used at scientific-research centres, and at some point, it was even forbidden to use it for commercial purposes. Another important step in its development was the arrival of the hypertext-based World Wide Web (WWW) space. The intended purpose of WWW was to assist and support the everyday work of CERN (*Organisation Européenne pour la Recherche Nucléaire*) employees, who used to work as a geographically dispersed team. This innovative solution contributed to a quick spread of the WWW among other professional and social communities, although it was based on a unidirectional transmission of information. As new Internet services emerged at the beginning of the 21st century, the term 'Web 2.0' was coined to refer to hosted services and social networking sites whose content was generated by users and let them interact with each other in a virtual environment. The said network expansion leading to inclusion of more and more services, devices, and systems led to appearance of the term of the so-called "ubiquitous Internet", which was to highlight how and where we use the available on-line resources (Kenny and Marshall, 2001, p. 121). Today we can see another 'generation' of the Internet, i.e. Web 3.0, being already in the spotlight, characterized by semantic processing of information by machines and devices. The IT and technical solutions attributed typically to Web 3.0 offer completely novel

conditions of data management, requiring new forms of economic activity. One of these solution is permanent on-line communication exchanged among not so much the users of the global network as among objects connected to this network themselves. Hence the term of *Internet of Things* (IoT) (Table 2). It needs to be underlined that IoT includes various types of objects we use on an everyday basis and which work and operate *on-line* – even if they have not been designed for this purpose.

Table 2. Description of three “incarnations” of the Internet

Qualities	The Internet	Ubiquitous Internet	Internet of Things
Medium	PC website	mobile devices	objects being a part of a global network
Access point	PC with a web browser	PDA wireless telecommunications interactive television digital wallet kiosks Internet customer service terminals	all objects featuring sensors, readers, chips
Customer's role	essential, initiator	active	active or passive, but necessary
Time and place of contact with customers	only when customers view WWW sites on their PCs	24/7, regardless of the place and the access point	24/7, regardless of the place, also without customer's participation
Type of customer	makes price comparisons before the purchase	anyone with an intermediate need, who will spend money to save time	time-saver, values comfort
Strategic mandate	building web sites, focus on the content of websites customization of websites waiting for customers to shop	focus on the context establishment of an agent to travel alongside the customer on-line being present wherever and whenever the customer is ready to make a purchase	context creating experience sharing knowledge, experiences, opinions
Marketing	communications and sales management: a new communications channel and a new sales channel	communication and sales management – regardless of the access point	demand management

Source: Kenny and Marshall, 2001, p. 121 and own work.

The significance of IoT for management process in general, and for marketing especially, is proven not only by the reach of the global network, measured by the number of users, but also by the number and type of devices and their features connected to the network. According to Cisco, there will be 50 billion objects connected to the Internet in 2020 (i.e. 2.7% of all products manufactured in total), and the IoT market will be worth almost 20 trillion dollars (Fabiszewski, 2014, p. S1). According to PwC, households in Poland will feature over 70 million devices connected to the Internet by 2020 (Fabianowicz, 2013, p. 42). IoT develops as both individual objects and complex and advanced systems. A good example would be intelligent cities, which usually feature a common communication network, and there is special software to connect sensors, chips, and markers to manage the local transportation network, plumbing system, power supply, etc. in order to achieve sustainable growth and provide their citizens with a high quality of life at the same time.

Internet of Things: Definition

The concept of the Internet of Things (or – Internet of Objects) appeared first most likely in 1999, introduced by Kevin Ashton, an expert on digital innovation from the Massachusetts Institute of Technology. However, as suggested by Whitmore, Agarwal, and Da Xu, the very idea of machine-to-machine communication (M2M) is not novel. They argue that IoT is another stage of evolution of the existing technologies, where the growing number of the devices in use, as well as the new types thereof, become interconnected via the Internet (Whitmore, Agarwal and Da Xu, 2015, p. 262). Their line of thought is that the Internet, by nature, is there to facilitate communication between users, servers, and routers. Although the thesis is quite true, it seems to oversimplify things to some extent. Such significant change as defining the product of communications medium with the change of the role of the customer as sender-receiver opens the door to completely new areas of business activities. Hence, it calls for a search of more adequate definitions.

Depending on the research perspective of the authors, the Internet of Things may be defined somewhat differently. According to Vongsingthong and Smachat, the Internet of Things is a global infrastructure

of networks, where single identifiable things and devices – both physical and virtual – connect with one another through intelligent objects, communication systems, and open opportunities (Vongsingthong and Smachat, 2014, p. 359). Działdowski defined IoT as “a set of all devices capable of network communication, and able, at least to some extent, to process the data transmitted over a given network, and which are clearly identifiable within such network” (Działdowski, 2014, p. 34). Ryu, Kim, Lee, and Song provide a more general, but an equally universal and practical definition of IoT, describing it as “a connection established between anybody, anytime, and anywhere” (Ryu, Kim, Lee and Song, 2012, p. 125–137).

Therefore, the notion of IoT comes down to being a system that ensures an omnipresent and permanent Internet-based communication between various objects, where human interference is neither necessary, nor needed. Today, this group of objects includes devices such as smartphones, tablets, laptops, sensors, and integrated circuits that can be installed with virtually each and every thing (e.g., packages, sales software, watches, and clothes). It needs to be emphasized that on the one hand, these objects are able to become aware of and analyse their environment. And on the other, they are able to organize themselves and cooperate to adapt to the changing conditions of their surroundings.

Hence, IoT works on the basis of several principles:

1. Each thing features a software element,
2. Each thing is connected to the Internet,
3. Each thing is able to transmit data,
4. Each thing features its own unique identifiable label (ID).

Areas of Application of IoT

IoT forms an intelligent infrastructure which facilitates taking advantage of certain benefits in the form of improved flexibility, reliability, and effectiveness of the performed tasks, ensuring increased security and precision thereof, as well as time- and cost-effectiveness. Hence it is common to find IoT applied across many areas, including especially (Whitmore, Agarwal and Da Xu, 2015, p. 265; Fabiszewski, 2014, p. S2):

1. transportation and logistics, or supply chain management, where IoT grants better performance of various processes thanks to automation and an-going update of the transmitted information,

2. power industry, where e.g., the amount of the produced energy is identified and adjusted to the changing market demand on an on-going basis,
3. construction industry, where IoT supports the development of new systems designed to build intelligent homes,
4. commerce and services, which involves e.g., management of parking spots, optimization of power consumption, on-going monitoring of selling slots,
5. motor industry, where the manufactured cars are equipped with geolocation devices, and systems to control the car' behaviour or to diagnose its condition on an-going basis,
6. other, e.g., health protection, where IoT is used to monitor patients' condition on an-going basis, water management, management of sports facilities, etc. (Table 3).

Table 3. Application of IoT by sectors

Service sector	Application group	Locations – examples
IT & Networks	public	cellular mobile towers, public data centres as mission critical buildings, together with servers/server blades, power supply systems and air conditioning
	enterprise	copiers, printers, franking machines as well as remote monitoring of PBXs, IT/data centre components and private network components
Security/public safety	surveillance	fixed surveillance (CCTV, Speed Cameras) as well as military security and radar/satellite
	emergency services	police, fire, ambulance services as well as car breakdown and regulatory services such as Homeland Security
	public infrastructure	flood plains, water treatment plants as well as climate-related and meteorological
	tracking	human (lone worker, parolees, etc.), animal, delivery and postal, "farm to fork" food tracing, packaging and baggage handling
	equipment	weapons, military vehicles, ships, aircraft and other gear
Retail	speciality	fuel stations, gaming, bowling, cinemas, discos and special events like concerts, racing and trade shows
	hospitality	hotels, restaurants, bars, cafes and clubs
	stores	supermarkets, shopping centres, as well as single site stores and distribution centres

Transport	non-vehicular	aircraft, trains, ships/boats and containers
	vehicles	vehicle telematics, tracking and mobile communications with cars, trucks and trailers
	transport systems	passenger information services, road pricing schemes, parking schemes and congestion charging
Industrial	distribution	infrastructure/supply chain
	converting/discrete	tanks, fabrication, assembly/packaging
	fluid/processes	
	resource automation	agriculture, irrigation, mining, warehouses, factory/plant
Health care & life science	care	Hospitals, Mobile POC, Clinics, Doctor Office
	in vivo/home	Home Monitoring Systems
	research	Drug Discovery, Diagnostics and Lab equipment
Consumer & home	infrastructure	wiring, network access and home energy management
	awareness & safety	home security and fire alarms, monitoring elderly (not clinical) and children
	convenience & entertainment	climate control, lighting management, appliances and entertainment
Energy	supply/demand	power generation, transmission/distribution, power quality and energy management
	alternative	renewable energy sources such as Solar, Wind, Tide as well as electrochemical
	oil/gas	applications and devices used to extract and transport these commodities
Buildings	commercial/institutional	shops and supermarkets, office buildings and government departments
	industrial	buildings housing factory processes

Source: Sector map M2M/IoT by Beecham Research, <http://www.beechamresearch.com/article.aspx?id=4>, access (12.08.2015).

Taking the above into account, it may be argued that application of IoT should be considered as oriented towards automation, monitoring, information, analysis, and control.

IoT in Business: Strategic Approach

IoT expansion turns products into intelligent interconnected objects which become more and more 'embedded' in the ever-expanding global

network. This, in turn, effects changes on organizations, on the way they operate, and on the principles they compete on the market. Porter and Heppelmann list 10 new strategic decisions companies face in a smart, connected world (Porter and Heppelmann, 2015, p. 99):

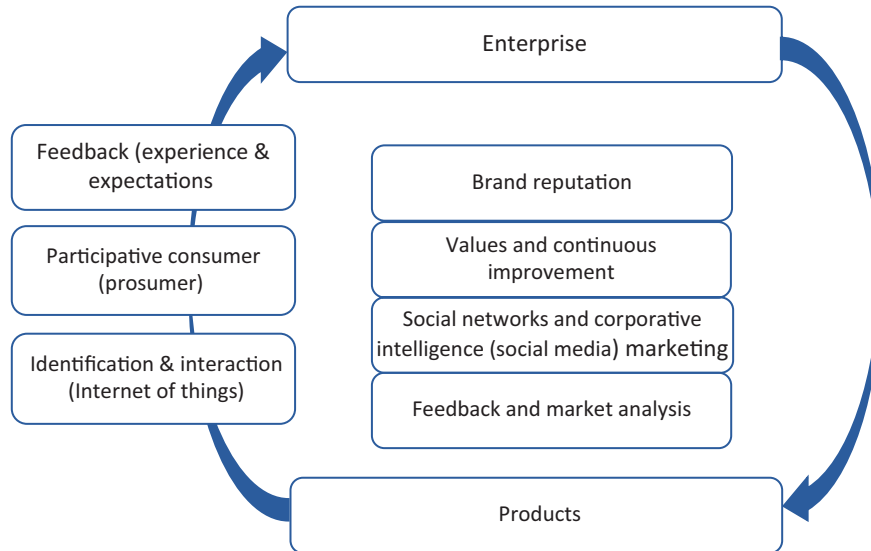
1. Which set of smart, connected product capabilities and features should the company pursue?
2. How much functionality should be embedded in the product and how much in the cloud?
3. Should the company pursue an open or closed system?
4. Should the company develop the full set of smart, connected product capabilities and infrastructure internally or outsource to vendors and partners?
5. What data must the company capture, secure and analyse to maximize the value of its offering?
6. How does the company manage ownership and access rights to its product data?
7. Should the company fully or partially disintermediate distribution channels or service networks?
8. Should the company change its business model?
9. Should the company enter new business by monetizing its product data through selling it to outside parties?
10. Should the company expand its scope?

As we can see, half of these questions concerns the way products should be designed and managed. This is crucial to the understanding of the idea of IoT in the world of contemporary competition, when products are very similar and price war is not always possible and reasonable from the point of view of the strategy of a given company. There are also further questions related to the way of shaping and delivering values significant to customers. According to Jara, Parra, and Skarmeta, a new dimension of marketing based on interaction with products is the so-called *participative marketing*. A link between products and company initiates the stage of identification and interaction thanks to IoT (Figure 1).

Customers use different media (smartphones, on-line platforms) to receive information about a given offer and present their experience and expectations in return. Ultimately, the feedback from active customers, given through Social Media combined with IoT, may be analysed to enhance the activities required from a business point of view in order to induce a positive impact on the customer. This positive impact is

induced through proper customer service and constant improvement of products, according to the needs and expectations of customers.

Figure 1. The flow between products and enterprise based on IoT



Source: Jara, Parra and Skarmeta, 2014, p. 999.

It is necessary to underline the novel possibilities manifesting themselves in provision of unique values and experiences. It is no longer expected that it is the customer who needs to learn how to use a certain product. It is the product itself and the information about this product left on-line by other customers that will offer the aid required. In exchange, the product provider will gain various information that will serve as the basis for further marketing activities.

In the area of marketing decisions, the biggest benefits of application of IoT are the following (Porter and Heppelmann, 2015, p. 104–106):

1. New ways to segment and customize; by gathering data directly from particular devices, the knowledge about the behaviour of the user of these devices becomes more in-depth, which makes it possible to profile these user in much more detail; companies receive information much faster than they would if they relied on traditional solutions like e.g., sales data or marketing research results.
2. New customer relationships – a product in the on-line world is means of delivering value to the customer as it acts as a platform that allows

companies to remain connected with their customers, to analyse their needs, and to monitor the level of their satisfaction.

3. New business models – with the IoT world being fully transparent, it is possible to plan other ways of paying per product use; moreover, an idea assuming that a company's goal of establishing and maintaining relationships with its customers is not to sell its products, but to actually care for their customers' success as this success will be reflected in the company's success eventually becomes more and more common (the so-called *win-win* strategy).
4. New sources of value – a product should constitute a part of a larger solution (ecosystem), which will make it a source of synergistic success, and deliver greater value to customer.
5. New options of after-sale service – in this context, we can point to a number of IoT-based improvements, including e.g., a range of possibilities to diagnose and repair devices remotely, solutions to prevent devices from becoming damaged (preventive service), various self-check/self-test functions, or features to let the owner fix their own device better and quicker.

IoT in Marketing: Operational Approach

IoT changes the role products play – products are now not just things owned by their owners as ICT constitute an integral part of these things. As shown by Porter and Heppelmann, a product connected to the Internet may monitor and transmit information about its condition and its environment, help gather data and create bodies of previously-unavailable information, and then use it to the benefit of the way it is developed and used. Second, users may control the way their products work by taking advantage of many implemented functions available. Users may customize many features offered by a given product. Third, a combination of these two approaches creates new opportunities for optimization, and this leads, in turn, to a full autonomy of products. In this new context, products may be both modified, personalized, and create from scratch according to the requirements of each individual.

The possibility of tracking the location and actions taken by customers lets IoT influence the means of contemporary communication as well. It is now possible to determine the location of potential customers in a precise and quick way, which then makes it possible to use highly-

customized content and to display it on a given personal device or on other devices found in immediate surroundings of a given individual. Thus, the Internet of Things may be analysed from two point of views.

IoT may become a solution focused only on automation of information exchange that occurs as a result of operation of certain software reflecting a pattern encoded by the producer. In such case, communication takes place bypassing active participation of the customer, and it may sometimes occur that the customer may be treated not as a subject of the process, but as an object that may be controlled. On the other hand, application of IoT promises a possibility to deliver new values of interest to customers. These values do not have to be directly connected to purchase of a given product, but they should rather be loosely related to shopping. For instance, an embedded IoT component may be used to send information about the popularity of a given product, about its origin, about the history of its brand, etc. to a potential customer's device. Particularly interested and engaged customers may be offered solutions letting them customize the offer.

The abovementioned approaches refer thus directly to R. Normann's logic of unbundling and liquification (Rogoziński, 2001, p. 11–13). Although it concerns relationships between service providers and customers, the analogy seems to be appropriate if we take the change of the nature of objects belonging to IoT, which are becoming more and more "packed" with additional functions, into account.

In its original form, the logic of unbundling implies that service providers take over any activities that may be troublesome to customers, who is not interested in the way these activities are performed, but in the outcome thereof. In the context of IoT, the principle may be transplanted to all activities which customers consider subjectively as bothersome and tedious, and as definitely too time-consuming. But while customers were somewhat left to deal with such issues alone in the past, today, properly-designed things may eliminate any troublesome activities effectively and efficiently, transferring them even entirely to the sphere of M2M communication.

The logic of liquification works in the opposite way, i.e. in this case, the service provider is interested in creating appropriate conditions to let the customer perform the relevant activities by themselves. K. Rogoziński notes that at first, involvement of service providers was manifested in various forms of organization or arrangement of special places supporting self-service. But over time, service providers started

perceiving themselves as providers of knowledge, organizers of trainings stimulating and ensuring correct self-service (technological self-service). This kind of approach in an IoT environment may lead to creation of conditions where customers are included in the process of offer development, thus becoming real co-creators of new values they find important and interesting.

IoT: Challenges in the Near Future

The Internet of Things is making constant and uninterrupted exchange of data and information come true, and so becomes commonly applied in various systems and areas. It is reasonable to expect that its further development will cover more and more spheres of our economic and social life.

Permanent communication between all “beings” regardless of time and place does certainly open doors to new opportunities for development, although today many of them may still be not known or explored. However, as rightly pointed out by Porter and Heppelmann, if IoT standards are implemented in an ill-considered and unskilful way, it may put the company at risk of failure related to (Porter and Heppelmann):

1. Addition of functions which customers will not want to pay for – the value of each such function may not lead to an increase in the costs borne by customers, nor may it make the use of a given product overcomplicated,
2. Underestimation of safety and privacy – companies need to take care of security of the transmitted and stored data, and of safety of the devices participating in the communication process,
3. Underestimation of future competitors, who may quickly change the rules and the scope of competition,
4. Delaying launching new solutions to the market and overestimating own capabilities in the scope of implementation of IoT.

The above list should be supplemented with risks arising from the amount and ease of collecting and processing of data. There surely is a big temptation to use the collected data according to the interest of the data owner. After all, it is possible to gather data about every customer since every person plays different roles in different life situations,

and therefore uses many different solutions in different contexts. A customer may be e.g., a resident of a “smart” housing development, an occupant of a “smart” apartment, an owner of a particular fridge, of a “smart” car, a marathon runner who uses shoes monitoring their shape and health, etc. Therefore, it is necessary that companies put more focus on:

1. the necessity to ensure safe data exchange,
2. protection of privacy of persons whose data may be a matter of concern,
3. the care for the way data is collected, stored, and shared with other parties.

The Internet of Things has been changing the current market situation for some time, forcing business to think of new strategies, where companies’ reaction should be real-time in order for them to be able to coordinate their activities efficiently and effectively. Competitive advantage will become more and more dependent on the abilities to use IoT in an innovative way, also – or perhaps mainly – in the area of products that take over the functions of communication.

References

- Castells, M. (2000). *The Rise of the Network Society*. Malden: Blackwell Publishing.
- Działdowski, A. (2014). Internet Rzeczy – wyzwania dla bezpieczeństwa. *Networld*, 7–8.
- Fabianowicz, B. (2013). Internet Rzeczy w natarciu. *Marketing w Praktyce*. 5(183).
- Fabiszewski, D. (2014). Internet (wszech)rzeczy motorem rozwoju gospodarczego. *HBR Polska*, 7–8.
- Frąckiewicz, E. (2010). *Nowe technologie informacyjno-komunikacyjne w marketingu przedsiębiorstw na rynku sieciowych powiązań*. Szczecin: Wydawnictwo Uniwersytetu Szczecińskiego.
- Jara, A.J., Parra, M.C. and Skarmeta, A.F. (2014). Participative Marketing: Extending Social Media Marketing Through The Identification and Interaction Capabilities From The Internet of Things. *Personal and Ubiquitous Computing*, 18.
- Kenny, D. and Marshall, J.F. (2001). *Contextual Marketing: The Real Business of the Internet*. In: N.G. Carr (Ed.), *The Digital Enterprise*. Harvard: Harvard Business School Publication.

- Sector map M2M/IoT by Beecham Research, <http://www.beechamresearch.com/article.aspx?id=4> (12.08.2015).
- Porter, M.E. and Heppelmann, J.E. (2014). How Smart, Connected Products Are Transforming Competition. *Harvard Business Review*, November.
- Porter, M.E. and Heppelmann, J.E. (2015). How Smart, Connected Products Are Transforming Companies. *Harvard Business Review*, October.
- Rogosiński, K. (2001). Samoobsługa czy usługa? Albo o wpływie nowoczesnych technologii na usługi. *Materiały Naukowe Akademii Ekonomicznej w Poznaniu*, 4.
- Ryu, M.W., Kim, J., Lee, S.S. and Song, H.M. (2012). Survey on Internet of Things: Toward Case Study. *Smart Computing Review*, 2(3).
- Vongsingthong, S. and Smanchat, S. (2014). Internet of Things: a Review of Applications and Technologies. *Suranaree Journal Science and Technology*, 21(4).
- Whitmore, A., Agarwal, A. and Da Xu, L. (2015). The Internet of Things – A Survey of Topics and Trends. *Information Systems Frontiers*, 17.

Karolina Małagocka

Be Wise with Privacy. Attitudes Towards Data as Online Activities Become Subject to Research

Abstract

Companies collect, process, and analyse private information in order to get to know the needs of their customers better – and to suit their offer to these needs accordingly. On the one hand, there are more and more entities interested in broad access to data. On the other, customers tend to view such practice as interference in their privacy. The text discusses ways of obtaining information, doubts raised by the increasing extent of use of big data, the impact of social network services on the perception of on-line privacy, and the possibilities of not only influencing our shopping decisions, but also of inducing certain emotional states.

Keywords: privacy, big data, social media, data analysis

Introduction

The digital footprints customers leave on-line every day serve as a business opportunity to engage in personalized communication and present offers selected according to needs or behaviour. The knowledge gained thanks to private data may bring brands and customers closer to each other, but may also become a ground where the expectations of the former and the latter will not overlap. Finding a balance between personalized and invasive communication is a major challenge for today's

business. Most Internet users say that access to the network has changed the way they make their shopping decisions, work, study, and go day by day. Popularization of the Internet has decreased the distance between customers and business, extending the range of decisions to be made based on the knowledge of available options gained thanks to the ease of offer comparison. On the other hand, the arrival of social media, with Facebook leading the way, and the spread of mobile devices has given companies easier access to a larger and larger amount of customer data. The amount of data collected digitally doubles approximately every 40 months (McAfee and Brynjolfsson, 2012). As a result, the growing enthusiasm for technology is accompanied by an increasing concern about privacy. Most Internet users asked for their opinion claim that the growing number of smartphones and tablets has a negative impact on our privacy, and the concern over it has grown by 5 percentage points in one year. This is an issue that causes a significant concern among Internet users (Microsoft, 2015).

Big Data – Big Risk

One of the definitions of big data describes it as “cultural, technological, and scholarly phenomenon that rests on the interplay of technology, analysis, and mythology” (Boyd and Crawford, 2014). In such context, the impact of big data depends not only on computer power, but also on algorithms determining the analyses that generate knowledge and insights. It is a phenomenon that has originated from the growing possibilities of not only creating and acquiring data, but also aggregating, processing, and storing data according to Moore’s law. It was Gordon Earle Moore, the founder of Intel, who predicted a doubling of the processing power of computers in an 18-month cycle. In practice, it meant that the offered computer devices would become increasingly smaller and increasingly more powerful, more efficient, and faster. Moore’s law concerns also the possibilities of storage of information whose amount grows at a geometrical rate. Today it may seem that the progress in the improvement of the performance of computers or smartphones is not so significant from the point of view of their users because the differences in the performance of subsequent models of these devices are rather minor. Yet, the spread of social media makes it possible to retain, or even regularly expand, the scope of the private data available on-line. It’s not

just social media, but every instance of logging-in, using an app, or on-line shopping that create datasets which if subject to analysis, may be used by companies to discover correlations, trends, and to be ahead of customer needs. “Big data is shaping up to be one of the key battlefields of our time” (Cowls, Meyer, Schroeder and Taylor, 2014). Business opportunities lie not only in access to certain information, but also in the possibilities to analyse this information in an effective way. According to Victor Mayer-Schonberger and Kenneth Cukier (2012), big data includes a whole population, not just a representative random group. Big data is also characterized by diversity of the origin of information (news, updates, content created and shared across social media, GPS signals, geolocation etc.) and speed of access, which means processing of data in real time or at a very similar rate. Quick access to unique customer information, ability to take advantage of data, or simply an organizational culture oriented towards drawing conclusions from data let businesses gain competitive advantage.

Such comprehensive approach may of course give rise to concerns over the ways and purposes of data processing. Privacy protection is an important aspect that has an influence on the quality of the acquired data. Also, customers’ trust in companies seems to be crucial in this context. The quality of big data may suffer exactly because of the lack of trust. It’s enough that customers create a partially false on-line image of themselves, or use solutions hindering correlation analysis, which will result in data being corrupted from the very beginning (Gehrke, 2012). This is also the reason why a fourth ‘parameter’ of big data has been called for more and more often; this parameter involves constant verification of information authenticity.

Meanwhile, according to Gartner’s studies, the expenses on data analytics are growing at a double-digit rate. Every move of Internet and mobile phone users may be traced, and the effects thereof saved and compared with other available data in any configuration. Every conversation, every piece of content/messages we exchange are also tracked and recorded. This leads to a situation unknown previously to mankind, which is why it gives rise to questions not only about technology, but also about ethics. The sole fact of availability of data shouldn’t entail a common consent for a comprehensive use thereof. The matter of not only how much information, but also what information should be collected and processed becomes a very sensitive topic. In a growing majority of cases, data is used not only by companies or organizations it has

been entrusted. Making data available to third parties may lead to a situation where not only customers, but also the companies that have been originally entrusted with this data lose control over it. According to Gartner's predictions, 30% of enterprise access to big data will come from go-between data broker services by 2017.

The increasingly common access of various organizations to private information, as well as the technological capabilities of aggregating and processing it, lead to a growing concern. The mere fact that the collected data (of good quality in most cases) is available should not give grounds to exploitation thereof. But since Edward Snowden shed light on the scale government agencies spied on citizens in cooperation with seven big corporations in 2013, the issue of interference in privacy has become a widely discussed issue. Literature devoted to the topic of legal regulations points clearly that the legislative system of the European Union grants individual users more protection than the legislation of the USA, although none of these systems is complete. Data protection within the European Community makes it possible to collect and process data only on the basis of precise principles, whereas the legislation of the USA has made the market self-regulatory, making customers the decision-makers in terms of sharing their personal data.

Regulations, regardless of their impact on the market, appear to be unable to keep up with technological development. This results in problems with security of the right to privacy guaranteed to citizens of both continents. Authorities responsible for national security and protection attempt in particular to extend the access to information about citizens – regardless of judicial proceedings. This leads to strong public opposition on the one hand, and on the other, necessitates a permanent justification of actions taken. James B. Comey, director of FBI, gave a speech on 16 October 2014, explaining the stand of the agency: “Some believe that the FBI has these phenomenal capabilities to access any information at any time – that we can get what we want, when we want it, by flipping some sort of switch. It may be true in the movies or on TV. It is simply not the case in real life. Some argue that we will still have access to metadata, which includes telephone records and location information from telecommunications carriers. That is true. But metadata doesn't provide the content of any communication. It's incomplete information, and even this is difficult to access when time is of the essence”. His speech depicts the state's designs to have as broad access to private data as possible. It appears that metadata, a collection of information about infor-

mation, records of events such as phone calls, visits on certain websites, acts of logging in, or sent messages, is not enough. What is becoming of equal – or even greater – importance and interest is the content of messages, on-line conversations, posts, or tweets.

Content analysis has been valuable in the context of learning customer opinions, behaviour, and needs for a long time. Companies take advantage of both immense bodies of collected metadata, as well as of the conclusions drawn from identification of what people talk about with each other and what opinions they share among their communities. This situation causes a strong reaction among customers, which involves more and more frequent intention to protect one's privacy. According to data published by Google, at the beginning of 2014, the rate of encrypted traffic increased by 50%. The reason for this was that on-line traffic was encrypted by the main Internet service providers – Gmail, Facebook, and even bigger web portals. In March 2016, 77% of the traffic on Google servers was encrypted (Google, 2016). This is caused, among others, by customers' growing expectations with respect to protection of their privacy.

In the context of functioning of companies on the market, the most often discussed issue related to big data is exactly the matter of privacy of customers. Respecting privacy has clearly gone beyond deliberations about pure ethics, becoming a factor influencing the quality of today's business operations. Companies take into account not only the existing legal regulations, but also customers' requirements, which translates into the quality of customer relationships. Respect for privacy translates into trust, which in turn affects customers' on-line behaviour.

Face to Face with Facebook

Customers share their private information expecting to have certain needs fulfilled in return. Businesses offering their goods and services both on- and off-line collect data to suit their offer to the needs of particular persons as well as possible. Starting from companies, through NGOs, and ending with state institutions, information are collected and processed to arrive at increasingly better effects of actions taken. A recent trend of analysing social media and a simultaneous turn away from conventional methods of range extension on the basis of traditional media such as radio, the press, and TV result both from the fact that

business environment has noticed an opportunity to take advantage of the resources already in possession and to optimize costs. The trend refers to the generation of people who don't know the world without social media, web browsers, and on-line targeting. They enter the market when their age makes them the most attractive group of customers. In the context of e-marketing, their needs are answered by messages and communication suited to the way they act and go by. At the same time, it is important to emphasize that they are advanced Internet users, always on the lookout for something new, more engaging, more creative, and better than what they already know.

Internet service providers, including social media services, make attempts to discover new areas of persuasion-based activities and to acquire customer information in response to the growing business-related needs to suit activities to customer expectations.

In 2012, Facebook conducted an experiment which the media referred to as 'emotion experiment', involving participation of 689 000 English-speaking users; the idea was to select the content they saw in their feed in a way to enhance their positive or negative mood (Kramer, Guillory and Hancock, 2014). The study was organized in cooperation with scientists from Cornell University and the University of California; Facebook filtered the information displayed to users, including posts, comments, photos, videos, and links to pages posted by others.

In the case of this social network services, people often share their emotions, opinions, and other information that may be later seen by others as part of the so-called "News Feed". Since Facebook users create content in amounts exceeding one's capability to read and follow everything what is posted in one's network, Facebook has designed its "News Feed" to function on the basis of a mechanism of post selection. The selection is made on the basis of Edge Rank algorithm, which is subject to constant development and tests. The aim of these activities is to make users 'receive' highly-engaging content, which is selected according to a given user's profile. At the same time, "News Feed" is an essential way of following others' activities and interacting with them. As a result, companies have access to a broad spectrum of private information with a simultaneous possibility to affect emotional states, which can determine not only shopping decisions, but also other actions of potential customers.

An analysis of data collected across various large social networks over a period of over twenty years by James H. Flower and Nicholas A.

Christakis shows that longer-lasting moods such as happiness or depression may be transferred through networks (after: Kramer, Guillory and Hancock, 2014). Facebook's experiment proved that this was true also for the digital world. When positive emotions were limited, users generated fewer positive and more negative content. And when the number of negative posts was limited, an opposite phenomenon took place. The results of the study indicate that emotions expressed by others in the virtual world have a genuine impact on others in the real world.

When the experiment was announced to have taken place, it aroused controversy on ethical grounds. The authors who wrote an article describing the course and the results of the experiment stated already at the beginning that since "this experiment was conducted by Facebook, Inc. for internal purposes, the Cornell University IRB [Institutional Review Board] determined that the project did not fall under Cornell's Human Research Protection Program" (Kramer, Guillroy and Hancock, 2014). There were also some ethics-related doubts. There were questions about the process of inclusion into the study, and about the lack of provision of clear information about the conducted experiment to the selected population. According to the company, the participants of the study were supposed to have expressed their agreement to take part in the experiment by accepting Facebook's terms of service. There are nearly 1.65 billion users of Facebook, with 1.1 billion of them active every day, including a vast majority of them active at least several hours a day (Internetworldstats, 2016). This gives the company a possibility to influence emotions of a very significant part of the world's population. At the same time, Facebook has access to data concerning the majority of private aspects of life of its users and their friends, families, and acquaintances.

Facebook may thus shape not only emotions and shopping decisions related thereto. During the United States presidential election of 2012, Facebook displayed a graphic with a link to the nearest polling location to a selected group of voters. There was also an 'I Voted' button that people could click to show they voted. At the same time, up to six randomly selected profile pictures of each user's Facebook friends who had clicked the 'I Voted' button appeared below such posts. Facebook users who were displayed such profile content turned out to be 0.39% more likely to vote than the persons from the control group. Later analyses showed that eventually around 60 000 voters were mobilized thanks to this special feature (Szalavitz, 2012). In both of the abovementioned cases, a company with access to private data about its clients not only

bases its operations on analyses of such data and presenting offers to its clients, but also actively supports attempts to induce certain behaviour or emotional states going way beyond the sphere of business.

The algorithms used by social networks may also cat in favour of their users, but they will be again based on their private data included in their profiles – and on an in-depth analysis of such data. One of the literature sources describes a case of a Ph.D. from Stanford, who proved that LinkedIn users developed their networks more effectively if they added people suggested by the service’s algorithms as ‘people you may know’ to their groups of contacts (Davenport and Patil, 2012). However, even in the case described above, which has largely contributed to LinkedIn’s market success, there is a two-step interference in users’ privacy. On the one hand, their data is analysed by algorithms, and on the other, the actions taken follow from the effect of functioning of these algorithms.

Apart from enjoying the advantages of different on-line services, customers should also benefit from respect for standards in the scope of care for private data made available to providers of such services for the purpose of use of various websites and offers available on-line. This implies that both companies and customers are able to see the value of access to private information and of protection thereof at the same time.

Conclusion

A year after Google was founded, Scott McNealy, the then CEO of Sun Microsystems – a company bought by Intel, told journalists when interviewed that there was no privacy whatsoever. Stephen Manes, an editor working for PC World, was one to quote McNealy, saying that he was right on the facts, but wrong on the attitude (Crisan, Zbucnea and Moraru, 2014). There is no doubt that everything, starting from medical data, through hobbies, culinary preferences, eating habits, ways to spend one’s free time, to photos and birthdays is available, processed, analysed, and compared to produce quality customer information. This data already exists in digital records. It’s very difficult – and sometimes impossible – to remove such data, that’s why the matter of privacy has nothing but disappeared, and the more participation in the digital world grows, the more essential this matter becomes. Nowadays there are technical means to protect privacy and to respect the principles of func-

tioning of services like Facebook, LinkedIn, or various mobile applications at the same time. The way to ensure that privacy is protected is to apply the same standards and solutions to everyone. Privacy in the digital world is not something that may and should be available to a selected few. According to reference literature, a reduction of the level of protection, or a lack of a possibility to increase it in the case of some individuals or whole groups, means that this level is reduced in the case of everyone (Abelson et al., 2015). Respecting privacy policies helps build trust-based relationships between customers and brands, with this trust being not permanent, but rather variable, depending on a given situation. Companies profit from access to data and analysis thereof, it's easier for them to make business decisions, and to target and customize their communication to their audience. Data-based operations have become a market standard of today. They are an outcome of the possibilities offered by modern technology. Despite a common consent in the scope of the right to privacy protection and the need to build trust in this area, companies still aim to increase the extent of use of private data as it seems impossible to suppress or break out of this trend. Meanwhile, more and more customers are becoming increasingly aware of this trend. They expect data to work clearly to their advantage – and not against them. This requires, however, a different perspective and some restructuring in the current business practice.

References

- Abelson, H. et al. (2015). Keys Under Doormats: mandating insecurity by requiring government access to all data and communications. *CSAIL*, 7(7).
- Boyd, D. and Crawford, K. (2012). Critical Questions for Big Data. Provocations for a Cultural, Technological and Scholarly Phenomenon. *Information, Communication & Society*, 15(5), 262–279.
- Comey, J. (2014). Brookings Institution Washington, D.C, <https://www.fbi.gov/news/speeches/going-dark-are-technology-privacy-and-public-safety-on-a-collision-course>.
- Crisan, C., Zbucnea, A. and Moraru, S. (2014). Big Data: the Beauty or the Beast. *Strategica: Management, Finance, and Ethics*, 3(10), 830–848.
- Cukier, K. and Mayer-Schorberger, V. (2013). *Big Data: A Revolution That Will Transform How We Live, Work, and Think*. Houghton: Mifflin Harcourt.
- Davenport, T.H. and Patil, D.J. (2012). Data Scientist – The Sexiest Job of the 21st Century. *Harvard Business Review*, 10, 70–78.

- EU (2014). European Directive on Data Protection, <http://ec.europa.eu/justice/data-protection/>.
- Gehrke, J. (2012). Quo vadis, data privacy? *Annals of the New York Academy of Sciences*, 1260, 45–54.
- Google (2016). Transparency Report, <https://www.google.com/transparencyreport>.
- Internet World Stats (2016). Internet Growth Statistics, <http://www.internetworldstats.com/emarketing.htm>.
- Kramer, A., Guillory, J. and Hancock, J. (2014). Experimental evidence of massive-scale emotional contagion through social networks. *Proceedings of National Academy of Sciences*, 17(6).
- McAfee, A. and Brynjolfsson, E., (2012). Big Data: The Management Revolution. *Harvard Business Review*, 59–66.
- Microsoft, (2015). Views around the Globe, <https://mscorp.blob.core.windows.net/mscorpmedia/2015/01/2015DavosPollFINAL.pdf>.
- Szalavitz, M., (2012). Get Out the Friend Vote: How Facebook Spurred 340,000 Extra Votes in 2010, *Time.com*, <http://healthland.time.com/2012/09/12/get-out-the-friend-vote-how-facebook-spurred-340000-extra-votes-in-2010/>.
- Taylor, L., Cows, J. and Schroeder, R. (2014). Big Data and Positive Change in the Developing World. *Policy & Internet*, 12, 418–444.

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An Inquiry into Determinants of Value Creation in the ICT Industry

Abstract

The paper presents an in-depth theoretical overview of the key value drivers in the ICT industry. By decomposing the value generation process into its basic elements, we intend to analyse the influence of each factor on shareholders' wealth. The paper highlights the particularities of the ICT industry, which shape and modify the value creating mechanism. In particular, we address the problem of sustainability of competitive advantage and describe appropriate tools of strategic management for maintaining competitiveness and enhancing shareholders' value. A special attention is paid to the dynamism and intangibility, which are characteristic of the ICT industry and which largely influence the value creating chain. As a result, specific rules of value-based management may be applied. In addition to conventional value drivers, we explore the importance of capital structure decisions, strategic alliances, M&A transactions, and non-financial value determinants for sustaining value creation. The paper attempts to summarize the existing theoretical and empirical evidence of the analysed problem, and offers further directions for research.

Keywords: value drivers, ICT industry, value-based management

Introduction

The principles of value-based management (Copeland et al., 2000) have shifted the points of focus in corporate practice by introducing a unique objective function, i.e. shareholder value. However, while the framework for ad-hoc performance appraisal has been established, the determination of the key value drivers and their contribution to the overall corporate goal remains a debatable issue. Strategic decision-making is largely shaped by the priorities and relative weights of each of the value creating factors in a given company's value generating chain. Therefore, the problem of studying the role of particular value determinants in the process of shareholder value maximization gains considerable praxeological significance.

Specific features of the ICT industry make it a particularly interesting research object in terms of building strategies of value-based management (VBM). Not only does it deliver a specific product, which due to its nature requires a particular set of predominantly intangible assets to be assembled, but it is also guided by characteristic rules of growth enhancement, knowledge dissemination, and value generation (Lopez-Pueyo and Mancebon, 2010). What is more, due to huge spillover effects, the competition models in the ICT industry have some distinguishing features which influence the processes of R&D cooperation (Cantwell and Santangelo, 2002), mergers and acquisitions, strategic partnerships, and alliance portfolio formation. The enumerated features influence the development of a VBM strategy tailored to the dynamism and specificity of the operational environment in the ICT industry.

The aim of the paper is to present an inquiry into the industry-specific value drivers of ICT companies and derive conclusions regarding their appropriate incorporation into VBM strategy. We start with a general overview of the key value drivers; then, we present distinguishing features of value drivers in the ICT industry by concentrating on such issues of strategic management as maintaining competitive advantage, capital structure decisions, mergers and acquisitions, dividend policy, and sustaining long-term growth. Additionally, the paper includes a discussion of non-financial value drivers, e.g., management innovation and corporate culture.

Principal Value Drivers and VBM: A Theoretical Overview

Ittner and Larcker (2001) analyse the historical evolution of the dominating trends in management accounting and highlight the gradual

transition from the accent on cost optimization to the focus on shareholder value maximization. The authors structure the algorithm of value based management and formulate six steps necessary for successful implementation of a VBM strategy: 1) setting company-specific internal goals with an ultimate focus on value maximization; 2) designing a strategy aimed at fulfilling fiduciary duty towards shareholders; 3) selecting key value drivers; 4) setting operational goals, targets, and elaborating a system of performance appraisal relying on targets; 5) performance appraisal; 6) creating feedback, i.e. undertaking necessary corrective actions or introducing changes to the adopted VBM strategy.

Damodaran (1998) states that the key value drivers are free cash flows for firm (FCFF), the rate of growth of FCFF, the expected length of the competitive advantage period, and the volatility of the cash flows approximated by the discount rate. Damodaran presents a set of rules allowing to increase company value generating potential. In order to increase cash flows, it is suggested to optimize the investment policy by abandoning the projects whose liquidation value exceeds continuous value; to improve operating performance by auditing all the costs and liquidating any slack embedded in the budgets by the managers; to introduce an efficient system of working capital management. In order to increase the perpetual growth rate, Damodaran suggests increasing the reinvestment rate and return on new invested capital (RONIC). The latter is done by means of undertaking risky projects, which offer higher potential return without elevating the risk of the entire enterprise. The desired effect may be partially achieved by means of consummating M&A transactions, which should be carefully evaluated in terms of synergies and benefits of control. A persistently high Ronic may be a result of an engrained competitive advantage, which can be created by means of solidifying customer loyalty and company's trademark; introducing entry barriers which dissuade potential competitors; or saving on economy of scope and scale. Finally, according to Damodaran, discount rate may be reduced by optimizing the capital structure and choosing the sources of financing appropriately.

Another approach to dealing with the key value drivers is offered by the Theory of Constraints (Goldratt and Cox, 1986), which postulates that in the pursuit of value maximization, managers should focus on the bottlenecks that preclude the company from reaching its strategic goal.

Specificity of Value Creation in the ICT Industry

Thompson (1967) elaborated a classification of technologies used in production processes. Long-linked technologies are mostly encountered in manufacturing companies, and produce homogenous outputs from standardized inputs. Mediating technologies are used to bring together clients interested in consummating a particular transaction. Intensive technologies are applied to solve a specific non-standardized problem, or to offer a unique product tailored to the needs of customers. Basing on this classification, Stabell and Fjeldstad (1998) developed a typology of value configurations, which distinguishes between value chains utilizing long-linked technologies, value shops based on intensive technologies, and value networks using mediating technologies.

ICT companies rely predominantly on intensive and mediating technologies, thereby representing value shop and value network configurations. According to Stabell and Fjeldstad (1998), value shops create value by solving unique cases through a cyclical process of data mining, analysis of hypotheses and possible solutions, implementation of the accepted solution, and a subsequent performance appraisal. Distinguishing features of value shops are interdependence between the stages of the value creation process and high reliance on skill and expertise of the workforce. The principal determinants of value creation include i.a. reputation, quality of intellectual human capital, and the ability to learn and continuously improve the expertise of the workforce.

As for value networks, Stabell and Fjeldstad (1998) underline the importance of creating positive network externalities, i.e. economies of scale and scope, in order to maximize the value generating potential. The iterative set of activities, aimed at developing a value network, includes promotion of network, provision of network services (linking the customers interested in a particular transaction), and maintenance/enhancement of infrastructure. The principal value drivers for value networks are i.a. the number of users, utilization of the network capacity, quality of services, vertical and horizontal network integration.

Ceric (2015) analysed the existing literature devoted to value management in the ICT industry, and divided the factors of value creation into technological, individual, organizational, and environmental. According to Ceric, technological determinants include ICT reliability, convenience, functionality, user friendliness, compatibility, accuracy, quality of output etc. Individual factors include i.a. the quality of intel-

lectual human capital, the acquired expertise, and the level of users' satisfaction. Organizational factors include corporate culture, trainings, and workplace practices. Environmental factors include market structure, competition, cooperation, regulatory framework, etc.

The prevailing business model in the ICT industry is gradually shifting towards a service-oriented architecture (Demirkan et al., 2008). It means that ICT companies may face major challenges in the domains of strategic management, business process design, and technological innovation. In a transformational context, setting proper priorities in value based management strategy may be the key to creating a long-lasting competitive advantage.

Varian and Shapiro (1999) claimed that the business model prevailing i.a. in the ICT sector, should generate substantial network effects, whereby the value of the product or service would increase together with the number of unique users, and whereby the switching costs would be too high to induce consumers to resign from a particular product. Copeland et al. (2010) argue that misinterpretation of the network effect in the context of ICT companies caused irrational exuberance of the stock market investors and led to the dotcom bubble. Intrinsic value derives from projected cash flows, which, in turn, should reflect a reasonable estimate of the company's value generating potential. Network effect is not easy to secure; it appears rarely even among ICT companies.

Value-Generating Capital Structure Decisions in the ICT Industry

Hogan and Hutson (2004) argue that financing decisions in the ICT industry violate the postulates of conventional theories of capital structure. ICT companies generally prefer issuing equity over incurring debt, which is in contradiction to the pecking order theory. At the same time, the potential benefits from the tax shield effect remain underutilized. Thereby, the question is raised regarding the criteria of choosing an optimal capital structure in the ICT sector.

Balakrishnan and Fox (1993) present a theoretical analysis which may shed light on the capital structure decisions made in the ICT industry. The authors argue that the most important determinants of capital structure are cash flow volatility, growth opportunities, and industry structure. Since ICT companies are characterized by significant

volatility of cash flows and increased risk of investment projects, the inherent conflict of interest between shareholders and bondholders entails an increase in borrowing costs, which precludes companies from augmenting the leverage ratio (Myers, 1977).

Secondly, in accordance with the agency theory (Jensen, 1986), debt may exercise disciplining power on managers who are otherwise prone to undertaking value destroying projects. In order to preclude suboptimal managerial decision-making, companies that run out of growth opportunities tend to incur additional debt. However, this is not the case of ICT companies, which usually have many risky growth options. Due to potentially overwhelming bankruptcy costs, ICT companies prefer equity financing.

Balakrishnan and Fox (1993) highlight another determinant of capital structure decisions, i.e. the availability of firm-specific resources, which may include unique assets, competence, skills, projects, etc. These assets constitute the basis for a company's competitive advantage. However, their specificity makes them less liquid and entails a significant discount in the case of an emergency sale. In a situation of financial distress, a company with a significant amount of specific assets on the balance sheet may face a drastic decrease of liquidation value. Balakrishnan and Fox (1993) found that firms' debt-to-equity ratio is positively related to investment in tangible assets and to redeployability of assets. Most ICT companies make product-specific investments and have significant amounts of firm-specific intangible assets on their balance sheets, which make them particularly vulnerable in the event of financial trouble.

Strategic Alliances and Acquisitions

Acquisitions constitute a possible alternative to organic growth model. According to a substantial body of research (e.g., Asquith, 1983; Agrawal et al., 1992), acquisitions may result in a long-term underperformance of the acquirer's stock. Homberg et al. (2009) argue that the principal reason of negative influence of acquisitions on financial performance of the acquiring company is overestimation of potential synergies; what is more, even relative complementarity of the acquirer and acquiree does not prevent negative financial performance dynamics. Therefore, the problem of accurate valuation of the acquiree and

estimation of valuation premiums requires an in-depth study of the key value drivers.

Studies of acquisitions in the ICT industry derive contradictory conclusions. Hagedoorn and Duysters (2002) studied a geographically diversified sample of ICT companies over an almost 10-year period and found that M&A transactions might improve technological performance of the sampled companies. However, organizational and strategic similarity of the companies considering M&A appears to be a crucial success factor. The authors underline the possibility to gain new technology and knowledge by means of M&A, which is of particular importance in the ICT sector.

Strategic alliances represent another form of interfirm cooperation, which may become a source of value. Hagedoorn (1993) analysed the principal motives underlying the process of intercompany alliance portfolio formation, and concluded that technology- and market-related reasons dominate. ICT companies engage in strategic alliances primarily for the purpose of applied research and technology exchange, whereas the motives of market penetration and market share expansion prevail among mature stable-growth companies.

Growth Options and Dividend Policy

Research appears to be scarce on the value relevance of dividend policy in the ICT sector.

Using dynamic partial equilibrium model, Karpavicius (2014) demonstrates that dividend policy constitutes an important value determinant. Companies with stable dividend flows were found to be higher valued by the market. Additionally, dividend smoothing was found to decrease the effective cost of capital for the sampled companies.

Jabbouri (2016) studied the determinants of dividend policy and concluded that dividend payments were positively related to company capitalization, profitability and liquidity, and inversely related to debt-to-equity ratio, growth rate, free cash flows, and economics conjuncture.

Denis and Osobov (2008) conclude that dividend payments are higher among large capitalizations companies that demonstrate persistently high operating results and for which retained earnings constitute a relatively higher fraction of the total equity. Additionally, Denis and Osobov (2008) show that propensity to pay dividends decreases gradu-

ally in all major economies and that new entrants to the stock market refrain from initiating dividend payments. Generally, it was found that market does not penalize non-dividend paying companies, thereby engendering a new trend of zero dividends. The available evidence is in contradiction to the assumptions of the agency theory (Jensen, 1986), whereby mature companies which run out of attractive investment opportunities but still generate substantial cash flow prefer paying dividends, while ICT companies – which possess multiple risky growth options and are mostly equity financed – refrain from paying dividends.

Evidence on the value relevance of the dividend policy may appear to be inconclusive and requires further research into the differences in valuation multiples between dividend paying and non-dividend paying stocks.

Managerial Innovation: Non-Financial Value Drivers

Birkinshaw et al. (2008) define management innovation as ‘the invention and implementation of a management practice, process, structure, or technique that is new to the state of the art and is intended to further organizational goals’. Empirical and anecdotal evidence demonstrates that management innovation constitutes an important factor of value creation. Implementation of a managerial innovation strategy may engender considerable difficulties due to conservatism and short-termism of managerial decision-making. Little research has been conducted regarding the role of management innovation in the ICT sector, although empirical literature suggests that it might be one of the key value drivers.

Markides (1997) cites several cases (Canon, Apple, Dell etc.) where management innovation played a pivotal role in shaping companies’ value creating mechanisms. A particular path was chosen, consisting in finding a market gap within a who-what-how framework. Company management should try to anticipate the needs of those customer segments which are not currently being serviced by any competitors. This goal is achieved by means of a constant analysis of the market situation. Companies should be open for experiments in order to track the market and fill in a new niche as soon as it appears. On the other hand, companies should institute an efficient system of risk management in order to track and prevent any possible negative repercussions of undertaking risky investment projects (Williams, 1997).

A particular attention should be paid to the design of performance management system. Tahinakis (2014) showed that during an economic downturn, companies tended to cut on R&D expenditures in order to hit short-term earnings targets. Therefore, in order to preclude suboptimal decision-making, performance appraisal system should encourage a long-term view on the company's perspectives and decision-making based on the unique criterion of shareholder value maximization.

Ronen et al. (2007) note that companies tend to underestimate non-financial value drivers, e.g., logistics chains management or time-to-market optimization while building their strategies of value maximization. The authors elaborated on the methodology of Value Focused management, which consists in identification, quantification, and prioritization of key non-financial managerial value drivers. This approach allows managers to prepare a detailed plan of business model modification aimed at creating value.

Corporate Culture as a Factor of Value Creation

Along with non-financial value drivers, the issues of corporate culture tend to receive little attention in studies of value relevance. Innovative corporate culture that makes a maximum use of individual initiative may be capable of producing much better results in purely financial terms.

Loewe and Dominiquini (2006) recommend encouraging personal initiative and crowdsourcing in order to produce ideas that challenge current corporate practices; giving employees the time to envisage and analyse new development opportunities and come up with an elaborated action plan; recurring to experiments in order to penetrate and occupy new market gaps and niches, or gather relevant evidence that is required to make informed decisions regarding further expansion of the business; enhancing the system of performance management in order to avoid managerial myopia, and allow new project to pass through the most challenging stage of loss generation. An innovative corporate culture should tolerate failure and be ready to persistently look for new sources of value.

Maher (2014) made an analysis of distinctive features of corporate culture focused on innovation, which may be of particular interest in the case of ICT companies. Firstly, innovative culture gives employees

freedom to develop new ideas, and assures managerial support in implementation of new projects. Secondly, innovative managers gather ideas from both internal and external sources, and make a significant effort aimed at educating the workforce in order to enhance innovative thinking. Companies should include the innovation component into their strategies and short-term operational goals. Finally, managers should create a platform for discussing new ideas in order to obtain useful feedback and benefit from diversity of opinions.

Valuation of ICT Companies

Valuation of hyper-growth ICT companies is often a challenge due to the specificity of the products, value drivers, and operating environment. ICT companies are characterized by highly volatile cash flows, high level of risk of the undertaken investment projects, and a lack of clear development prospects. High technology companies have a particularly low level of success rate and thus pose a considerable difficulty to financial analysts in terms of making assumptions underlying valuation.

Copeland et al. (2010) suggest valuing ICT companies using multiples based on non-financial data. The authors cite evidence from the 1990s, when many ICT companies went public without having robust earnings growth or solidified market share. Therefore, traditional multiples, i.e. enterprise value to EBITA or enterprise value to revenue, were not appropriate since companies often had a negative operating income and a volatile turnover. Calculation of forward looking multiples was more challenging since the prospects of ICT companies were unclear. Therefore, it was suggested to use non-financial performance metrics, i.e. the number of unique users, number of clicks or consumers, etc.

Copeland et al. (2010) developed a series of rules allowing to properly apply multiples valuation based on non-financial metrics. Most importantly, the chosen indicator must be closely tied to a given company's value creating mechanism and be a good proxy for shareholder value dynamics. The available metrics are highly specific for each type of an ICT company and reflect the way in which the company generates cash flows. At the same time, the authors highlight that as companies mature, financial indicators regain predictive power and may be used in valua-

tion process. At the same, although non-financial multiples tend to be attractive, they do not guarantee investors from irrational exuberance and emotional treatment of particular stocks.

Further Directions for Research

Literature review revealed several research areas where additional analysis may appear to be necessary in order to systematize the problem of value drivers in the ICT industry. Research framework should take into account the inherently specific features of ICT companies in terms of value generating mechanisms and strategic decision-making.

In the domain of strategic management, the most important problems requiring further clarification include analysis of value configuration, which appears to be substantially different from that applicable to manufacturing companies. Several variables should be tested for their input into the value function, e.g., the accumulated intellectual capital, the speed of technology dissemination and learning, the quality of information flows, network capacity utilization, the level of user satisfaction and relevance of information content, the quality of infrastructure, network integration etc.

The issue of capital structure decision deserves particular attention as well. Further research may cover the role of conflict between share- and debtholders in reducing the leverage ratio of ICT companies. Application of debt covenants as a means of assuring the interests of bondholders and fuelling company growth may necessitate additional coverage. The subject of influence of resource specificity and redeployability on the capital structure decisions also appears to be scarcely researched.

Analysis of M&A and strategic alliances should focus on sources of synergy in the ICT sector, on the scale of spillover effects and on their role in increasing shareholder value. The matter of information flow and technology replication may also be discussed in the context of alliance portfolio formation.

Finally, in our opinion, corporate culture may be studied as a separate determinant of value creation. Resilience and flexibility may be treated as key qualities of successful ICT companies. Therefore, the influence of hierarchy and recurrence to crowdsourcing may be treated as separate factors of value generation.

Conclusions

The paper presents a theoretical overview of the key value drivers in the ICT industry and outlines further research directions. Some topics, e.g., non-financial value drivers and the role of corporate culture in generating value of ICT companies, merit additional attention, while the results of the existing quantitative research may necessitate further development and triangulation of results with recurrence to qualitative research methodology. Several areas may require revision due to contradictory or inconclusive results with respect to the ICT industry. Due to the set of specific features and particularities of value creating mechanisms, some of the conventional theories from the domain of value relevance may not apply, suggesting ICT companies may need specific guidelines for building strategies of value based management.

References

- Agrawal, A., Jaffe, J. and Mandelker, D. (1992). The post-merger performance of the acquiring firms: a re-examination of an anomaly. *The Journal of Finance*, 47(4), 1605–1621.
- Asquith, P. (1983). Merger bids, uncertainty, and stockholder returns. *Journal of Financial Economics*, 11, 51–83.
- Balakrishnan, S. and Fox, I. (1993). Asset Specificity, Firm Heterogeneity and Capital Structure. *Strategic Management Journal*, 14(1), 3–16.
- Birkinshaw, J., Hamel, G. and Mol, M. (2008). Management innovation. *Academy of Management Review*, 33(4), 825–845.
- Cantwell, J., and Santangelo, G. (2002). The new geography of corporate research in information and communications technology (ICT). *Journal of Evolutionary Economics*, 12(1–2), 163–197.
- Ceric, A. (2015). An Alternative Model of the ICT Value Creation Process Based on Cross-Impact Analysis. *Contemporary Management Research*, 11(3), 223–248.
- Copeland, T., Koller, T. and Murrin, J. (2000). *Valuation, Measuring and managing the value of companies*. New York: John Wiley & Sons.
- Damodaran, A. (1998). Value creation and enhancement: back to the future. *Contemporary Finance Digest*, 2(4), 5–52.
- Demirkan, H., Kauffman, R., Vayghan, J., Fill, H., Karagiannis, D. and Maglio, P. (2008). Service-oriented technology and management: Perspectives on research and practice for the coming decade. *Electronic Commerce Research and Applications*, 7(4).

- Goldratt, E. and Cox, J. (1986). *The Goal – A Process of Ongoing Improvement*. New York: North River Press.
- Hagedoorn, J. (1993). Understanding the Rationale of Strategic Technology Partnering: Interorganizational Modes of Cooperation and Sectoral Differences. *Strategic Management Journal*, 14(5), 371–385.
- Hagedoorn, J. and Duysters, G. (2002). The effect of mergers and acquisitions on the technological performance of companies in a high-tech environment. *Technology Analysis & Strategic Management*, 14(1), 67–85.
- Hogan, T. and Hutson, E. (2004). *Capital structure in new technology-based firms: evidence from the Irish software sector*. Dublin: University College Dublin.
- Homberg, F., Rost, K. and Osterloh, M. (2009). Do synergies exist in related acquisitions? A meta-analysis of acquisition studies. *Review of Managerial Science*, 3, 75–116.
- Ittner, C. and Larcker, D. (2001). Assessing empirical research in managerial accounting: A value-based management perspective. *Journal of Accounting and Economics*, 12, 349–410.
- Jabbouri, I. (2016). Determinants of corporate dividend policy in emerging markets: Evidence from MENA stock markets. *Research in International Business and Finance*, 37, 283–298.
- Jensen, M. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *American Economic Review*, 76(3), 323–329.
- Loewe, P. and Dominiquini, J. (2006). Overcoming the barriers to effective innovation. *Strategy & Leadership*, 34(1), 24–31.
- López-Pueyo, C. and Mancebón, M. (2010). Innovation, accumulation and assimilation: Three sources of productivity growth in ICT industries. *Journal of Policy Modelling*, 32(2), 268–285.
- Maher, L. (2014). Building a culture for innovation: A leadership challenge. *World Hospitals and Health Services*, 50(1), 4–6.
- Markides, C. (1997). Strategic innovation. *Sloan Management Review*, 38(3), 9–23.
- Myers, S. (1977). Determinants of corporate borrowing. *Journal of Financial Economics*, 9, 147–176.
- Ronen, B., Lieber, Z. and Geri, N. (2007). Value Focused Management (VFM): Capitalizing on the Potential of Managerial Value Drivers. In: Y. Shi, D.L. Olson and Stam A. (Eds.), *Advances in Multiple Criteria Decision Making and Human Systems Management* (p. 149–175). Amsterdam: IOS Press.
- Shapiro, C. and Varian, H. (1998). *Information Rules: A Strategic Guide to the Network Economy*. Harvard: Harvard Business School Press.
- Stabell, C. and Fjeldstad, O. (1998). Configuring value for competitive advantage: on chains, shops, and networks. *Strategic Management Journal*, 19, 413–437.

- Tahinakis, P. (2014). R&D expenditures and earnings management: Evidence from Eurozone countries in crisis. *The Journal of Economic Asymmetries*, 11, 104–119.
- Thompson, J. (1967). *Organizations in Action*. New York: McGraw–Hill.
- Williams, T. (1997). Empowerment vs risk management? *International Journal of Project Management*, 15(4), 219–222.

Kaja Prystupa

Different Types of Virtual Teams, Different Challenges for Management

Abstract

Virtual teams are wide spread phenomena in today's business environment. However, their effective management is more troublesome than collocated teams. Team dynamics in virtual reality is shaped differently without traditional socialization processes. Thus, virtual teams need to face challenges associated with virtuality in order to be able to work effectively. However, there are various types of virtual teams and each of them needs to cope with slightly different challenges. Therefore the aim of the chapter is to analyze challenges of virtual team management taking into account their typology.

Keywords: Challenges of virtual team management, trust, leadership of virtual team, multicultural teams

Introduction

Globalization has changed the business environment irreversibly. With development of information and communication technology, organizations may compete everywhere around the world. The possibility to get involved in international activities has actually turned into a necessity in the case of many companies. Traditional organizational structures may not be able to face the challenges of the present. The business environment of today requires a new organizational design. One of the

answers to the challenges of the modern-day competitive world is the emergence of virtual teams.

The phenomenon has first appeared with the development of ICT technology like desktop video conferencing, collaborative software, and Internet/Intranet systems (Townsend, DeMarie and Hendrickson, 1998). This kind of new working environment is unrestrained by geography, time, and organizational boundaries. It enhances companies' ability to meet their goals (Townsend et al., 1998). From the point of view of a company, it is a very practical and cost-effective solution. Organizations can now deliver a new product faster to the market because teams located around the world are able to focus 24 hours a day on a given project (Horwitz, Bravington and Slivis, 2006). It increases the pool of available workers since they may be recruited around the world – without the need to be relocated (Berry, 2011; Lipnack and Stamps, 1999; Witchalls, Woodley and Watson, 2010). Moreover, working as part of a locally dispersed team gives the opportunity to present different opinions and thus it is possible to benefit from organizational learning and synergy to a greater extent – precisely because of this added diversity (Berry, 2011). In the case of employees, it gives them more flexibility in the context of juggling between work and family responsibilities (Townsend et al., 1998).

On the other hand, proper management of virtual teams is difficult. According to a report by Witchalls et al. (2010), 1/3 of executives declared that virtual teams were badly managed. The research showed that the poor performance was associated with wrong style of management and leadership (Berry, 2011). Virtual teams differ significantly from traditional work communities, which is a fact often forgotten by management staff. A number of researchers have attempted to identify best practices in managing virtual teams (i.e. Cramton, 2001; Hinds and Mortensen, 2005; Maznevski and Chudoba, 2000). However, it is difficult to develop a single recipe for effective virtual team management. There are various types of virtual teams, and so the challenges for each of them even if named the same, may be quite different in practice. Therefore, the aim of this chapter is to present the most common challenges in virtual team management with reference to a particular type thereof based on an extensive literature analysis.

In the first section of the chapter, the author outlines the typology of virtual teams based on four dimensions: distance, level of technology support, purpose of existence, and time spent as a virtual team. The

second section of the chapter presents an in-depth analysis of six challenges faced by virtual teams, i.e. communication, knowledge, culture, logistics, technology, and employee motivation. The author indicates which challenges deserve special attention with respect to particular type of virtual team.

Definition of Virtual Team

A virtual team is defined as a group of people in which at least two members are based in different locations, and where all team members have a common goal (Townsend et al., 1998). They use different technological means of communication in their work (Lipnack and Stamps, 1999; Malhotra, Majchrzak and Rosen, 2007; Townsend et al., 1998). According to Griffith, Sawyer and Neale (2003), the ‘virtuality’ of team is presented in three dimensions:

- level of technology support, which may include communication, documentation, and/or decision support capability,
- physical distance, which may range from being based in different offices to being based on different continents (Hinds and Mortensen, 2001; Malhotra et al., 2007),
- percentage of time spent on a given task as virtual team members are rarely delegated to work for a particular team in 100% (Townsend et al., 1998).

Bearing in mind those three dimensions, we can distinguish two types of virtual teams: pure virtual teams and hybrid virtual teams (Nicolson, Sarker, Sarker and Valacich, 2008). Pure virtual teams are such teams whose members are geographically dispersed, never meet ‘face-to-face’, and thus are highly dependent on technology (Griffith et al., 2003). The reasons why they are not able to meet differ across companies, but the most common one involves financial or strategic considerations (a necessity to run work 24h per day, for instance). In the case of hybrid virtual teams, in turn, some members are located at different locations, but some of them are based at the same spot (Nicolson et al., 2007). They rely on technology to communicate, but take advantage of physical interaction as well.

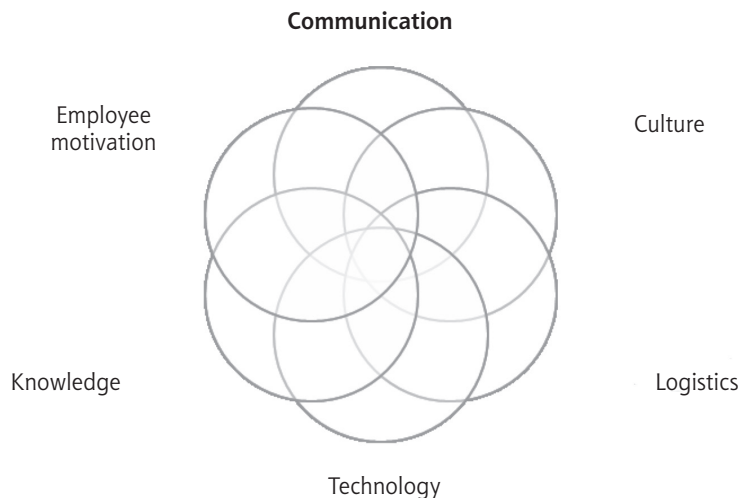
The fourth dimension found in the literature on the subject is the purposefulness of existence of a virtual team. It may be a temporary

structure existing to accomplish tasks such as international product launches, negotiating mergers and acquisitions, or managing strategic alliances (Maznevski and Chudoba, 2000). But they may also function to address operational tasks – such as strategic planning (Townsend et al., 1998). The purpose of existence of virtual teams has vital impact on resource allocation and engagement of management in the launch and maintenance of each such team.

Challenges for Virtual Teams

The conducted literature review revealed six major challenges in the scope of management of virtual teams (Figure 1). Each challenge is analysed separately and indicates how it may negatively impact some types of virtual teams.

Figure 1. Challenges of virtual teams



Source: author's own compilation.

Communication

Virtual teams need to act as regular teams, but without the ability to go through a traditional socialization process which enhances peer coope-

ration (Townsend et al., 1998). Therefore, their members are less satisfied with their mutual interaction (Hinds and Mortensen, 2005)

The lack of physical distance between people hampers the emergence of a sense of closeness and integrity. Weak interpersonal bonds, unshared context, and poor information sharing may all lead to conflicts (Hinds and Bailey, 2003; Hinds and Mortensen, 2001). Lack of shared context leads to exacerbation of problems. When people use such means of communication to communicate with others they do not know well, they experience a sense of isolation, anonymity, and deindividuation. They often tend to lean towards overattribution on the basis of only few social cues they glean (Cramton, 2001). Team members are likely to evaluate others' behaviour negatively assuming a competitive rather than cooperative stance (Hinds and Mortensen, 2005). Cramton (2001) observed that silence in e-mail exchange was perceived as unwillingness to work. However, silence was often caused by limited access to computer lab or other problems.

Communication in virtual teams is limited to the use of computer-mediated asynchronous communication where the nonverbal communication is missing (Berry, 2011). Gestures and facial expressions are important because they help in understanding the meaning of conversation (Vroman and Kovachich, 2002). Technology is low in social presence, and low in interactivity, so it is more difficult to retain contextual information (Montoya-Weiss, Massey and Song, 2001). Differences in time zones and dissimilar experience of team members make it even more difficult to build a common understanding (Hinds and Mortensen, 2005; Witchalls et al., 2010). There were accounts of problems caused by incompatible terminology (Cramton, 2001; Hinds and Mortensen, 2005) and poor communication quality (Horwitz et al, 2006).

Virtual teams have issues with maintaining trust, which is critical to a team's ability to manage decision-making processes effectively (Jarvenpaa and Leidner, 1999; Witchalls et al., 2010). Development of trust among employees increases the potential benefits of collaboration and decreases the costs of coordination (Blomqvist, Kyläheiko and Virolainen, 2001). It helps in maintaining coercion and commitment, which tend to be less developed in virtual teams, where employees are less satisfied with their interaction and like each other less than members of collocated – traditional – teams (Straus and McGrath, 1994). Social communication is important in the process of trust evolution, in a similar way as in the case collocated teams (Kayworth and Leidner,

2001). However, in virtual teams, tight deadlines for accomplishing tasks leave no time for developing relationships at the launch stage (Hettonen and Blomqvist, 2005).

Challenges for Particular Types of Virtual Teams:

- In the case of pure virtual teams, development of shared context and shared identity is significantly difficult. Researchers advise that at the launch of a virtual team, all team members should meet face-to-face in order to establish some relationships between each other. (Duarte and Snyder, 1999; Lipnack and Stamps, 1997; Henttonen and Blomqvist, 2005). Pure virtual teams are deprived of such opportunities and are reliant on technology only, i.e. virtual team meetings or communication via Social Media.
- In hybrid virtual teams, those team members who work in the same office may develop closer relations with each other than with distant members, benefiting from physical interaction (Griffith et al., 2003). This, in turn, may lead to division of a team into subgroups, which may work in a dysfunctional way in a longer run.
- Temporal virtual teams are often deprived of special attempts towards socialization of team members (Townsend et al., 1998). Their leaders tend to be concentrated on the assigned task as they know that the team existence is only temporary. However, this approach may be fatal when some conflicts arise because without a shared identity, it will be much more difficult to restore peace within the team.

Knowledge

Virtual teams strive with development of collective knowledge (Griffith et al., 2003). Without a face-to-face contact, it is difficult for them to confront different ideas (Witchalls et al., 2010). An example of such misunderstanding was a project run by two teams – one from Colorado, the other from California, involving sending a Mars orbiter to space. The project failed because the team members were unaware that each location applied a different metric system to their calculations.

In general, virtual team members tend to share less information than members of face-to-face teams (Hinds and Weisband, 2003). In addition to that, it is more difficult for virtual team members to transfer tacit knowledge, which can be crucial to a given organization because of the fact that such knowledge may constitute its' competitive advantage

(Griffith et al., 2003). Usually tacit knowledge is acquired through observation of others in action – or through mentoring (Lubit, 2001). Virtual interaction hinders such exchange of practices, making it easier to retain valuable knowledge for oneself and use it as a source of power and influence.

On the other hand, the asynchronous communication characterized by nonlinear, multi-threaded topics, may lead to information overload as team members need to cope with a seemingly disjointed set of communication inputs. A lack of sequential flow of information may limit points of reference that facilitate identification of how messages fit within the overall context of group communication (Kayworth and Leidner, 2001).

Challenges for Particular Types of Virtual Teams:

- Hybrid virtual teams face a great danger of unbalanced transfer of information. For employees working in the same office, it is easier to share information passively, without any special effort (while chatting casually in the office hall, for instance). Communication through ICT technology is never accidental. As a result, team members from the same office will remain better informed than team members working remotely.

Culture

In the case of global virtual teams, communication challenges may be also exacerbated due to diverse ethnic and national backgrounds (Kayworth and Leidner, 2001). During communication process, team members tend to filter information through their inherent cultural biases, which may lead to different kinds of misinterpretations. They define situations and objects diversely, and the asynchronous communication they rely on does not provide a rapid or rich feedback to their assumptions (Horwitz et al., 2006).

Various research projects have shown that people from different countries exhibit different communication patterns (Hall, 1976; Trompenaars and Hampden-Turner, 1997), which poses a challenge to every multinational team. However, in a virtual context, the situation is even more complicated as team members tend to forget about the differences in national communication patterns, and evaluate the situation through their own inherent patterns. Therefore, various instances of misunderstanding and discontent may arise in consequence.

Challenges for Particular Types of Virtual Teams:

- Theoretical knowledge about and of different national patterns does not solve the possible challenges in the process communication. Only practical collaboration with team members from different nationalities brings greater understanding of others' actions and attitudes. In diversified virtual teams, initial tasks should not be highly interdependent as they may lead to conflicts and inefficiency (Hertel, Konradt and Orlikowski, 2004). However, in the case of temporary virtual teams it is often possible to organize work in a way to ensure a gradual increase in the extent of interdependency of tasks, as this usually involves working under time pressure.

Logistics

A challenge common to all kinds of virtual teams is logistics. Virtual teams often suffer coordination problems (Cramton, 2001). Collaboration requires information about work progress and team members' current capabilities, but it's complicated to attain such knowledge without contact on an everyday basis (Hinds and Mortensen, 2001).

Furthermore, virtual team members work often in different time zones. Maintaining direct contact for a whole working day is impossible due to conflicting scheduling (Kayworth and Leidner, 2001). However, business environments often require swift reactions (for instance, troubleshooting for customers). Such crisis situations combined with the lack of direct contact among all team members may be extremely stressful for virtual team members.

In virtual teams, team members have additional duties related to their home office environment, which may also interfere with their professional responsibilities (Berry, 2011). Local tasks are often associated with local performance appraisal. Therefore, virtual work may be given a lower priority being perceived as of low visibility and importance in the context of professional reward and recognition. Being involved with two or more teams at the same time may be stressful for a given employee as they may be overloaded with responsibilities which they are not able to satisfy (Townsend et al., 1998).

Challenges for Particular Types of Virtual Teams:

- Effective logistics is ensured by implementation of procedures and standards (Berry, 2011). However, in temporary virtual teams it may

be neglected due to the temporal aspect of team existence, which is especially evident in organizations that do not have rich experience in virtual collaboration (Cramton, 2001). Moreover, in organizations where members of virtual teams are assigned to several teams at the same time, management should remember about establishing a common code of conduct. Otherwise employees may be overwhelmed with a variety of contradiction standards and procedures.

Technology

Technology is an indispensable tool for all virtual teams. Initial research on virtual teams indicated that employees needed still to learn how to use new technologies, how to express themselves, and how to understand others in a virtual environment (Townsend et al., 1998). However, over the years, people have in general become more fluent with ICT technologies, using them not only for their work, but in their private time as well. A new challenge has arisen, and this challenge involves the number of available virtual collaboration tools which employees need to master and use actively during their work to make it effective.

Virtual teams are composed of members dispersed often around the whole world. Technology-related matters are still a challenge as companies do not have influence over the regional infrastructure at hand, varying frequently across different parts of the world. High-speed Internet connection is still not a standard feature all over the globe (Paulen, 2003). In developing countries, where many MNC subsidiaries are based, the infrastructure is outdated causing problems like temporary power outages, etc. Uneven access to technology may easily lead to conflicts as team members may lack a common understanding of limitations affecting certain locations (Cramton, 2001).

Challenges for Particular Types of Virtual Teams:

- In organizations where virtual teams are temporal solutions, management often is reluctant to invest in high-quality communication tools, especially when the market abounds in free communication software. However, in the case of virtual cooperation, costs should not be the only criteria for selection of ICT tools. The most important aspects to be taken into account are the stability of connection and the range of features necessary to exchange information.

Motivation

When it comes to virtual teams, maintaining high spirits is more challenging than in the case of conventional teams (Horwitz et al., 2006). Monitoring teams' 'health' is difficult without face-to-face contact. When working and communicating remotely, it is hard to see if someone has nothing to say or if they've lost their motivation (Oertig and Buerger, 2006). Virtual teams are prone to the so-called "focus drift", and leaders need to keep their teams focused on the tasks at hand (Brake, 2006).

Challenges for Particular Types of Virtual Teams:

- In the case of pure virtual teams, team members may feel isolated and detached from both their work and other team members. They may thus become less productive or satisfied with work. Physical interaction with co-workers is an important factor affecting job satisfaction and motivation, a factor that is missing in virtual teams (Berry, 2011).

Discussion and Conclusion

The author of this paper has analysed six major challenges faced by virtual teams with respect to their typology. The article presents a perspective that draws attention not only to challenges in general, but provides more specific indications which cast a new light on the issue of management of virtual teams. It shows that leaders responsible for deciding in matters related to establishment of a particular type of virtual team – i.e. in the scope related to the level of their team's 'virtuality' – need to take all the challenges which they will need to cope with into account. This way they will be able and ready to manage different situations before their virtual teams begin to suffer from any of the possible dysfunctions. For instance, pure virtual teams need special attention when it comes to motivation. Whereas in the case of hybrid virtual teams, leaders need to set up standards in order to enhance an even distribution of knowledge among team members. Organizations that rely on temporal virtual teams need to remember that even if a team is temporary, it still requires development of shared context, implementation of procedures, and appropriate ICT tools. When it comes to permanent virtual teams, management should carefully design the launch of such structure in order to ensure a proper

socialization process to enable the development of shared context and shared identity of a given team.

In conclusion, the notion of ‘virtual team’ encompasses various types of organizational structures. Earlier research has failed to introduce a clear analysis of the challenges associated with utilization of particular types of virtual teams. However, as presented in this paper, this may have important implications for both practitioners and researchers. Therefore, it appears reasonable to call for further research in this area.

References

- Berry, G.R. (2011). Enhancing effectiveness of virtual teams. Understanding Why Traditional Team Skills Are Insufficient. *Journal of Business Communication*, 48(2), 186–206.
- Blomqvist, K., Kyläheiko, K. and Virolainen, V. (2001). Filling the gap in traditional transaction cost economics: towards transaction benefits based analysis using Finnish telecommunications as an illustration. *International Journal of Production Economics*, 79, 1–14.
- Brake, T. (2006). Leading Global Virtual Teams. *Industrial and Commercial Training*, 38(3), 116–121.
- Cramton, C.D. (2001). The Mutual Knowledge Problem and Its Consequences for Dispersed Collaboration. *Organization Science*, 12(3), 346–371.
- Griffith, T.L., Sawyer, J.E. and Neale, M.A. (2003). Virtualness and Knowledge in Teams: Managing the Love Triangle of Organizations, Individuals, and Information Technology. *MIS Quarterly*, 27(2), 265–287.
- Hall, E. (1976). *Beyond Culture*. New York: Doubleday.
- Hertel, G., Konradt, U. and Orlikowski, B. (2004). Managing distance by interdependence: Goal setting, task interdependence and team-based rewards in virtual teams. *European Journal of Work and Organizational Psychology*, 13, 1–18.
- Hettonen, K. and Blomqvist, K. (2005). Managing distance in a global virtual team: the evolution of trust through technology-mediated relational communication. *Strategic Change*, 14(2), 107–119.
- Hinds, P. and Mortensen, M. (2001). Conflict and shared identity in geographically distributed teams. *The International Journal of Conflict Management*, 12(3), 210–238.
- Hinds, P.J. and Mortensen, M. (2005). Understanding Conflict in Geographically Distributed Teams: The Moderating Effects of Shared Identity, Shared Context, and Spontaneous Communication. *Organization Science*, 6(3), 290–307.

- Hinds, P.J. and Weisband, S.P. (2003). Knowledge sharing and shared understanding in virtual teams. In: C.B. Gibson and S.G. Cohen (Eds.), *Virtual teams that work: Creating conditions for virtual team effectiveness* (pp. 21–36). San Francisco: Jossey-Bass.
- Horwitz, F.M., Bravington, D. and Slivis, U. (2006). The promise of virtual teams: identifying key factor in effectiveness and failure. *Journal of European Industrial Training*, 30(6), 472–494.
- Kayworth, T.R. and Leidner, R.E. (2001). Leadership Effectiveness in Global Virtual Teams. *Journal of Management Information Systems*, 18(3), 7–40.
- Lipnack, J.S. and Stamps, J. (1999). Virtual teams: The new way to work. *Strategy and Leadership*, 27(1), 14–19.
- Lubit, R. (2001). Tacit knowledge and knowledge management: The keys to sustainable competitive advantage. *Organizational Dynamics*, 29(3), 164–178.
- Malhotra, A., Majchrzak, A. and Rosen, B. (2007). Leading virtual teams. *Academy of Management Perspective*, 21(1), 60–70.
- Maznevski, M.L. and Chudoba, K.M. (2000). Bridging Space over time: Global Virtual Team Dynamics and Effectiveness. *Organization Science*, 11(5), 473–492.
- Montoya-Weiss, M.M., Massey, A.P. and Song, P. (2001). Getting it together: Temporal Coordination and Conflict Management in global Virtual Teams. *The Academy of Management Journal*, 44(6), 1251–1262.
- Nicolson, D.B., Sarker, S., Sarker, S. and Valacich, J.S. (2008). Determinants of Effective Leadership in Information Systems Development Teams: An Exploratory Study of Face-to-Face and Virtual Contexts. *Journal of Information Technology Theory and Application*, 8(4), 38–56.
- Oertig, M. and Buergi, T. (2006). The challenges of managing cross-cultural virtual project teams. *Team Performance Management*, 12(1/2), 23–30.
- Pauleen, D.J. (2003). Leadership in a global virtual team: an action learning approach. *Leadership and Organization Development Journal*, 24(3), 153–163.
- Townsend, A.M., DeMarie, S.M. and Hendrickson, A.R. (1998). Virtual Teams: Technology and the Workplace of the Future. *The Academy of Management Executive*, 12(3), 17–29.
- Trompenaars, F. and Hampden-Turner, C. (1997). *Riding the Waves of Culture: Understanding Diversity in Global Business*. Boston: Nicholas Brealey Publishing.
- Vroman, K. and Kovachich, J. (2002). Computer-mediated interdisciplinary teams: Theory and reality. *Journal of Interprofessional Care*, 16, 159–170.
- Witchalls, C., Woodley, M. and Watson, J. (2010). *Managing virtual teams: taking a more strategic approach*. The Economist Intelligence Unit, http://graphics.eiu.com/upload/eb/NEC_Managing_virtual_teams_WEB.pdf.

Justyna Starostka

Design Thinking as a Form of User-Oriented Design

Abstract

Design thinking (DT) is the concept that has gained a lot of popularity in recent years. Despite of its popularity, it is understood differently by varied researchers and scholars. In this article we perceive DT as a method of approaching innovation. Despite different understandings of the concept by different researchers, some elements of DT approach are unquestionable, one of which is the role of empathy towards users. Main purpose of this chapter is to present the concept of DT as a form of user-oriented design. The first part of the chapter presents the introduction of DT and the user-oriented design. The second part presents empirical results of qualitative study of Polish organisations that have implemented DT projects with the main focus on the user orientation and user involvement.

Keywords: Design thinking, new product development, user oriented design

Introduction to Design Thinking

In today's uncertain and turbulent times, it is necessary to create organisations that are capable of innovating and maintaining creativity

on a daily basis. As noted by some researchers, design can become this competitive advantage that can give organisations predominance on the market (Kimbell, 2011, p. 287):

„Design is now central to innovation and since organizations are under pressure to maintain or grow market share, or if in the public sector, increase user satisfaction and effectiveness, then designers and their thinking have something important to offer.”

Modern history of design starts with Alexander, who wrote that “the ultimate object of design is form” (1971). For him design was reserved for tangible products. Almost at the same time, Nobel laureate, Herbert Simon took on a totally different approach. He stated that design, by dealing with “what ought to be” instead of “what is”, is responsible for creating a better future, changing existing reality into a better one. For Simon, design was not reserved for designers (Simon, 1969):

“Engineering, medicine, business, architecture, and painting are concerned not with the necessary but with the contingent – not how things are but how they might be – in short, with design.”

With this very wide notion of approaching design, as creating “better future” is where the big interest in how designers work started. The growing interest of design by management scholars has created a larger interest in the way designers act and work, how they solve wicked problems (Buchanan, 1992).

In recent years’ design thinking (DT) has become one of the hottest topics in the management press and education programmes. It has been popularised by the biggest design consultancy IDEO, that have benefited greatly from it. However popular, DT is still a rather loose term that can have several different meanings (Johansson-Sköldberg, Woodilla and Cetinkaya, 2013; Kimbell, 2011b). One of the most popular advocates of design thinking, Tim Brown defines it as follows: “Design thinking is a discipline that uses the designer’s sensibility and methods to match people’s needs with what is technologically feasible and what a viable business strategy can convert into customer value and market opportunity” (Brown, 2008). Lockwood defines design thinking as a process based upon observation, collaboration and rapid concept prototyping: “The term design thinking is generally referred to as applying a designer’s sensibility and methods to problem solving, no matter what the problem is. It is not a substitute

for professional design or the art and craft of designing, but rather a methodology for innovation and enablement” (Lockwood, 2009). These definitions are, despite their widespread popularity, widely criticized for being too vague and general, providing generalisations like “designer’s sensibility” without explaining what it consists of and how well non-designers might develop and make use of it (Stephens and Boland, 2014, p. 1–2).

Some authors try to take the methods approach in defining what DT is. According to Seidel and Fixon (2013, p. 20), three methods are commonly cited within a design thinking approach (cf. Brown, 2009; Lockwood, 2010; Martin, 2009): (1) needfinding, encompassing the definition of a problem or opportunity through observation; (2) brainstorming, a formal framework for ideation; and (3) prototyping, building models to facilitate the development and selection of concepts. Liedtka notices that there are three significant changes and additions worth noting about DT that were not prominent in earlier writings of design theorists: (1) who designs (orientation toward cocreation), (2) the role of empathy and (3) strong emphasis on the concrete and the visual to highlight the key role of visualization and prototyping (Liedtka, 2015, p. 927). Carlgren et al frame DT as a set of five core principles: focus on the user, challenge the problem, include diverse viewpoints, make tangible, and experiment (Carlgren, 2013; Carlgren et al., 2014).

Despite the growing popularity, the concept of DT has some critics in the design research community (e.g., Tonkinwise, 2011; Johansson-Sköldberg et al., 2013; Jahnke, 2013). Some authors even call DT as the next management fad (Deserti and Rizzo, 2014, p. 41):

“From a certain point of view, design thinking can be seen as one of these [management – JS] fads: It could be associated with the growth of large design consultancies, just as many managerial models and techniques are bound to the growth of large managerial consultancies. Although it was initially meant to introduce research on design and new product development processes, it was subsequently turned into a managerial approach through the process of abstraction from its original context.”

The main critique is about presenting the concept in too simplistic and too optimistic ways. Kimbell remarks that design thinking, as it’s presented in majority of popular articles by its proponents (by scholars like Brown, Martin), do not draw extensively on research in either design

studies or management and organisation studies (Kimbell, 2011, p. 294), so as a result it still remains undertheorized and understudied. Carlgreen notices that the managerial discourse on DT has been blamed of “presenting the concept as something that will create value in any setting, and is straightforward to implement” (Carlgreen, 2013, p. 30).

Having this criticism in mind, we decide however to look at DT from slightly different perspective and use it as a framework for implementing user orientation in organisations. In the following section, we present the concept of the user-oriented design as an important framework in innovations.

User-Oriented Design

There is no doubt that users are widely recognized as a valuable source of knowledge in the development of new products and services (Buur and Matthews, 2008), however understanding the role that users can play in innovation has been understood differently in different streams of research. Buur and Matthews (2008), focus on three of these approaches: design anthropology, participatory design and the lead-user approach.

Behind the philosophy of user-oriented design is the assumption that at each stage of the design process, the needs, wants, and limitations of end users should be given an extensive attention. As Veryzer put it (Veryzer, 2003, p. 851):

“Innovation is essentially about change, and diffusion is essentially consumer willingness for change. Fundamental to the change brought by product innovation is how the new offering will interact with the actual needs and desires of consumers.”

In this approach, during the whole process of developing new product or solution, each assumption should be co-developed, tested and validated with users (Veryzer and Borja de Mozota, 2005, p. 132). Many researchers state that in the user-oriented approach, qualitative research studies should be conducted, that ought to be focused on discovering tacit and latent knowledge about users. Authors Cagan and Vogel (2002, p. 185–186) divide research methods for: observation, interviews (taking the form of free narrative, the story of consumers describing their daily behaviour) and visual stories (stories created by users using images,

video, or notes, are doing during daily activities). Table 1 presents main research methods, as presented by Cooper and Evans.

Table 1. Ethnographic research methods used in the user-oriented design

Research method	Description
Shadowing	Designers tag along with customers to observe and understand their day-to-day routines, interactions, and contexts.
Spatial observations	Spatial observations absorb the atmosphere of a location, observe behavioural patterns, and look for evidence of everyday workarounds or innovations that may indicate unmet needs.
Consumer journeys	Here consumers are asked to communicate their experiences throughout the "product journey." This is sometimes done with camera journals in which consumers use photography to record their experiences.
Day-in-the-life	Day-in-the-life surveys encourage stakeholders to take note of their own surroundings and behaviours.
Extreme user-interviews	These interviews identify individuals who are extremely familiar or completely unfamiliar with the product and ask them to evaluate their experience using it. Often they are able to highlight key issues of the design problems
Storytelling	Here consumers are asked to describe their experiences as a narrative or as an analogy – providing a character-rich story line describing the context of use of a product or service.
Unfocus groups	These involve a diverse group in a workshop environment. Participants are selected for their lack of product preconceptions and are asked to use a stimulating range of materials to create things relevant to the project.

Source: Cooper and Evans, 2002.

The lead user approach is a form of customer involvement is to treat them as co-developers (Hippel, 2006). Hippel shows that most user-developed products and product modifications are developed by lead users. Lead users are those users that share two distinguishing characteristics: (1) They are at the leading edge of an important market trend and thus are currently experiencing needs that will later be experienced by many users in that market, and (2) they anticipate relatively high benefits from obtaining a solution to their needs and thus may seek to innovate (Hippel, 2006, p. 38). What is very important according to this philosophy is that individual users do not have to develop everything they need on their own; rather, they can benefit from innovations developed and freely shared by others (Hippel, 2006).

This approach can also treat customers as innovators, where a supplier provides customers with tools so that they can design and develop the

application-specific part of a product on their own. This shifts the location of the supplier/customer interface, as the trial-and-error iterations necessary for product development can now be carried out by the customer only (Thomke and Hippel, 2002). The most advanced method of customer involvement is to create a toolkit for user innovation (Franke and Piller, 2004). They give users real freedom to innovate, allowing them to develop producible custom products via iterative trial and error. Through toolkits, users can create a preliminary design, simulate or prototype it, evaluate its function in their own user environment, and then iteratively improve it until they are satisfied. As a result, the construction and testing of the product shift from the company to the user, thus bypassing the lengthy process of “guessing” customer preferences within the company.

Despite different understandings of the user-oriented design, we think it can.

Empirical Results

As this study is explorative in nature we took a qualitative approach. Given our exploratory aim, an inductive case study approach was considered appropriate (Yin, 2003). Empirical material was hence collected through in-depth interviews with people directly involved in design thinking projects. We were gathering the material according to a dyadic approach: interviews were carried out among both companies introducing design thinking methodology and design consultancies that were involved in the implementation process. In total 10 interviews were conducted – 5 with consultants and 5 with managers. Interviews lasted from 40 up to 90 minutes, were recorded and transcription was made. Respondents details are omitted due to confidentiality reasons. Interviews were conducted in the period from June to December 2014.

Design Thinking as a Form of User-Oriented Design: Empirical Results

Interlocutors, when asked about the essence of design thinking methodology most often identified it with the existing definitions in the literature, pointing to the advantages of application of this method in solving business problems:

“Design thinking is a way of working, which is based on a design workshop that can be applied to any field, whether it is health care, whether it is a large corporation, whether it is a micro business. In general, the main idea [behind DT – JS] is empathy, is to become open to users.”

One respondent started with the definition of design, as sometimes, especially in Poland, it's misunderstood what design is. In this case the definition written by Herbert Simon was cited, which, very roughly speaking, says that design is striving for positive change, or, in other words, design is to change the existing situation in the preferred, the better. This respondent was highlighting that the desire to make a positive change in some very different aspects – social, material, technological, functional is really the essence of any design activity. Unfortunately, especially in Poland many people identify design only with aesthetics, beauty or luxury products.

Another interlocutor indicated that design thinking helps the team to go back one step in the process of developing a new product or service and to verify initial assumptions about users' needs. By going back this one step it helps to verify the initial assumptions defined in the design brief, thus become more user-oriented. Here the Double Diamond tool developed by Design Council in London was referred to:

“I think that the most important element of this methodology is that if we look at the double diamond, which was sketched by the Design Council in London, we see that there are three nodal moments. The first, which is the output of the problem, then there is the middle, where the definition of the problem is, and then the end of the project. I think the main thing is that normally different companies begin their work with the designer with the design brief, which they define themselves, so in the middle of the Double Diamond. So they do have the impression that they are aware of what they need. (...) Meanwhile, what design thinking does, it pulls out the whole process of this one step back and allows first to investigate the problem and then define it again. And this is the main difference introduced by this method of work.”

Respondents emphasized that design thinking helps companies to become more open for external sources of knowledge, mainly from users. Some respondents were highlighting that in “traditional thinking”,

businesses very often operate inbred, with an emphasis (very often exclusively) on the internal sources of knowledge. They invent ideas inside, very often using statistical data (sales statistics for example) or quantitative research (quantitative surveys for example). What design thinking helps to achieve is focus of the whole team on the specific individuals in the central position. Respondents were talking about tools like persona, role-plays or prototyping and testing solutions with users that are designed to bring the team closer to users and very often engaging them in the development process. One respondent referred to it directly as a form of ‘user-oriented design’.

Experts highlighted that besides user orientation another important advantages of design thinking are multidisciplinary approach and rapid prototyping. When asked about the differences with respect to the “traditional” new product development processes they frequently indicated that, design thinking helps to work simultaneously in different directions, with the interdisciplinary approach. One respondent pointed out the differences between design thinking and the traditional new product development process models based on the “stage-gate” philosophy, still largely used by Polish companies:

“In the traditional model of work, you have a funnel process of innovation, (...) the stage-gate process with the idea of running from one department to another, handing in competence in each stage to the various people from different disciplines. Design thinking is an interdisciplinary method of working, so you have the whole team working together. This is one thing, the second thing is that it facilitates the prototyping and testing: let’s improve, let’s correct our initial idea many times.”

Some interviewees were highlighting the importance of DT as a form of introducing users in the development process at the beginning of it, not at the end:

“The main thing is here you involve users at the beginning, not the end. It doesn’t seem like a great difference, but it is! Looking through the eyes of the user is for those companies is a great discovery!”

One example is a telecommunication company, where all projects are conducted in design thinking approach. Each project always starts with deep user research. This phase can be time-consuming, as team members were sharing that the research can take more than 3 months in an

8-months project. User research is a time of discovery, gathering inspirations and insights, identifying user needs and developing initial ideas. Research methods that are used by the team vary, and are always planned accordingly to the type of the project. The most common methods are in-depth interviews among very diverse user groups. As one manager was stating:

“First, we have a very in-depth research stage. We start this research in on what we have inside, and then we always do a series of interviews with very different groups of users.”

Apart from interviews, users also very often become more actively engaged in the development stage, often in the form of the participatory workshops. In those workshops the team is working with selected groups of customers on a specific topic, for example on a new product or service. Companies pay a lot work to select the best lead users, which then become not only the source of information, but also team members, actively engaged in the development process.

Another example of the user engagement during the new product development process was a research method – the cultural probes technique use. Cultural probes is a technique used to inspire ideas in a design process with an aim to gather inspirational data about people’s lives, values and thoughts. By using this cultural probes method, the team was able to gain wider context of the researching topic. Around 30 customers were selected and asked to participate in this study. The assumption was to give those participants different tasks connected with the project theme:

“In these cultural probes there is a specific task, one for each day. Every day participants had to spend 30 minutes on one task that was designed specifically for that day. This research lasted for 7 days and after the last day we had a workshop summary. For the whole process there was a manual, with detailed instructions for participants. (...) In general, we have created a story around traveling so in that theme was all the context, it was designed to make people feeling more involved.”

As the team members were reflecting, customers participating in this research were very engaged in the process:

“Well, I can say it worked, because they were very engaged. Of those 30 people, only one person withdrew, but as it came to rest – they

were all very involved. It was a fantastic result, because normally people are shedding on such research projects like that. What's more they really liked how it was done, and the fact that it was specially designed for them by (...) was very inspiring and they were very glad about that.”

This research resulted in gaining a lot of inspirational, qualitative data, that was summarized in the participatory workshop on the last day. That was the beginning on working for the first solutions.

The first phase of looking for insights and conducting research, described above results in gaining a lot of qualitative data. That is followed by the second stage of the project – phase of definition. During this phase designers are introduced and are taking over the project. In the project that was using cultural probes techniques described above, one external agency was invited for cooperation, from which 2 designers were assigned to this project. Designers were participating in the last phase of cultural probes workshops with users, and also were handed all the research materials gathered during the research phase.

On the basis of the material gained in the discovery phase, the team have started to create first initial versions of the new product. Designers have started to create prototypes, very rough versions that were used only for the initial selection of certain directions. That led to the development stage. The final version of a product was also discussed and co-created with users:

“We had probably about 20 different projects that we have tested during variety of workshops with users (...) So based on this we selected two projects, but pointed out the one who has to go to completion.”

Summary and Discussion

Despite different understandings of the design thinking by different researchers, the role of empathy towards users is one commonly shared characteristics of the concept. Users are widely recognized as a valuable source of knowledge in the development of new products and services, according to Buur and Matthews (2008) it can have different forms: design anthropology, participatory design and the lead-user approach. DT as we have shown in our results of our empirical study, can use and

benefit greatly by using different forms of user engagement: from design anthropology using different research techniques, to co-design and co-development with lead users. As stated by interlocutors, the user orientation was one of the most important elements in DT projects developed in researched organisations. As one interviewee openly stated that the main characteristic of DT “is empathy, is to become open to users.”

Despite the exploratory nature of the research project, some further, more systematic study is needed. It seems interesting to further study users’ involvement and different forms of it in polish organisations.

References

- Brown, T. (2008). Design Thinking. *Harvard Business Review*, 86(6).
- Brown, T. (2009). *Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation*. New York: HarperBusiness.
- Buchanan, R. (1992). Wicked problems in design thinking. *Design Issues*, 8(2), 14–19.
- Buur, J. and Matthews, B.E.N. (2008). Participatory innovation. *International Journal of Innovation Management*, 12(3), 255–273.
- Cagan, J. and Vogel, C. (2002). *Creating Breakthrough Products. Innovation from Product Planning to Program Approval*. New York: Prentice Hall, Upple Saddle River.
- Carlgren, L. (2013). *Design thinking as an enabler of innovation: Exploring the concept and its relation to building innovation capabilities*. Gothenburg: Chalmers Reproservice.
- Carlgren, L., Elmquist, M. and Rauth, I. (2014). Exploring the use of design thinking in large organisations: Towards a research agenda. *Swedish Design Research Journal*, 1.
- Cooper, R. and Evans, M. (2002). Breaking From Tradition: Market Research, Consumer Needs And Design Futures. *Design Management Review*, 17(1).
- Deserti, A. and Rizzo, F. (2014). Design and the Cultures of Enterprises. *Design Issues*, 30(1), 36–56.
- Franke, N. and Piller, F. (2004). Value Creation by Toolkits for User Innovation and Design: The Case of the Watch Market. *Journal of Product Innovation Management*, 21(6).
- Hippel, E.V. (2006). *Democratizing Innovation*. Cambridge, Mass: The MIT Press.
- Jahnke, M. (2013). *Meaning in the Making: Introducing a hermeneutic perspective on the contribution of design practice to innovation*. Gothenburg: PhD Thesis. University of Gothenburg.

- Johansson-Sköldberg, U., Woodilla, J. and Cetinkaya, M. (2013). Design Thinking: Past, Present and Possible Futures. *Creativity & Innovation Management*, 22(2), 121–146.
- Kimbell, L. (2011). Rethinking Design Thinking: Part I. *Design and Culture*, 3(3), 285–306.
- Liedtka, J. (2015). Perspective: Linking design thinking with innovation outcomes through cognitive bias reduction. *Journal of Product Innovation Management*, 32(2).
- Lockwood, T. (2009). *Design Thinking: Integrating Innovation, Customer Experience, and Brand Value (1 edition)*. New York: Allworth Press.
- Martin, R. (2009). *The Design Of Business: Why Design Thinking Is The Next Competitive Advantage*. Harvard: Harvard Business Press.
- Simon, H.A. (1969). *The Sciences of the Artificial*. Cambridge: MA.
- Stephens, J.P. and Boland, B.J. (2014). The Aesthetic Knowledge Problem of Problem-Solving With Design Thinking. *Journal of Management Inquiry*, 12.
- Thomke, S. and von Hippel, E. (2002). Customers as Innovators: A New Way to Create Value. *Harvard Business Review*, 80(4).
- Tonkinwise, C. (2011). A taste for practices: Unrepressing style in design thinking. *Design Studies*, 32(6), 533–545.
- Veryzer, R.W. and Borja de Mozota, B. (2005). The Impact of User-Oriented Design on New Product Development: An Examination of Fundamental Relationships. *The Journal of Product Innovation Management*, 22, 128–143.
- Yin, R.K. (2003). *Case study research. Design and methods*. Thousand Oaks–London–New Delhi: SAGE Publication.

3. STRATEGY IN THE DIGITAL WORLD





Mihaela Constantinescu

New Trends in Marketing Research: Neuromarketing and Eye Tracking

Abstract

Marketing research brings substance and precision to the decision making process. However, we must verify the reliability of data used when making decisions, knowing the fact that people do not tell the truth all the time. The present technological development gives us the opportunity to avoid the dependence only on what people say, giving us the possibility to see what happens in the consumer's "black box". This article discusses the usefulness of new marketing research techniques – neuromarketing and eye tracking – in identifying and explaining how the brain reacts to different marketing stimuli.

Keywords: neuromarketing, eye tracking, EEG, fMRI, consumer behavior

Introduction

In order to avoid depending on what people say, if those things are according to the reality, or if maybe some things just skip from our respondents' attention, nowadays we can rely on technology. We have a series of techniques that can be used in order to observe the actual reaction and behaviour of a consumer, independent of what they would have

intentionally or unintentionally conceal. Of course, it is not fair to assume that all respondents lie; actually, most of the time, individuals are not able to assess some of the decisions as they originate in the subconscious; they don't lie, they're just not aware of the situation.

There are 4 different types of information that we seek about consumers: what they think, what they do, what they feel, and what they say. These 4 consumer behaviour dimensions do not always match – due to several reasons discussed above; therefore, it is important to objectively analyse consumer thoughts and feelings in order to better explain their behaviour, without relying only on what they say.

The importance of new marketing research techniques such as neuromarketing and eye tracking can be determined also by the fact that every major marketing research company is acquiring a neuromarketing service provider, or developing its own department (for example, Nielsen acquired NeuroFocus, and Ipsos has its Neuroscience and Emotion Innovation Centre).

A study among research specialists showed that techniques such as eye tracking and neuromarketing will be taken into consideration by at least ¼ of researchers in the near future (Greenbook, 2015). This segment will be joining some of their colleagues who are already using such techniques: 28% for eye tracking and 15% for neuromarketing in general.

Neuromarketing

Definition and Utility

From an interdisciplinary approach, neurosciences represent a link between many fields (biology, chemistry, medicine, computer science, and psychology), and aim to explore the structural and functional aspects of the nervous system (Popa et al., 2015). Plassmann et al. (2015) present neuromarketing as a technique that explains the relationship between the brain and our behaviour.

The literature devoted to neuromarketing is quite young, considering that the earliest reported use of the word 'neuromarketing' appears to date to a June 2002 press release by an Atlanta advertising firm, BrightHouse, announcing the creation of a business division using fMRI for marketing research (Fisher, Chin and Klitzman, 2010). Although it is a rather young branch of marketing research, the last decade is abundant in neuromarketing studies in one of the following areas:

- a) **Consumer behaviour research** – concerning decision-making, preference formation, reward system, emotional response, etc. Considering that this is the widest area of neuromarketing application, specialists call it also consumer neuroscience (Berčík et al., 2015; Agarwal and Dutta, 2015). Neuromarketing provides a better understanding of the four main dimensions of consumer behaviour: consumer decision-making and formation of consumer preferences, engagement of the brain's reward system by marketing, consumers' motivational and emotional response, the neural foundations of consumers' attention and memory (de Oliveira et al., 2015).
- b) **Testing/evaluating promotional campaigns** – related to attention and memory. Horst (2016) describes neuromarketing as a precise tool that allows us to bring science-based evidence to our decision-making in the communication process.
- c) **Evaluating website design** – precise determination of visual paths and areas of websites or ads that absorb the attention of the recipient.
- d) **Analysing package design decisions** – comparing the attractiveness of packaging on supermarket shelves and identifying the best version of package design in order to offer customers relevant information.

Considering the fact that there is still uncertainty about how consumer and strategy specialists can use neuromarketing, Solnais et al. (2013) clarifies the current scope and contribution of consumer neuroscience by conducting a comprehensive empirical review of 34 selected studies. The conclusion of Solnais and her team is that although neuromarketing will bring us a set of objective information about how consumer's brain works, this type of research cannot replace classic studies, but rather complement them with missing data.

How Does It Work?

An individual is presented with a stimulus (TV commercial, printed ad, different versions of the same product, etc.) and their reactions are measured with one of the following techniques:

a) **Electroencephalography (EEG)**

Participants being monitored under the EEG have electrodes placed on the top of their scalp in the form of a cap or a headset (Figure 1B) connected to a computer operating a programme designed to interpret

the input coming from the participant. Apart from measuring signals from the brain, EEG can identify which signals are caused by which stimuli (Gorgiev and Dimitriadis, 2015).

Figure 1. Equipment used in neuromarketing studies



A – Magnetoencephalography (MEG), B – Electroencephalography (EEG),
C – Functional magnetic resonance imaging (fMRI) (Wikipedia.org).

b) Functional magnetic resonance imaging (fMRI)

This technique involves the use of a MRI machine (Figure 1C), where the subject being tested has to remain still while interacting with different marketing stimulus and their brain being scanned for response reactions. fMRI is an imaging technique that can detect increased blood flow in the brain, which occurs in response to metabolic demand. Simply put, this technique shows the ‘activated’ regions of the brain during a stimulus given to the participant (de Oliveira et al., 2015).

c) Magnetoencephalography (MEG)

MEG measures the magnetic field created by neuronal activity. This allows scientists to study magnetic changes in the brain and figure out which areas are busy doing things each millisecond (Dotinga, 2007). During an experiment, the subject’s head is placed inside a housing (as can be seen in Figure 1) which contains an array of sensors called super-

conducting quantum interference devices (Vainio, 2015). MEG isn't geographically precise, but it's very fast.

None of those techniques can be considered perfect, each has both advantages and disadvantages. fMRI involves a very high cost of scanning (around USD 1000 per hour), therefore the study cannot be conducted on too many subjects. The cap used in EEG will let you know what happens only on the near surface areas of the brain. In an EEG study, the subject can move freely, whereas those subject to fMRI or MEG have to remain still as the scanning uses a very large machine, a fact that can be disturbing to some individuals. Considering all these negative aspects, choosing neuromarketing techniques depends first of all on the reactions that you seek to get from participants (i.e. to what parts of the brain they are linked and when/where they manifest themselves).

Application of Neuromarketing

a) Coca-Cola – Pepsi war

Researcher Read Montague (McClure, 2004) has designed one of the best known neuromarketing study, trying to explain the difference between preferences expressed in the Pepsi Challenge (where people, without knowing the brand of the soda drink, tend to choose Pepsi over Coca-Cola, considering only the taste – this is what is known as “blind tests”) and the results of surveys where people choose Coke over Pepsi when asked about their preferred soda beverage.

Montague created a Pepsi Challenge of his own, hooking up his test subjects to an MRI machine to track brain activity. This experiment allowed Montague and his team to identify the brain regions activated when the subjects used only taste information compared to situations when they also knew the brand name. At first, as part of the blind test, the reward centre of the brain, the ventral putamen, revealed a much stronger preference for Pepsi versus Coca-Cola. However, when Montague told his subjects which samples were Coca-Cola, preferences shifted to three-to-one in favour of Coke (identified due to activity in the medial prefrontal cortex – an area of the brain associated with cognitive functions such as thinking, judging, preferences, and self-image).

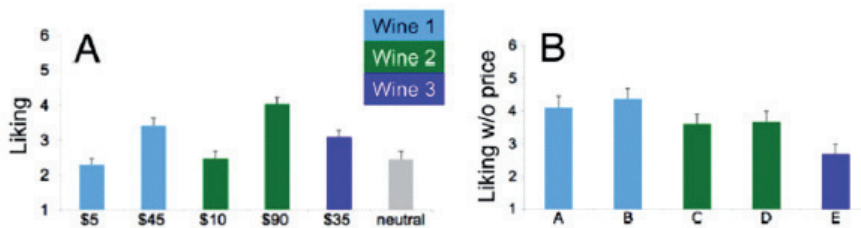
Montague concluded that the brain was recalling images and ideas from commercials, and that the thoughts and emotions connected to the branding were overriding reactions to the actual quality of the product (Marketing-Schools.org).

This shows us the importance of marketing efforts, the impact of positive image on buying decision process, and the strong link that consumers develop with famous brands.

b) Influence of price on experienced pleasantness (EP)

A team of researchers from Stanford University and California Institute of Technology used neuromarketing in order to identify the effect of marketing instruments (such as price) on perception. It's a much known fact that when asked, a person will highly appreciate a product with a higher price, due to the direct connection that we make between price and quality. But what happens when a consumer is not asked a question (therefore avoiding subjective opinions), but rather had their brain activity monitored?

Figure 2. The level of pleasantness for wines when the price was known (A) versus the situation when participants didn't know the price of each wine (B) (Plassmann et al., 2008)



Using fMRI, the researchers analysed the specific area of the brain where that perception of enjoyment lies – the medial orbitofrontal cortex, which reacts to experienced pleasantness for odours, taste and music (Reinberg, 2008). The participants of this research were asked to taste 5 types of wine, each of them being presented by their retail price: USD 5.00, USD 10.00, USD 35.00, USD 45.00, and USD 90.00. The trick in all this was that there were actually only three types of wine: wine 1 (presented as costing USD 5.00 or USD 45.00), wine 2 (presented as costing USD 10.00 or USD 90.00) and wine 3 (presented as costing USD 35.00). The researchers measured the impact of price information on experienced pleasantness (EP) by comparing the mean liking rating for wines 1 and 2 when administered at high vs low price. In order to determine if the level of pleasantness is actually influenced by knowing the price of the wine, the researchers conducted a follow-up study in which participants were not presented with the price of each of the five

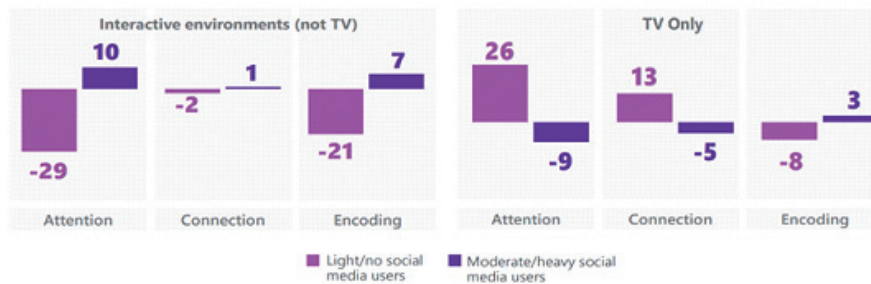
wine. You can see in Figure 2 how the level of pleasantness varies depending on knowing or not knowing the price (Plassmann et al., 2008).

The conclusion of this study was that the more expensive the wine, the more activity we can find in the medial orbitofrontal cortex of the brain, therefore we will “let the brain know” how much we like the product depending on its price.

c) Microsoft uses neuromarketing quite often:

- In 2015, Microsoft published results of a very extensive study on consumer’s attention (Microsoft, 2015). The study involved the use of two marketing research methods – survey and neuromarketing (EEG). The main objective of this study was to understand what impact technology and today’s digital lives had on our attention span. The results showed different levels of attention between light/no social media users and moderate/heavy social media users, depending on the device they were using (Figure 3);

Figure 3. Overall performance across attention (concentration), connection (emotional) and encoding (memory)



- In 2009, Microsoft used EEG to identify the level of engagement of gamers using an Xbox. In order to determine the efficiency of in-game adverts, they tracked which parts of the brain were stimulated by the displayed ads, considering that gamers would engage more with ads that determine more parts of their brain to react; the study showed that Xbox Live ads had a higher cognitive response, and also a positive emotional response (Dooley, 2009).

Eye Tracking (ET)

Definition and Utility

An extension of neuromarketing studies, eye tracking, involves either eyeglasses (mobile) or a stationary tracker that uses infrared cameras to detect where a given person is looking at a given moment (Cosic, 2016).

The need for tracking such aspect of personal behaviour is based on a process called selectivity of attention, which describes the fact that human attention is limited and we are not able to look at more than a certain number of things at a time. This is why consumers' sight has to be drawn towards certain products in a supermarket; this is why webpages use striking colours for the most important sections; this is also why dynamic ads are more salient than static ones. All because they can catch the attention of the consumer.

We can see the importance of attention in the AIDA (attention-interest-desire-action) economic model, which is built on the assumption that only those elements of a message that receive sufficient attention from the audience will receive cognitive processing capacity, and that attention is a necessary (but not sufficient) condition for subsequent stages in information processing and decision making (Felix and Hinck, 2015).

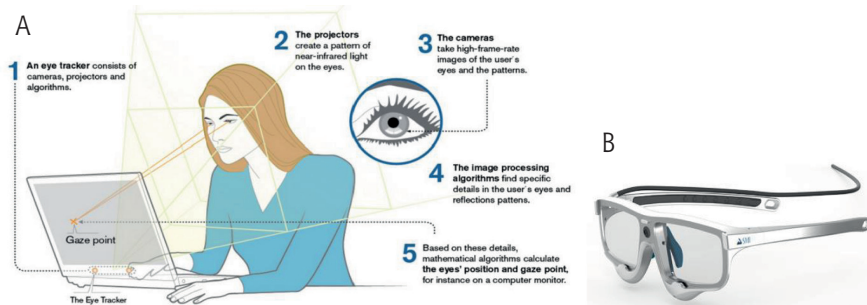
By detecting eye position, gaze direction, sequence of eye movement, and visual adaptation during cognitive activities, ET is used to evaluate the spatial orientation of attention, the performance in visual tasks, the reaction to information on websites, the customer response to advertising, and the emotional and cognitive impact of various spurs on the brain (Popa et al., 2015).

How Does It Work?

Eye tracking involves actual tracking of the movement of the pupil, and the most commonly used technique is pupil centre corneal reflection (PCCR). The basic concept is to use light source to illuminate the eye causing highly visible reflections, and a camera to capture the image of the eye showing these reflections. The image captured by the camera is then used to identify the reflection of the light source on the cornea (glint) and in the pupil. We can then calculate a vector formed by the angle between the cornea and pupil reflections – the direction of this vector, combined with other geometrical features of the reflections, is

then used to estimate the gaze direction (tobii.com). The steps for this tracking process are presented in Figure 4 where we can also see the two devices used – stationary eye tracker and eye tracking glasses.

Figure 4. The use of eye tracking devices



A – stationary eye tracker (tobii.com),
 B – eye tracking glasses (smivision.com).

The results of the eye tracking process can be presented in the form of heat maps and gaze plots (Figure 5). The heat map shows how looking is distributed over the stimulus and the fixation duration (red spots indicate longer gazes). Gaze plots show the location, order, and time spent looking at locations of the stimulus (tobii.com). For every marketing item (ad, package, webpage, commercial, etc.), it is very important to know where people look first and what are the areas that draw the most attention.

Figure 5. Heat map (smivision.com) and gaze plots (tobii.com)



Application of Eye Tracking

a) Package design

In today's over-crowded marketplace, marketers know that packages sell. Having far too many options at hand, consumers will go through and analyse the products that capture their attention. This is the reason for which more and more companies resort to eye tracking studies in order to identify the best version of their packages. The most common studies for this area are the ones that compare the attractiveness of packaging on supermarket shelves (in comparison to other competitive products displayed there) and studies that identify the best version of the package design, in order to offer customers relevant information.

One study that deserves to be mentioned in particular is that conducted for Bonduelle, where the change brought by the eye tracking results led to a 15% increase in sales (tobiipro.com). As you can see in Figure 6, when people were looking at the old package (A), they had to analyse visually the whole area in order to find the necessary information. Also, the brand was not something that customers paid attention to. With the new version (B), the package guides the customer through a "tunnel" with all the necessary information.

Figure 6. A heat map showing how customers analyse the old and the new version of Bonduelle package (tobiipro.com)



b) Ad design

The world of advertising has virtually exploded in the last 20 years, therefore the consumer is overwhelmed everyday with hundreds of ads on TV, radio, Internet, streets and even on their personal phone. In this

context, if a company wants to be efficient in its communication process, it has to identify how an ad can be attractive and convincing at the same time. One of the current problems of advertisement is the fact that if you chose to include an attractive element in your ad (beautiful people, babies, pets, landscapes, etc.), this element can attract all the attention, thus the product advertised will be actually overlooked. This is why companies resort to eye tracking in order to arrive at the proper ad design. Figure 7 presents the differences between the efficiency of two versions of the same ad, depending where the girl is looking, a fact that directs also the eyes of the viewer.

Figure 7. A heat map showing the interest points of viewers for two different versions of one printed ad (Patel, 2013)

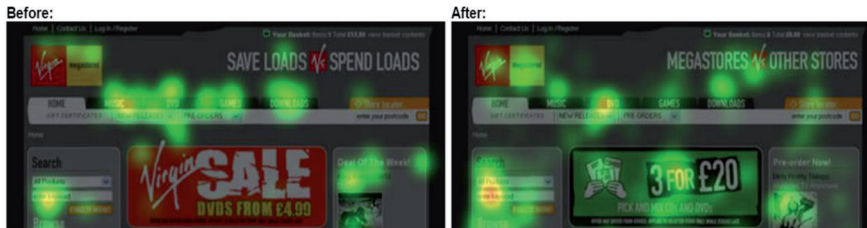


c) *Banner blindness*

The term “banner blindness” has been used by those who say most consumers don’t really see ads because they have trained themselves to ignore them, focusing on other content instead. In order to test this theory, researchers conducted several studies. One of these studies focused on Virgin website and, especially, on a banner presenting a sales offer. As you can see in Figure 8, when the banner was red, almost no one looked at it. And this is explained by the banner blindness theory, as Internet users avoid red areas because they already associate it with special offers. After the first eye tracking test, Virgin website changed the colour of the banner to green, a colour that is not yet associated with

promotions, and we can see that it was a good move – people took the time to look at the banner.

Figure 8. Using eye tracking to determine the effect of banner blindness (etre.com)



Conclusions

Neuromarketing is the link that has been missing from the marketing research process towards understanding the consumer, a technique that shows us the connection between thoughts and actions. Thus, managers should approach both brain-based studies and traditional studies as complements rather than substitutes in discovering insights.

We cannot approach neuromarketing and eye tracking without taking the ethical issues that arise from scanning people's brains and eye movement into consideration. The ethics regarding such research techniques is discussed in numerous articles and as part of many conferences (de Oliveira et al., 2015; Stanton, Sinnott-Armstrong and Huettel, 2016; Bakardjieva and Kimmel, 2016), most of the time the question at hand being "Is it right for marketing to use the results of such studies?". There are specialists that sustain the idea that marketing is trying to trick consumer's brain into buying things that actually they don't like or want. Yet, this is a debate that will not stop with neuromarketing, so the solution is not here. However, we can show the advantages of learning from neuromarketing studies: knowing what the consumer wants will lead us to better products, knowing what are their interests will help us build more interesting communication campaigns, knowing what makes them choose a product will add to more friendly and easy-to-handle marketplace.

References

- Agarwal, S. and Dutta, T. (2015). Neuromarketing and consumer neuroscience: current understanding and the way forward. *Decision*, 42(4), 457–462.
- Bakardjieva, E. and Kimmel, A.J. (2016). Neuromarketing Research Practices: Attitudes, Ethics, and Behavioral Intentions. *Ethics & Behavior*, 3.
- Cosic, D. (2016). Neuromarketing in market research, *Interdisciplinary Description of Complex Systems*, 14(2), 139–147.
- Dooley, R. (2009). *Neuromarketing at Microsoft*, <http://www.neuroscience-marketing.com/blog/articles/neuromarketing-at-microsoft.htm> (May 3, 2016).
- Dotinga, R. (2007). *MEG Scanners Are Mega Powerful*, <http://www.wired.com/2007/01/meg-scanners-are-mega-powerful/> (April 21, 2016).
- Felix, R. and Hinck, W. (2015). *Attention to Print Advertising: An Eye Tracking Study in the Context of Airline Advertisements*. Part of the series Developments in Marketing Science: Proceedings of the Academy of Marketing Science, 252–255.
- Fisher, C., Chin, L. and Klitzman, R. (2010). *Defining Neuromarketing: Practices and Professional Challenges*, <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3152487/> (April 21, 2016).
- Etre.com (2006). *Virgin on successful*, http://www.etre.com/blog/2006/04/virgin_on_successful/ (April 19, 2016).
- Gorgiev, A. and Dimitriadis, N. (2015). Upgrading Marketing Research: Neuromarketing Tools for Understanding Customers. In: T. Tsiakis (Ed.), *Trends and Innovations in Marketing Information Systems*. IGI Global.
- Greenbook (2015). *GRIT Report 2015 Q3-Q4*, <http://www.greenbookblog.org/2015/12/07/grit-report-for-q3-q4-2015-is-here-download-it-now/> (April 16, 2016).
- Horst, S. (2016). Using neuroscience to improve ad impact: How new research tools can advance cultural marketing. *Journal of Cultural Marketing Strategy*, 1(2), 193–202.
- Marketing-Schools.org, *Neuromarketing. Explore the Strategy of Neuromarketing*, <http://www.marketing-schools.org/types-of-marketing/neuromarketing.html> (April 25, 2016).
- McClure, S.M., Li, J., Tomlin, D., Cypert, K.S., Montague, L.M. and Montague, P.R. (2004). Neural correlates of behavioral preference for culturally familiar drinks. *Neuron*, 44(2), 379–387.
- Microsoft (2015). *Attention Spans, Consumer Insights, Microsoft Canada*, <https://advertising.microsoft.com/en/WWDocs/User/display/cl/researchreport/31966/en/microsoft-attention-spans-research-report.pdf> (May 3, 2016).
- Oliveira, J.H.C., de, Giraldo, J.d.M.E., Jabbour, C.J.C., Netto, C.F. and Betti, K.C.M. (2015). Improving business innovation and research through the

- application of neuromarketing with ethics: a framework. *International Journal of Business Innovation and Research*, 9(1), 52–64.
- Patel, N. (2013). *7 Conversion Lessons Learned from Eye Tracking*, <https://www.quicksprout.com/2013/08/01/7-conversion-optimization-lessons-learned-from-eye-tracking/> (May 2, 2016).
- Plassmann, H., Venkatraman, V., Huettel, S. and Yoon, C. (2015). Consumer Neuroscience: Applications, Challenges, and Possible Solutions. *Journal of Marketing Research*, 52(4), 427–435.
- Popa, L., Selejan, O., Scott, A., Muresanu, D., Balea, M. and Rafila, A. (2015). Reading beyond the glance: eye tracking in neurosciences. *Neurological Sciences*, 36(5), 683–688.
- Reinberg, S. (2008). Study Spotlights Marketing’s Impact on the Brain. *HealthDay*, <https://consumer.healthday.com/cognitive-and-neurological-health-information-26/brain-health-news-80/study-spotlights-marketing-s-impact-on-the-brain-611659.html> (May 2, 2016).
- Solnais, C. Andreu-Perez, J., Sánchez-Fernández, J. and Andréu-Abela, J. (2013). The contribution of neuroscience to consumer research: A conceptual framework and empirical review. *Journal of Economic Psychology*, 36(6), 68–81.
- Stanton, S.J., Sinnott-Armstrong, W. and Huettel, S.A. (2016). Neuromarketing: Ethical Implications of its Use and Potential Misuse. *Journal of Business Ethics*, 1–13.
- Smivision.com (2013). *Case Study Eye Tracking: Shopper Research*, http://www.smivision.com/fileadmin/user_upload/downloads/case_studies/smi_cs_shopperresearch_etg20.pdf (April 28, 2016).
- Tobiipro (2016). *Eye tracking study of package design led to 15% sales growth*, <http://www.tobiipro.com/fields-of-use/marketing-consumer-research/customer-cases/strategir/> (May 4, 2016).
- Vainio, M. (2015). *Consumer neuroscience: usability of brain imaging methods in marketing research*. Master’s Thesis, University of Turku, http://doria32-kk.lib.helsinki.fi/bitstream/handle/10024/117364/gradu_2015_Vainio.pdf?sequence=2 (May 3, 2016).

Bogdan Mróz

New Information Technologies: Implications for Business Strategies and Marketing Communication

Abstract

The article discusses the impact of modern information and communication technology on changes of the strategies of contemporary enterprises, the appearance of new business models, and the effects of these processes on marketing communication. A particular attention has been drawn to issues like utilization of large bodies of consumer data (including Social Big Data) in marketing operations and in managerial decision-making, data-driven marketing, Internet of Things, and predictive analytics. Furthermore, the article points to the new possibilities marketing communication can benefit from thanks to utilization of 360-degree video technology, streaming, and the general evolution of the Internet towards the so-called Web 5.0.

Keywords: information and communication technologies, Big Data, Internet of Things, predictive analytics, Web 5.0

Introduction

The key to understanding the changes in consumer behaviour and consumers' quick reaction to new trends involves employing modern tech-

nologies to collect, process, and utilize vast bodies of consumer data in a marketing context, which requires a considerable level of efficiency and effectiveness of internal analytical units, as well as a close cooperation with companies specializing in market research, marketing analytics, database collection, information processing, etc. (Mróz, 2013, p. 241 et seq.).

In the era of quickly-developing and increasingly-accessible Internet, millions of gigabytes of data are collected and processed each day. It is estimated that approximately 100 hours of videos are uploaded to YouTube each hour, and there are about 85 thousand videos uploaded each day, which amounts to around 2400 gigabytes of data. Facebook's database includes over billion users, who upload 10 million videos and a billion photos to the service every month. Already in 2008, Google processed 24 petabytes of data every day, and in 2001, Jeff Bezos, Amazon's founder, said that his S3 cloud contained one billion objects. Taking into account the fact that an 'object' may be anything from a photo to a complex database, and assuming that the average size of a file is 1 megabyte, this can mean that we're talking about even an exabyte (billion gigabytes) of data. According to studies conducted in 2011 by a team of scientists from the University of Southern California, the amount of data 'stored' globally on the Internet and in devices outside the network exceeds 295 exabytes (Gutkowski, 2014). Today, such a huge body of data does not pose any major problems when it comes to the possibility of storage thereof, but the real challenge lies in analytical processing of such data and using it to make the right managerial decisions.

Many marketing managers view Big Data analytics as a wonderful remedy to improve business efficiency and to gain competitive advantage. Big Data may actually contribute to a real competitive advantage because it makes it possible to diagnose the business reality and draw conclusions in real time, on the basis of the currently-ongoing market processes. It is a great and powerful tool to gain broad knowledge about consumers and market trends, treated by many as a *Wunderwaffe* in contemporary business. However, it cannot replace strategic thinking, operating efficiency, marketing creativity, and managerial competence – although it still may boost them significantly.

Today, business managers and marketing professionals have access to vast amounts of data about consumers, which they are not always able to handle in the right way. "Data flood" is a major challenge and an is-

sue that needs to be dealt with by enterprises aspiring to become market leaders. This is pointed to by Nate Silver, an American statistician: “Every day, three times per second, we produce the equivalent of the amount of data that the Library of Congress has in its entire print collection. Most of it is... irrelevant noise. So unless you have good techniques for filtering and processing the information, you’re going to get into trouble” (Nichols, 2013, p. 62–63).

Sources of Data About Customers and Consumers

There are plenty of sources of data about customers and consumers. The most common and most often used of these are: company websites, e-mails, on-line directories, on-line shops, contact forms, and CRM systems. In recent times, marketers have directed their attention to vast data sources that may provide them with a lot of diverse and detailed information. They are usually of smaller or larger importance, tend to be messy and not systematized, but they are still worth taking advantage of in order to be able to offer customers the best brand or business experience possible. These include:

- **social media** – the term includes a range of social networking platforms which contain a huge body of data on the basis of which it may be even possible to make short-term predictions of a given customer’s needs (Mazurek, 2012). Internet users tend to disclose a great deal of information about themselves across social media, quite often unknowingly. This concerns also very personal information and preferences such as one’s taste in films and music, or even kinship with other users. Apart from that, they share an astounding number of photos – which can be also used to gain some information. The posts they share and like, or the pages they follow are also a means that provide marketers with a very important knowledge.
- **geolocation data** – on a most basic level, technology makes it possible to utilize GPS data from a mobile device, and then display certain adverts to a given person on the basis of their location. Smartphones of users who are permanently on-line are mines of information about them. This gives marketers access to the current needs of a given consumer in a given location, which helps them immediately develop a highly-personalized offer and display information about nearby shops, restaurants, sales, etc. Geolocation data constitute

a perfect context for such information, and is a great complement thereto.

- **wearable technologies** – our clothes, shoes, or jewellery can be also packed with a range of sensors that monitor certain parameters and functions of our body, and send such data to applications integrated with them. Such solutions make us able to access information about the shape and health of a given person, or about the physical activity they undertake.
- **everyday articles connected to the Internet** – in the age of the increasingly common expansion of the Internet of Things (IoT), the equipment and devices we use to pursue our everyday activities tend to be monitored by sensors, gauges, meters, etc. This is a way to learn e.g. what a given customer is out of – and to offer them the right products in response to their needs.

Big Data and Data-Driven Marketing

The concept of Big Data has evolved over the years, and today is still interpreted and understood in various ways. The media covering the subject usually refer to Doug Laney's definition, who stated in 2001 that it was a huge amount of data generated at a very quick rate and containing a lot of content. Big Data is based on the principle of 4V: *volume* (big amount of data), *variety* (different types of data), *velocity* (high variability, significant dynamics), and *value* (value or assessment determined on the basis of review and verification). According to Gartner's definition from 2012, Big Data is high-volume, high-velocity and/or high-variety information assets that demand cost-effective, innovative forms of information processing that enable enhanced insight, decision making, and process automation. These assumptions are possible to achieve thanks to analysis and correct ways of presenting conclusions. This is why Big Data is not only about collecting and processing data, but most of all about concluding and presenting data essential for gaining certain business profits (Gutkowski, 2014; Płoszajski, 2013).

Analysis of large data volumes is applied in the following sectors: finance, telecommunications, health care, biotechnology, scientific research (especially space research), Internet industry (especially e-commerce), advertising, tourism, social networking services, information websites, as well as in industry and services of global reach. The expect-

tations of Big Data are big, and it is assumed that collecting information from every source possible (devices, the Internet) will be soon common for every enterprise, regardless of its size (today, only the biggest market players can afford it). A proper utilization of the potential of drawing conclusions from and analysing vast bodies of data will let business entities find solutions allowing them to: become more time- and cost-efficient, make good business decisions quicker, develop new products and optimized offers, as well as monitor and identify market trends. An important aspect in this context is also the automatization and simplification of organization-internal processes. The fact that data can be collected and analysed almost at the same time is also significant. Thanks to Big Data, understood as real-time analysis of vast volumes of data, companies are able to offer the recipients of their products or services (both individual and business entities) real value, corresponding to their expectations and preferences.

Data-driven marketing is a process of collecting and combining immense amounts of on-line data with off-line data, followed by an analysis of such data in real time, and making insightful observations about customers. All this is to infuse the market with highly-personalized communication. But personalization is not everything. Marketing communication needs to be not only individualized, but also consistent. In order for this to be so, marketers need to have a permanent access to – and insight into – consumer data. According to a survey carried out by Ascend2, even 93% of managers believe that integration of customer data from different channels has helped their companies develop better-tailored offers and induce appropriate interaction, which has led in effect to an increase in the quality of customer service. But approximately 44% of marketing professionals say that pursuing a consistent and logical communication with consumers in an omnichannel environment poses a real problem (Ascend2, 2015).

Big Data is something of great utility to marketers. It is a resource that can be used to establish a successful business. Data itself is not as important as what can be inferred from it, and what decisions can be made on the basis thereof. Big Data combined with an integrated corporate marketing strategy may have a major impact on the key elements of business, such as customer engagement, customer retention, customer loyalty, and optimization of marketing activities.

Contemporary marketing is not just about creative and ‘catchy’ slogans or flashy and eye-catching billboards. It is also based on sophisti-

cated analytics – to an increasingly larger extent. In a market reality, where almost all marketing activities become measurable, optimization of such activities is the first and most important commandment of every marketing professional. At present, larger and larger parts of budgets are spent on marketing, but the results of such investments are expected to be measurable and satisfying.

Big Data poses a marketing challenge not only in terms of acquiring and analysing historical data, but also with respect to forecasting. Today's algorithms are developed in a way that makes marketers able to predict a given consumer's behaviour on the basis of historical data. This becomes a very powerful tool in the hands of marketers, and if used in an inventive and creative way, it may yield excellent results.

Social Big Data

Nowadays, marketers are well-able to closely monitor and measure customer behaviour through analysing their activities pursued across social media. Modern technology makes it possible to record such data with a great attention to detail. An average Internet user spends about 2.5 hours a day using social media, providing enterprises with huge amounts of data concerning their preferences in many different areas. It is necessary to point out that every social networking platform is different, and each of them “offers” different types of useful information.

- Facebook – the famous “Like” button is clicked 2.7 billion times a day, revealing information about the preferences of each individual user, but it is also possible to identify the latest dominant trends by analysing larger ‘clusters’ of such data;
- LinkedIn – 22% of users of the website make 500 to 999 “1st degree” professional connections, and 19% of them – from 301 to 499 of such connections. Using the information about the skills and qualifications of LinkedIn's users, it is possible to create maps of professional connections and monitor “talent clusters”, interactions between talented people, etc.
- Twitter – in 2014, the service reported a peak of 143 199 tweets published in one second (globally). Twitter makes it possible to follow topics that stir the most interest of its users in real time;
- Pinterest – over 17% of infographics comes from the “Home” category, and 12% of them is distributed over the “style” or “fashion”

categories. This is an excellent source of information about consumer preferences;

- YouTube – according to Nielsen, YouTube reaches a larger number of adult Americans aged 18–34 than any other cable TV. The website offers an insight into users' preferences for videos and music, but also into the latest trending videos, etc.
- Foursquare – the service boasts 45 million users, who have so far checked in 5 billion locations worldwide. It is a great source of information about real-time location (Smith, 2014).

Predictive Analytics: Predicting Consumer Behaviour

Those familiar with G. Orwell's "1984" surely remember the rather shocking vision of the future, where the omnipotent and omniscient superstate and its "Thought Police" knows every recess of every citizen's soul, and is able to predict every act of dissidence. It seems that what used to be fiction is now becoming the reality, although the world of today is fortunately still far from Orwell's dystopian vision.

As for studies into consumer behaviour and taking advantage of the findings of such studies in business, it appears that the so-called predictive analytics, making it possible to fulfil the desires consumers are not yet aware of, may play a crucial part. Using data analysis, companies will be able to predict the needs of consumers before they even surface. Big e-commerce chains take advantage of this technique already today. Based on analysis of data concerning regular and repetitive shopping, they are now able to tell when the customer is going to run out of the purchased goods, and pre-empt the customer's actions by providing them with a better offer than that of the competitors. Processing data about preferences lets businesses anticipate the behaviour of customers and to predict their further purchase-related steps. This is why on-line shops may suggest products that are complementary to those already purchased, matching the offer to particular circumstances. Based on a given consumer's purchasing history, behaviour, and information shared across other channels (e.g. on social media), on-line shops may harvest data about birthdays, anniversaries, name days of their family members and friends, and then offer interesting products in special prices. Thanks to proper customer segmentation and appropriate and systematized collection of data, it is now possible

to process information about particular family members of a consumer, which helps on-line shops use these persons' preferences and address the consumer with suggestions of gifts for the former. UPS, for instance, makes use of predictive analytics to predict the requirements in the scope of maintenance of delivery vehicles. With a very big number of parcels delivered each day, each breakdown generates huge losses and leads to customers being dissatisfied with the service. Forecasting and planning of vehicle maintenance lets the company save millions of dollars on unexpected repairs and reduce the number of customer complaints. Today, other market leaders, such as Amazon, Walmart, or Zappos, rely on similar methods (Gutkowski, 2014).

A very interesting example illustrating the potential of predictive analytics is the solution used by UBS Investment Research. It involves analysing satellite photographs of parking spots available next to Walmart shops in order to improve the algorithm predicting the future financial results of the retail company. The model performs an analysis of how the number of cars parked at Walmart's parking lots is correlated with the company's quarterly results; a monthly calculation of parked cars makes it possible to determine how many customers visit these shops, and a mathematical regression model translates this information into precise estimates of the future quarterly results, updated on a monthly basis. This way UBS gains advantage over other research companies attempting to forecast Walmart's financial results by means of conventional prognostic models.

Predictive analytics is also applied in predicting various natural disasters or epidemics. An example is Google's project named *Flu Trends*. Google monitors the queries typed in the search engine to create real-time changing maps of areas threatened with a flu epidemic. In New York, in turn, there is a team of "analytical alchemists", who has managed (basing only on an analysis of commonly available data!) to improve the effectiveness of preventing fires in vacant buildings by 70%.

In e-commerce, predictive analytics makes it possible to predict not only the current needs of customers, but also their future needs. Retail networks are able to use purchasing history to make deduce – in all likelihood – if a given female shopper is pregnant, and even make an educated guess as to the month of pregnancy. This knowledge is taken advantage of by salespeople, of course, who use it to send appropriate offers to such customers at the right time.

Internet of Things

The concept of the Internet of Things (IoT) was coined by a British entrepreneur and start-up founder, Kevin Ashton. He formed the idea first in 1999 to describe a system where the material world communicates with computers by means of omnipresent sensors. Almost a decade later, at the end of 2008 and beginning of 2009, the quantity of devices connected to the Internet exceeded the number of inhabitants of the world. That moment, according to Cisco, was the true birth of the “Internet of Things”, referred to more and more often as the “Internet of Everything”. In such context, the system is formed not only by objects, but also by processes, data, humans, and even animals or atmospheric phenomena – anything that can be treated as a variable. The idea of the Internet of Things is therefore understood as an ecosystem where objects are able to communicate with one another – with or without humans’ participation (Kolenda, 2015).

According to estimates by McKinsey Global Institute, in 2025, the global IoT market will be worth approximately at least 4 trillion dollars; in a dynamic scenario, this value is likely to be even 11 trillion dollars. According to studies by Gartner, there will be over 25 billion devices connected to the Internet by 2020. But these are still very cautious predictions; other research institutes speak of even several hundred billion objects connected to the Internet in the nearest 10 years to come (Kolenda, 2015).

The products we use on an everyday basis become a part of the network more and more often. They offer a broad spectrum of possibilities to introduce new features, escaping the limits of imagination of an average user. This forces companies to revise and analyse their operations: starting from manufacturing new products through their maintenance and use, to end with IT structure security. Enterprises face new strategic challenges, asking questions like: how to create new values for customers, what partners to work with, or how to gain competitive advantage when the borders between different industries shift dynamically (Porter and Heppelmann, 2014).

New intelligent products offer a possibility to take customer relationships to a higher level. Access to data concerning the way various products are used grants better knowledge of how customers benefit from these products, which makes it possible in turn to target product offers better, and to highlight the assets of a given product. What is more,

companies are able to remotely diagnose the loss of product efficiency or instances of failure, which is often coupled with an option to perform remote repairs, and this makes them less dependent on partners responsible for servicing and maintenance. This, in turn, translates into increased revenues and larger profit margins.

Web 3.0 gives a new set of tools to develop offers. Internet-connected devices will acquire a new significance and will become more than products used by customers. Forming a network, these devices will be able to provide customers with an added value.

The so-called *wearables* will play a very important part in marketing. This market segment has been growing for some years now, and according to forecasts, its annual value may range between 2.3–6.2 trillion dollars in 2025 (McKinsey, 2015). These devices will lead to appearance of completely new touchpoints and an immeasurable amount of consumer insights. Marketers will have the tools to accompany customers anywhere and anytime; they will be even possibly able to explore their ‘inside’, so to speak. Parameters such as blood pressure, pulse, amount or level of physical activity, body temperature, etc. will become the basis for developing tailor-made and personalized offers. This also implies an increased rate of reaction to consumer behaviour – in real time.

Solutions like *smart-home* technologies will become a gateway for marketers to consumers’ homes, which means an even greater amount of data to be processed and utilized. The rooms we spend most time in, the temperature level inside our home, the time we get and go to sleep, the expiry date of milk in the fridge, etc. – this is the data enterprises will have access to; they will use it to suit their offer to our most private and personal needs.

At present, almost half of the world’s population lives in cities. By 2020, this rate will probably grow to 70%. This urban density, combined with the omnipresence of smartphones, fuels the sector of on-demand economy in the present decade. This is an observation shared by the authors of IPG Media Lab report of 2015: “The next decade will see our cities come alive with connected devices, as the Internet of Things moves out of the home and into the streets. How we interact with our surroundings will be increasingly driven by a combination of personal data and public data. Projects like LinkNYC are beginning to unlock this potential today, with highly networked, interactive digital out-of-home. But to reach every block of every city, this new infrastructure will require

many years of unprecedented collaboration between private companies and government agencies” (IPG Media Lab, 2016).

Web 5.0: The Internet as Emotional Web?

New technologies provide us with increasingly better tools for developing accurate behavioural profiles of Internet users, but they have been so far inadequate to let one look deeper and explore the more spiritual side of modern humans – their thoughts, feelings, and emotions. And yet, today we speak of the so-called Web 5.0 – a web that will become a gateway to human emotions. There is a project named <http://www.wefeelfine.org/> that displays results of search for phrases like “I feel” or “I am feeling”, dividing these results into categories and locations. This gives an image of how Internet users feel in a given place and at a given time. But this still doesn’t reflect the reality in full, and it therefore does not let one draw long-term, analytically and business useful conclusions. A San Francisco based company called Emotive has gone even further and created a device that makes it possible to ‘read’ human neurological activity by means of EEG technology. The obtained data combined with information about blood pressure, etc. will make it possible to examine the psychological condition of a given person at a given time (Web 1.0 vs Web 2.0..., 2015). What does it mean for marketing? New standards in advertising, new advertising space, and an increased significance of real-time activities. After all, marketing is – to a smaller or larger extent – about influencing human psyche. An opportunity to get to know what and how consumers feel, and to react to their mood in a proper way is the fondest dream of every marketer striving to strike the right chords of consumers’ souls and reach them with their offer.

In a 5.0 reality, the biggest challenge for this in charge of marketing activities will be to provide customers with even more personalized interaction to offer them emotion-rich experience in real time. Web 5.0 may transform the Internet from an environment full of media buzz into a more intimate and warm place, where interactions with users will become much friendlier and much less aggressive. On the other hand, however, it may lead to an abuse of possibilities granted by technology, and we can expect to see attempts of taking advantage of the Internet to manipulate human emotions and to conduct very dangerous psychological experiments.

Video 360° and Streaming: New Possibilities in Marketing Communication

360° (or spherical) video is a technology of recording the whole scene/setting that surrounds us, and it can be applied with both actual videos and photos. The market already abounds with cameras to record 360° images, but the special GoPro Hero mount system seems to offer one of the best results. The system makes it possible to mount 7 to 14 cameras at the same time (depending on the model), which grants a 360-degree view of the surroundings. The 360° video technology combined with Oculus or Samsung gear lets the user get “inside” the video and watch it from every angle by turning their head. Today there is even a special software and a set of applications making it possible to connect Samsung phones (Galaxy 6 and Edge) to such digital eyewear, and this combined with headphones, lets users ‘immerse’ themselves in virtual reality (Pałys, 2015).

Companies wish to be closer to consumers, but consumers want to be closer to companies as well. In the digital world of today, consumers expect a realistic image of the reality, and a great deal of transparency. Now it’s not only marketers who have the right to know more about customers, but it works the other way round too, as customers wish to have more knowledge about the companies and products they trust. The 360° video technology is an excellent tool to enhance consumer experience. The costs of production of 360° videos will gradually fall as the equipment designed to make such videos becomes more common; after all, making interactive videos is now both increasingly feasible and tempting. You can show your product from every angle, or let your viewers follow a character or discover some artefacts hidden in a specially-designed virtual environment. Therefore, the concept opens the doors to a space for creative advertising campaigns and new ways to communicate with consumers. The first company to have a 360° video spot was Bud Light, who showed videos of its events. Viewers found it very attractive and exciting, as they could watch the whole event and its participants, turn their head to change the viewing angle, change the perspective of viewing, etc. Studies were quick to find that the engagement of viewers of 360° videos was 36% higher than in the case of traditional videos (Pałys, 2015).

This gives good reasons to assume that in the near future, the 360° video technology will become an inseparable element of every marketing

strategy, and that it's just a matter of time until we're able to view 360-degree content in all mobile systems and browsers.

Streaming is another novelty in the area of video content. It is a form of content sharing users find very engaging. People love watching various live events, performances, concerts, etc. Mainly because everything is real, something unexpected and surprising can happen any moment, and they can react to it quickly and spontaneously. "Live" communication strategies are supported by tools like Meerkat or Periscope. Application of these tools aims to improve customer relationships through comments of viewers, who can express their opinions about a given stream in real time, which provides a given company (or brand) with an instant feedback. Such solutions make communication with customers significantly better because of the offered opportunity of 'live' interaction. This can be employed as a great component of brand image building, especially when we want to show the more human side of the brand. It is possible to e.g. show an employee of a given company preparing for a business presentation, or a coffee break in the company's office.

According to forecasts, video is to make up for 69% of the whole on-line traffic by 2017. Expansion of video content is one of the seven trends to spread over the next couple of years. They will be no longer something extraordinary, but will rather become a standard, and brands will be forced to come up with ideas to stand out in business (Digital Marketing Trends..., 2015).

A step towards a much higher level is the so-called augmented reality. Some brands have already made their first (and rather careful) steps into this area as a new space to communicate with customers. At present, there are four global brands on the market that have started exploring the field of *virtual reality*. These are: Oculus Rift purchased by Facebook, Samsung Gear VR, Google's Cardboard, and Sony Morpheus – a headset that will enter the market in 2016 (Digital Marketing Trends..., 2015).

The clash between these brands will lead to emergence of a new channel of communication, where user engagement may exceed even the most daring expectations. Contextual advertising weaved into e.g. a storyline of a computer game may play a vital part in this context. For instance, the main playable character of the game will be able to have a tin of Coca-Cola because the brand has paid the developer of the game for such product placement.

Final Remarks

It appears that in the forthcoming digital reality, which will feature new interactive platforms of communication with consumers, corporate business and marketing strategies will become even more *consumer-centric*. Consumers of the future will expect new shopping experience, where brick-and-mortar points-of-sale, the Internet, and the mobile channel will become merged and will complement one another. The key idea will be to offer a “holistic shopping experience” across many platforms. This means further expenditure on investments in IT specialists and new technological solutions. A trend involving enhanced personalization of offers of goods and services and tailor-made marketing communication will intensify – customers will expect marketers to know them, remember their previous interaction with the brand, and be able to integrate platforms and communication channels in a way to grant them a consistent experience.

It is reasonable to assume that enterprises operating in many different industries will take more and more advantage of the potential lying in Big Data analysis. Even today, many companies start gaining measurable business benefits granted by practical implementation of Big Data solutions into their business operations. But there is a darker side of the coin as well; utilization of the possibilities coming with Big Data solutions may carry quite serious consequences therewith when it comes to both business and the private sphere of our life. Consumers and Internet users tend to speak more and more often of an asymmetry in the relationships between enterprises and consumers. Another argument raised in the discussion concerns the issue that the increasing amount of data collected by enterprises and government institutions and agencies poses a threat to our freedom – and not just on-line, but rather viewed as the broadly-understood civil liberty.

From a pragmatic, managerial point of view, it is important to bear in mind that the collected data may contain errors and mistakes. Although the algorithms used on the basis of Big Data principles are becoming better and better, it is quite reasonable not to take all the conclusions drawn for granted as they may simply be wrong. There is also another fundamental issue: what will be the future of management in the decades to come? Will managerial competence, experience, and intuition give in to lifeless and nameless algorithms, extreme de-personalization of management, and marketing automation? What will be the convergence

between the human brain and the memory and increasingly better performance of computers? Will humans become more like computers (which could be expressed in e.g. management algorithmization), or will computers gain a *human touch* and become similar to the human brain?

We can see already today that companies who build their decision-making models not only on the basis of standard sources of information about their customers, but also taking geolocation data, consumer behaviour analysis, or weather data into consideration are able to react to the ever-changing market reality in real time and thus gain competitive advantage. This proactive approach is also reflected in the growing popularity of terms enriching the everyday vocabulary of marketers, such as behavioural targeting, location-based marketing, proximity marketing (based on utilization of beacons), blogvertising, on-line amplifying, etc. (Mobile Institute, 2015; Digital Marketing Trends..., 2015; Prognoza..., 2016).

To conclude, new information technologies force modern enterprises to change their business models and strategies. More and more traditional, rigid structures are becoming replaced with new flexible organizational forms concerned with a constant interaction with customers/consumers and with taking effective measures in real time.

References

- Ascend2 (2016). *Data-Driven Marketing Trends. Survey Summary Report*, <http://ascend2.com/home/wp-content/uploads/Data-Driven-Marketing-Trends-Survey-Summary-Report-151105.pdf> (05.05.2016).
- B(v)log power. *Wpływ blogów i wideoblogów na internautów*. (2015, April). Mobile Institute for PSVB, http://www.psbv.pl/BlogPower_raport.pdf (03.05.2016).
- Digital Marketing Trends That Will Matter in 2016. (2015, 26 November). <http://www.maxwebinc.com/digital-marketing-trends-that-will-matter-in-2016/> (03.05. 2016).
- Gutkowski, T. (2014, 17 December). *Big Data w biznesie: jak handel, bankowość czy transport korzystają z Big Data*, www.web.gov.pl/wiedza/587_4420.html (02.05.2016).
- IPG Media Lab (2016). http://ipglab.com/outlook2016/pdf/outlook2016_digital_en.pdf.
- Kolenda, P. (2015). *Internet Rzeczy w Polsce*. IAB Polska, <http://iab.org.pl/wp-content/uploads/2015/09/Raport-Internet-Rzeczy-w-Polsce.pdf> (03.05.2016).

- Mazurek, G. (2012). *Znaczenie wirtualizacji marketingu w sieciowym kreowaniu wartości*. Warszawa: Poltext.
- Mróz, B. (2013). *Konsument w globalnej gospodarce. Trzy perspektywy*. Warszawa: Oficyna Wydawnicza, Warsaw School of Economics.
- Nichols, W. (2013) Advertising Analytics 2.0. *Harvard Business Review*, 91(3), 60–68.
- Pałys, K. (2015, 31 July). *Zwykłe kamery odejdą do lamusa. Przyszłością jest wideo 360*, http://manager.money.pl/strategie/z_ryнку/artkuł/zwykłe-kamery-odejda-do-lamusa-przyszloscia,148,0,1870484.html (05.05.2016).
- Patel, L. (2013). Incremental Journey for World Wide Web: Introduced with Web 1.0 to Recent Web 5.0 – A Survey Paper. *International Journal of Advanced Research in Computer Science and Software Engineering*, 3(10), 410–417.
- Płoszajski, P. (2013). Big Data: nowe źródło wzrostu i przewag firm. *e-mentor*, 3(50), <http://www.e-mentor.edu.pl/artkuł/index/numer/50/id/1016> (02.05.2016).
- Porter, M.E., Heppelmann, J.E. (2014). How Smart, Connected Products Are Transforming Competition. *Harvard Business Review*, 11, <https://hbr.org/2014/11/how-smart-connected-products-are-transforming-competition> (03.05.2016).
- Prognoza – jaki trend marketingowy w 2020 roku?* (2016), <http://mediarun.com/pl/marketing/prognoza-trendy-marketingowe-2020-roku.html> (04.05.2016).
- Smith, C. (2014, 12 March). *Social Big Data: Each Social Network Is Using A Very Different Data Lens To Understand And Target Users*, <http://www.businessinsider.com/social-big-data-the-type-of-data-collected-by-social-networks-3-2014-3> (30.04.2016).
- The Internet of Things: Mapping the Value Beyond the Hype*. (2015, June). McKinsey Global Institute, https://www.mckinsey.de/sites/mck_files/files/unlocking_the_potential_of_the_internet_of_things_full_report.pdf (02.05.2016).
- Web 1.0 vs Web 2.0 vs Web 3.0 vs Web 4.0 vs Web 5.0 – A bird's eye on the evolution and definition*. (2015, 17 March) <https://flatworldbusiness.wordpress.com/flat-education/previously/web-1-0-vs-web-2-0-vs-web-3-0-a-bird-eye-on-the-definition/> (04.05.2016).

Dagmara Plata-Alf

The Impact of Automation Processes on Customer Experience Management

Abstract

The move of the process of communication towards the virtual environment has triggered significant changes in terms of the quality of the relationships between companies and their customers. The Internet is the first medium where a dialogue between a consumer and a company can reach such an advanced level, which in effect translates into an opportunity to build long-lasting relationships. The development of information and communication technology has also had a major impact on the possibilities to automate the on-going marketing processes – and to use them in relationship management. The aim of this paper is to discuss the concept of marketing automation, as well as to review the available literature of the subject and analyse the latest trends to present this concept's impact on the processes of customer experience management.

Keywords: information, marketing automation, customer experience management, moment of truth, consumer decision journey

Introduction

Marketing has changed beyond recognition in recent years. The rapid development of communication technology has contributed to the growing significance of information, which has grown to become an element used in the decision-making process (Czekaj, 2000). Information lets us assess the risk and chances ahead of us, which makes it a value of its

own in the virtual world of today (Czekaj, 2000). ‘Citizens’ of the virtual world become content creators, and the Internet serves as a platform to exchange information (Doligalski, 2009). Virtual world is also a home to the so-called e-consumers, who use the Internet mostly to take advantage of the ease of on-line shopping and consumption. The Internet enhances their ‘flair’ for shopping since the on-line process of making decisions in terms of purchasing a product/service, or selecting the date of purchase gives them access to a great body of information (Kolny, Kucia and Stolecka, 2012). The amount of information available on-line and the number of people looking for information on the Internet grows clearly year by year (Berger and Schwartz, 2011). Arrival of on-line tools facilitating communication between companies and their customers has made real-time exchange of information possible. Companies have started controlling their communication in order to provide their customers with products corresponding to or even exceeding their expectations, which in turn makes consumers willing to share their experience with certain products or services (Hsu, Chen and Ting, 2012).

It is important to highlight the significant influence of information on strategic decision-making in business context. As part of business exchange, companies deliver value to customers and receive value from customers in return. One of the key elements of the said process is building customer relationships and trust. In a virtual environment, the Internet makes it possible to include customers in the process of value exchange, which may involve both co-creation and evaluation of the final ‘composition’ of the value customers receive from the company.

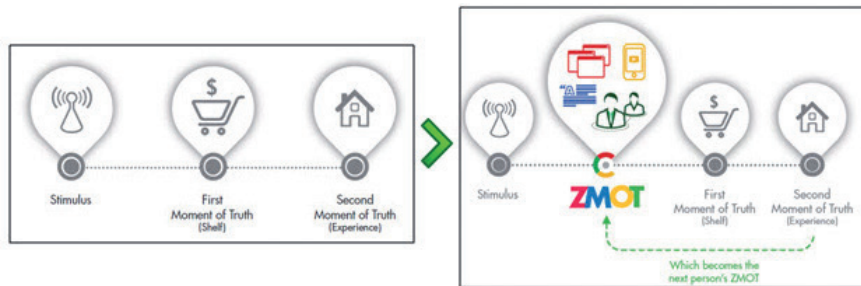
“Moments of Truth” and Customer Experience Management

Broad access to information and to sources of data has given us a range of possibilities to monitor the behaviour displayed at particular stages of the sales funnel (or purchase funnel) and to analyse the journey of potential consumers. At present, we are dealing with a great dynamics of changes taking place in customer-company relations, as well as with immense possibilities to engage consumers and to carry out an in-depth analysis of their behaviour and their personal data. Buyers are active in discovering new content and products, they are in constant search of information on-line, they analyse information available across social

media, and are able to investigate details about a company before they get in touch direct touch.

Speaking of customer experience management (CEM), we treat the matter as a strategic process which involves controlling and enhancing customer experience generated through every instance of contact with a given company and its products, identifying all “touch points” where customers interacts with companies, analysing the value delivered as part of every relationship, and integrating customer experience – in order to create a coherent company image in the customers’ eyes (Schmitt, 2013).

Figure 1. Traditional model of the “moment of truth” transforming into the new model containing the “Zero Moment of Truth”



Source: Lecinski, 2011.

Dołycka (2012) quotes Lecinski (2011) and points out that in the case of a traditionally understood marketing consumer decision-making process, we deal with a model consisting of several so-called “moments of truth”, i.e. the key moments when a consumer interacts with a company. According to the traditional model (Lecinski, 2011), the so-called “first moment of truth” occurs when a consumer is influenced by some stimulus like e.g. a TV commercial, and makes their decision to purchase a certain product from one brand or another. The “second moment of truth” involves customer experience, where a satisfied customer will buy again from the same company they have decided to trust before, and where a dissatisfied customer will most likely not make a purchase decision in the place they have purchased the product/service they are dissatisfied with. The growing impact and popularity of the Internet, combined with its opinion-forming power, has transformed the said traditional model, leading to appearance of an additional stage between

the stage of stimulus and the stage of the actual purchase, named as the “zero moment of truth”, as shown in Figure 1; this is, in general, experience learned from recommendations found on-line (left by other Internet users who have had experience with a given brand before) (Dołżycka, 2012).

Marketing Process Automation: Review of Marketing Automation Tools

The field of marketing has evolved significantly in recent years, driven by the dynamic rate of convergence of customer service, digital, and marketing technologies (Brinker, Kunker and Singer, 2015). This means that nowadays companies need to be up-to-date with technology and be able to use modern tools to meet the needs of consumers by providing them with personalized marketing communication that not only makes it possible for such companies to stand out on the market, but also constitutes a perfect answer to customers’ needs and expectations. The answer to those needs and expectations are marketing automation solutions. According to the definition given at Wikipedia (2016), marketing automation aims to streamline sales and marketing organizations by replacing high-touch, repetitive manual processes with automated solutions designed to collect and process information about potential consumers (the so-called sales leads). On the basis of the information about potential customers (demographic factors, behaviour on certain websites) and after such customers are identified, a special system addresses appropriate, personalized marketing messages to selected recipients, according to our marketing strategy. The said data helps us determine precisely the effectiveness of a given campaign, analyse the reactions of consumers to particular activities, and calculate the ROI for each marketing action taken.

The main functions and features of marketing automation systems can be divided into the following options (SALESmanago, 2015; Marketing Automation Blog, 2015; Plata-Alf, 2015):

- **Customer segmentation** based on marketing automation lets us match the content of marketing communication to the target audience very effectively, which makes the messages more personalized – and better received by their addressees. Segmentation enriched with analysis based on behaviour makes us able to create segments cor-

responding to customers' interest in certain groups of products or services, to segment customers on the basis of the frequency, volume, and 'content' of their shopping, to gain insight into a clear structure of the whole body of customers, and – most of all – to integrate the formed segments with marketing activities in order to increase the effectiveness of the latter.

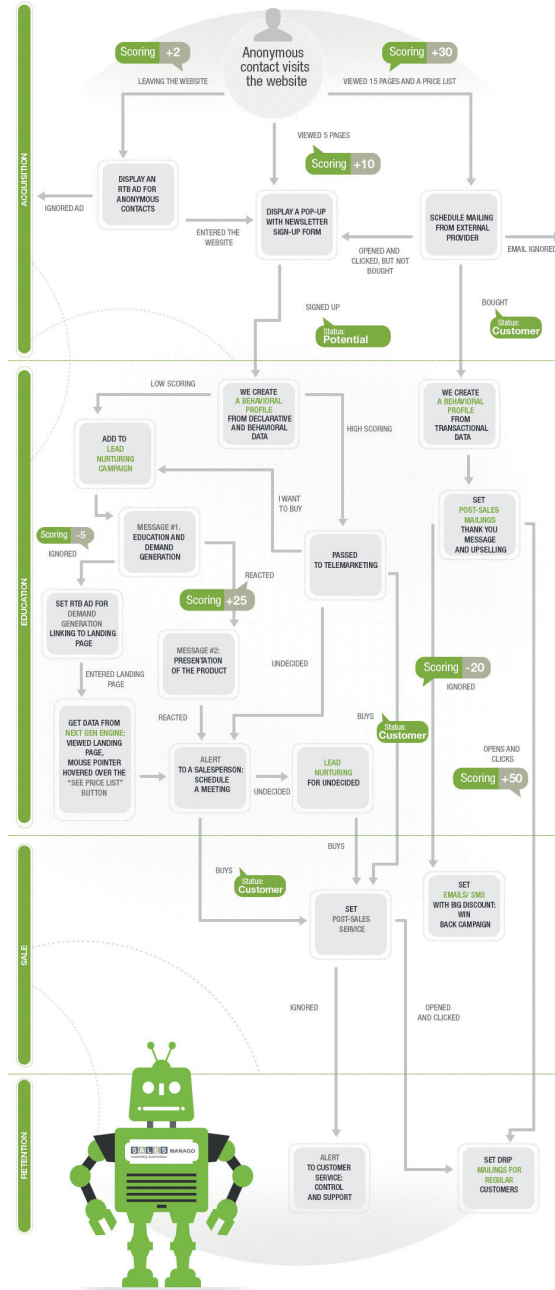
- **Lead scoring** is a method of assessment of customers' engagement and of their knowledge of a given brand, which lets us design and address the messages we target at them in a very precise way. In system terms, it involves assigning points to customers once they take certain actions, and using the scoring system to e.g. personalize the e-mail or text messages sent to these customers.
- Systems of marketing automation process management offer a function of analysis of the behaviour of potential customers when they encounter a given brand; this behaviour is referred to as **Digital Body Language** (e.g. the rate of click-through in e-mails, the downloaded materials from various websites, visits to different websites, etc.). This lets us gain valuable information and 'clues' related to the shopping intentions of our customers, which can be used to suit our marketing communication to their needs.
- **Monitoring of customers visiting our company website** makes it possible to analyse customers' footprints and behaviour; this knowledge can be later used to provide the persons visiting our website with dedicated and personalized marketing messages.
- Thanks to personalization and dynamic content based on the data aggregated in marketing automation systems and covering the preferences and interests of our customers, we're now able to enhance their interest in our services by suiting the generated **marketing communication** to the target audience as much as possible, which increases the effectiveness of the marketing channels we use.
- Personalized communication involves providing certain recipients with the right content in the right form and in the right time – **Real-Time Personalization**. The content needs to be suited to the expectations of a given recipient and presented to them at a moment close to real time, so when they visit a given website, they are attracted to a piece of information they might find relevant. Consumers should see content that is of some relevance to them, like e.g. offers they might consider interesting, or special deals taking their geographic location into account. On-site personalization is based on the data

about the visitors of a given site, with the data collected before or on an on-going basis. Thanks to the fact that detailed demographic data is recorded and that behavioural information is obtained on an on-going basis, it is possible to make communication with a given person highly individualized. This can improve many aspects of customer relationships, and increase the profits on sales: better lead conversion, optimized lead nurturing, boost of consumers' involvement, and improved communication via the website.

- **Lead nurturing** is an automatically-activated education campaign, consisting most often of several or a dozen or so e-mail messages. It stems from an assumption that customers of today are much more self-reliant and prefer looking for information on their own, which results in a shift of marketers' role – today, they assist in gaining knowledge and provide information that let customers make the best buying decision. In the case of a new visitor to our site, one who's just provided us with their data (the so-called lead), we send them a few messages over several subsequent days, where we explain how our product helps to solve a given problem, sharing our experience and knowledge. This lets us establish a customer relationship based on trust, and increase customer loyalty and the probability they will buy from us in the future. According to a study by Annuitas, nurtured leads make 47% larger purchases than non-nurtured leads. This arises from the fact that a well-educated customer knows what they pay for and feels more comfortable, which translates into a tendency to buy a certain product or a particular service.
- If we talk about different functional features of marketing automation systems, we should list e-mail and newsletter creators and automation of mailings sent to our customers (**e-mail marketing**). Now we don't need to think about the best time to send our mailing – the system will set the sending time and date to the preferences of the addressees.

The very broad scope of capabilities of marketing automation systems lets us not only pursue a range of marketing activities using a single system, but also aggregate and assess the data we collect. Figure 2 presents an example of automation process involving application of SALES-manago tool; it shows that application of marketing automation systems and processes makes strategic and operational planning in the scope of the pursued marketing activities much more precise and effective thanks to a full view of the behaviour and an in-depth analysis of the needs of

Figure 2. An example of marketing automation process involving application of SALESmanago system



Source: SALESmanago, 2015.

a given customer, as well as relatively more economically viable thanks to simplification and automation of operations that have been so far performed manually – and thus limited (Peszko and Chra chol-Barczyk, 2014), or non-measurable and therefore inaccurate. The obtained information let us adjust the schedule of advertising activities and avoid unnecessary expenses.

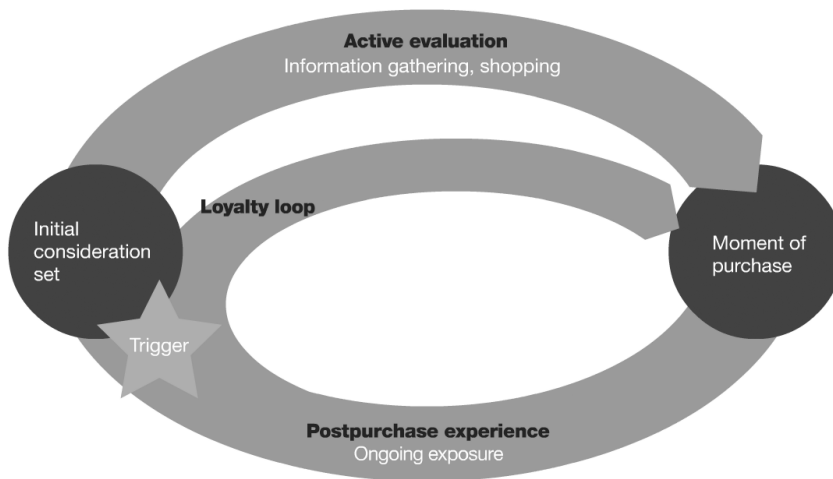
Customer Journey and Customer Experience Management Using Marketing Automation Processes

The great freedom consumers enjoy while shopping gives them a possibility to analyse both products and services, as well as the buying process itself using many different channels, often at the same time (omnichannel). At present, customers are bound neither by their location, nor by their time zone, which would make them able to buy products/services e.g. only in certain places and at a certain time. Using the Internet, customers are virtually unlimited in the available range of possibilities to analyse the product offer. In order to reach a customer (Marketing Automation Blog, 2013), buying experience requires a proper balance between form and function. We need to focus on personalization of the messages we send, but also on providing these messages to a given customer in a specific situational context – and in real time. So we're not talking about mass marketing activities, but about making efficient use of detailed data aggregated in marketing automation systems, constituting an individual 'profile' of an individual customer, and not of a mass segment; and this is the knowledge we need to apply to sending customized messages supporting the process of purchase-making.

Looking into an article by Court, Elzinga, Mulder and J rgen Vetvik (2009), it is important to highlight that they point to the fact that the traditional sales funnel, which has so far described and explained the process of consumer behaviour and consumer's position at subsequent stages of the sales cycle, has appeared to be insufficient. As part of marketing activities, we're always trying to reach consumers at the moment when they're most ready for input and influence – which is when we're able to interfere in the moment of contact ("moment of truth"). The boom on the market of digital technology in the scope of communication has led to a situation where our consumers are well-informed individu-

als, and it takes much more sophisticated and refined measures than those defined in the traditional sales funnel to reach them (Figure 4). The consumer of today has an exceptionally wide range of products and services to choose from, and an access to a great number of communication channels where they can compare and learn of the available offers in detail. This means that nowadays a concept developed by McKinsey&Company in 2009, referred to as consumer decision journey, may be more relevant than the conventional sales funnel; this concept is presented in Figure 3 (Marketing Automation Blog, 2013).

Figure 3. Consumer Decision Journey



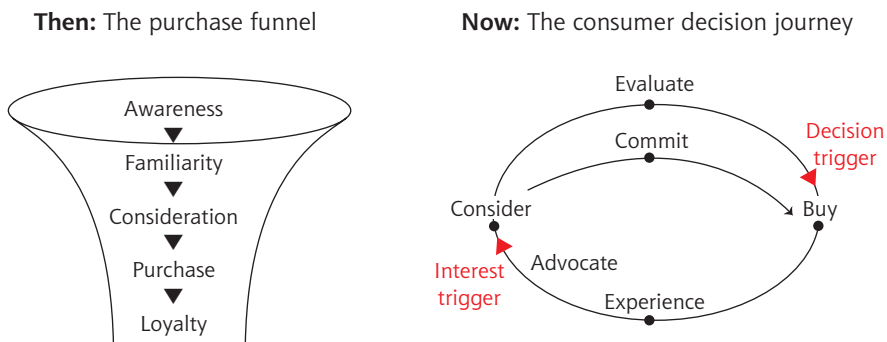
Source: McKinsey & Company, 2009.

Today, the process of purchase-related decision-making starts already before the customer gets inside the sales funnel (according to the model of the “zero moment of truth” – see: Figure 1). According to an entry on Marketing Automation Blog (2013), the consumer of today is more conscious and more proficient in looking for information, which makes them value the information they acquire on their own more than the information generated through outbound marketing tools across traditional marketing channels, which make it impossible to reach the right people with the right content at the right time. The observed change in consumer behaviour makes companies gain new ways to reach and understand new customers, to communicate effectively with them, and to influence the purchase decisions they make through application

of the concept of consumer decision journey (Marketing Automation Blog, 2013).

The said process of making purchase-related decisions by consumers is currently so complex and multi-faceted that we no longer speak of channels of communication, but of the aforesaid “moments of truth” – touch points where consumers and companies meet. Communication with consumers does not follow a systematized process within a single channel, but relies rather on constant dynamism, where marketing automation systems recognize particular customers and identify their behaviour on an on-going basis, reacting to it automatically by delivering the right content at the right time and shaping the customers’ brand experience (Marketing Automation Blog, 2013).

Figure 4. Purchase funnel and consumer decision journey



Source: Marketing Automation Blog, 2013.

Conclusion

Marketing process automation lets us point our attention towards consumers, who both need and expect support and communication from companies, which gives us an opportunity to focus on providing customers with positive experience and satisfaction (Dyrsmid, 2015). Marketing automation systems are capable of identifying a potential customer before such customer takes steps to interact with a company, and then take lead nurturing actions targeted at such customer to influence building relationships and induce positive experience in the customer’s interaction with the company (Bajdak, 2015). Peszko and Chrachol-Barczyk (2014) claim that smart data analysis and efficient application of mar-

keting automation systems let companies reach potential customers with “tailor-made” products, which reduces the risk of occurrence of negative experience.

In the light of the above, the use of automation systems in customer experience management has a profound impact on the initial behaviour of customers, determining in effect their further behaviour, and even their presence in the whole process of building relationships with companies.

References

- Bajdak, A. (2015). Marketing automation – systemy wspierające pracę sprzedawców na rynku b2c. *Warsaw Marketing i Rynek*, 8.
- Berger, J. and Schwartz, A. (2011). What drives immediate and ongoing word of mouth? *Journal of Marketing Research*, 48(5).
- Brinker, M., Kunker, N. and Singer, M. (2015). *Trendy technologiczne 2015: Połączenie biznesu oraz IT. Marketing wielowymiarowy*. Deloitte, http://www2.deloitte.com/content/dam/Deloitte/pl/Documents/Newsletters/CIO-Insight/CIO-Insight_Marketing_wielowymiarowy.pdf (2016-13-04).
- Court, D., Elzinga, D. Mulder, S. and Jørgen Vetvik, O. (2009). *The customer decision journey*, <http://www.mckinsey.com/business-functions/marketing-and-sales/our-insights/the-consumer-decision-journey> (2016-13-04).
- Czekaj, J. (2000). *Metody zarządzania informacją w przedsiębiorstwie*. Kraków: Cracow University of Economics.
- Doligalski, T. (2009). Budowa wartości klienta z wykorzystaniem Internetu. In: B. Dobiegała-Korona and T. Doligalski, *Zarządzanie wartością klienta*. Warszawa: Poltext.
- Doligalski, T. (2009a). Sposoby budowania zaufania klientów do firmy w Internecie. In: L. Garbarski and J. Tkaczyk (Eds.), *Kontrowersje wokół marketingu w Polsce*. Warszawa: Wydawnictwo Akademickie i Profesjonalne.
- Dołżycka, N. (2012). Zero Moment of Truth – czyli jak promuje się (w) Google, <https://socjomania.pl/zero-moment-of-truth-czyli-jak-promuje-sie-w-google> (2016-19-04).
- Dyrsmid, E. (2015). *4 Ways to Improve the Customer Experience with Automation*, <http://groovedigitalmarketing.com/customer-experience-management/> (2016-08-04).
- Hsu, Y., Chen, K. and Ting, Y. (2012). Travel review websites as innovative marketing venues for hotels. *International Journal of Organizational Innovation*, 5(2).
- Kolny, B., Kucia, M. and Stolecka, A. (2012). *Produkty i marki w opinii e-konsumentów*. Gliwice: Helion.

- Lecinski, J. (2011). *Winning the Zero Moment of Truth*, https://ssl.gstatic.com/think/docs/2011-winning-zmot-ebook_research-studies.pdf (2016-18-04).
- Marketing Automation Blog (2013). *Tradycyjne ścieżki zakupowe umarły. Nadszedł czas Zakupowej Podróży Klienta*, <http://marketing-automation.pl/zakupowa-podroz-konsumenta-zastepuje-tradycyjny-lejek-zakupowy-i-sciezki-konwersji/> (2016-11-04).
- Marketing Automation Blog (2015). *Czym naprawdę jest Marketing Automation?*, <http://marketing-automation.pl/czym-naprawde-jest-marketing-automation/> (2016-07-04).
- Peszko, K. and Chraćhol-Barczyk, U. (2014). *Analiza potrzeb klientów za pomocą Marketing Automation*, <http://www.czasopismologistyka.pl/artykuly-naukowe/send/329-artykuly-na-plycie-cd-2/7452-artykul> (2016-11-04).
- Plata-Alf, D. (2015). *Marketing Automation od A do Z*. Poznań: Biznes Hotel.
- SALESmanago (2015). *Rozwiązania*, <https://www.salesmanago.pl/marketing-automation/knowledge.htm> (2016-19-04).
- Schmitt, H.B. (2013). *Customer Experience Management*. New Jersey: John Willey & Sons.
- Wikipedia (2016). *Automatyzacja marketingu*, https://pl.wikipedia.org/wiki/Automatyzacja_marketingu (2016-05-04).

Aleksandra K. Przegalinska

Affective Computing: Disruptive Player in Marketing

Abstract

So far, wearable technologies enthusiasts, movements related to using activity trackers, such as the Quantified Self, as well as companies that use data from wearable technologies were mainly focusing on medical tracking applications. Currently, with the advent of technologies and software dedicated to affective computing (such as Muse, Melon, Emotiv or Empathica) their focus is slowly shifting towards issues of detecting mental states, mental wellbeing, nurturing creativity, innovation and workplace productivity. This shift is of crucial importance, as tracking of parameters that correlate best with various mental processes, and the evolution of context-aware systems, can bring about a profound change in our understanding of what product perception and marketing are about. In this paper, I provide an overview of mindtrackers and their functionalities, as well as insights into how marketing can be disrupted by the new wave of wearable technologies that offer access into consumers' minds. Finally, the last section of the article takes a closer look at both risks associated with the use of neurotrackers and the opportunities that these new wearable technologies bring.

Keywords: neurotracking, marketing, disruptive innovation, affective computing, wearable technologies, management, cognitive science, neuroscience

Introduction

Recently, the long-awaited Facebook like button upgrade – Facebook reactions, went live allowing users more ways to express themselves through the social channel (Hines, 2016). The new options provided users the chance to more accurately express a variety of feelings in response to posts and shares by their community. This change was welcomed by many Facebook users who requested for a „dislike” more than 6 years ago and wished they were able to show support in more than just likes, particularly when responding to a post in the face of tragedy or unpleasantness. The new spectrum of Facebook reactions allow to empathize with one another in more than one way. While Facebook’s algorithm is constantly changing, sometimes to the chagrin of most marketers, this is a surely great move for brands. Marketers now have a chance to learn even more on how their audience is reacting and responding to their content. Most probably, over time, marketers will be able to see the degree to which our audience is moved by what the audience is doing online (Hunersen, 2016). However, despite the fact that Facebook reactions may seem like a revolution in creating mindfiles of consumers, they are just the first step to creating robust databases of consumer mental states preferences as they still rely on declarative responses.

Nowadays, with the advent of the Internet of Things and ubiquitous computing, the upcoming (Grienfield, 2006) trend is rather to detect and recognize emotional information with passive sensors which capture data about the user’s physical state or behavior without interpreting the input. Current state of technological development does not clarify what will be the next stage of affairs and what sort of use will we make of those technologies that are either replacing people or opening up a new, radically deeper level of machine-human interaction and inter-dependency. We are no longer sure if we are indeed following the path of humanizing technology, or rather moving towards adapting humans to technologies.

In this text I will present these emerging problems using the example of neurotrackers: technologies that measure human mental activity (including such states as the level of concentration, distraction, fatigue, and various emotional states). Neurotrackers are a new branch of wearable technologies that are currently disseminating rapidly among individual users. Their future potential, however, most probably consists in

measuring large groups of users in the organizational and institutional context and linking the measurement results with big data analysis tools. In this way, neurotracking may provide insightful research concerning, for instance, people's general shopping preferences, their professional efficiency or creativity at a given time.

Changing the Scope

We can define quantified tracking as a regular collection of any data about the self that can be measured, such as biological, physical, behavioural or environmental information (Swan, 2009). Additional aspects may include the graphical display of the data and a feedback loop of introspection and self-experimentation. In the past, the cost and expertise needed for working with large-scale datasets and visualizations limited access to such work to professionals. However, these costs have decreased significantly. Furthermore, improvements in tools have made data collection and manipulation more available to the individual.

Tracking first occupied the health sector and then became visible in wellness and recreational sport activities. With biomarker testing, health metric tracking was traditionally an expensive one-off process ordered by physicians for patients in response to specific medical risks (Swan, 2009).

Nowadays, however, a number of different initiatives are attempting facilitate participatory health, including the emergence of Internet-based social networking communities together with low-cost newly available technology like genome sequencing and bio-monitoring applications and devices. What is more, at least two interest groups formed in the second half of 2008 to explore, brainstorm and share their self-tracking experiences: Quantified Self (2016) in the San Francisco area and Home-Camp (2016) in London. All these movements have embraced affective computing (Pickard, 1998): bridging emotions and computers. Such technologies' aim is not only to measure, but also to improve cognitive performance of the user. The term itself was coined two decades ago, but had to wait for material manifestations. Today we know that the machine can measure emotions in different ways: using text analysis, studies of physiological parameters, observing behavioral patterns, facial expressions, and recognizing emotions in voice or body posture of users. Particularly precise measurement of facial expressions is gaining popu-

larity, because results of this type of tracking can be sold to marketing departments and advertising content producers.

Among neurotrackers one can find NeuroOn (2015), masks for measurement of sleep that recently was a subject to quite severe critique (Neurocritic Blog, 2015) as well as headbands measuring the level of concentration, such as Melon (2015) or Muse (2015). Melon, for instance, is a headband and a mobile application that measures the user's concentration when performing specific tasks while embedding it in the context of what is happening in the user's environment. Melon uses electroencephalography to measure brain activity. The device records the assembly of weak electrical signals recorded simultaneously in different points of the scalp. Melon's algorithms detect the level of concentration and provide visualization of the gathered data in a gamified and simplified form. Relationships between graphs allow Melon to characterize brain waves, and interpret them. Additionally, users who wish to improve or change the functionality of Melon (usually those who strongly identify themselves with the Quantified Self movement or any other self-tracking community) receive access to Software Development Kit.

Muse is a different, although somewhat functionally similar device. Muse is also using electroencephalography to measure the level of stress, which – in combination with a special training plan – teaches to cut off from external stimuli, focus and meditate. Muse, like Melon, learns more with higher frequency of usage: the more often one wears it, the more it knows about the user's brain. Muse's creators agree that the user can see the effects of technology after two months of daily exercise (at least three minutes a day).

Figure 1. Muse Headband



Source: <http://sexytechyctic.com/muse-brain-sensing-headband-review/>.

What we do know is that the shift towards mindtracking and affective computing is of crucial importance, as tracking of parameters that correlate best with various mental processes, and the evolution of *context-aware systems* (Baldauf, Dustdar and Rosenberg, 2007), can bring about a profound change in our understanding of marketing understood as communication between the company and the consumer audience. In the context of neurotrackers, such activity can be direct, both-sided, and, most importantly, highly personalized if not intimate.

Figure 2. Melon Headband



Source: <https://www.youtube.com/watch?v=Q4S2eBHxed>.

Potential Applications

Emotion is fundamental to human experience, influencing cognition, perception, and everyday tasks such as learning, communication, and even rational decision-making. However, technologists have largely ignored emotion and created an often frustrating experience for people, in part because affect has been misunderstood and hard to measure (Pickard, 1998). Research related to affective computing develops new technologies and theories that advance basic understanding of affect and its role in human experience. It aims at restore a proper balance between emotion and cognition in the design of technologies for addressing human needs.

Affective computing research combines engineering and computer science with psychology, cognitive science, neuroscience, sociology, education, psychophysiology, value-centered design, ethics, and more. The research has already contributed to a number of different fields, including: designing new ways for people to communicate affective-cognitive states, especially through creation of novel wearable sensors and new machine learning algorithms that jointly analyze multimodal channels of information; creating new techniques to assess frustration, stress, and mood indirectly, through natural interaction and conversation; showing how computers can be more emotionally intelligent, especially responding to a person's frustration in a way that reduces negative feelings; inventing personal technologies for improving self-awareness of affective state and its selective communication to others, and, last but not least, increasing understanding of how affect influences personal health.

Already now, we know many potential usages of affective computing. In e-learning applications, affective computing can be used to adjust the presentation style of a computerized tutor when a learner is bored, interested, frustrated, or pleased. Psychological health services, i.e. counseling, benefit from affective computing applications when determining a client's emotional state. Affective computing has potential applications in human computer interaction, such as affective mirrors allowing the user to see how he or she performs; emotion monitoring agents sending a warning before one sends an angry email; or even music players selecting tracks based on mood.

Another idea (Sebe et al., 2003) is the analysis of a person's face while they are using a certain product (he mentioned ice cream as an example). Companies would then be able to use such analysis to infer whether their product will or will not be well received by the respective market. One could also use affective state recognition in order to judge the impact of a TV advertisement through a real-time video recording of that person and through the subsequent study of his or her facial expression. Averaging the results obtained on a large group of subjects, one can tell whether that commercial (or movie) has the desired effect and what the elements which interest the watcher most are. Such applications of affective computing can already be found in mimics tracking software like Affectiva (2015) and Ellen (2015).

Questions and Doubts

Affective computing with its promises of making the mind of the consumer transparent in many ways resembles – or rather can be confused with – „neuromarketing” that developed quite dynamically two decades ago and currently enjoys a revival. For instance, the Neuroleadership Institute¹, founded in 2007 to “encourage, generate and share neuroscience research that transforms how people think, develop and perform”, seeks to apply neuroscientific research in management and business. It publishes its own journal, and holds meetings around the world offered to prominent business people. The Neuroleadership Institute’s published work shows why their approach needs more scrutiny. Take the example of the AGES model of learning which was published in the institute’s journal (AGES stands here for attention, generation, emotions and spacing). The main idea is that effective use of these four domains in training can lead to more effective learning. For instance, „generation” of associations and deeper, more elaborated processing of material leads to better memory retention. This means that the word „table” will be forgotten easily if it is presented briefly in a long list of other words. However, it will be easily remembered if the subject is asked to imagine an elaborate scene featuring a beautifully decorated table in a restaurant where all the waiters are anthropomorphic ducks. This effect is a well-known and robust psychological effect, usually called „levels of processing”, first described by Craik and Lockhart (1972). „Spacing” is the idea that information will be better retained if it is studied for short periods, spaced out over a few days or weeks, rather than intensively studied in a single short period. The spacing effect was in fact first described by Hermann Ebbinghaus in 1885 (Weibell, 2011). Neither of these effects needs any reference to neuroscience to make the point. There are also occasional, often misleading, references to neurotransmitters such as dopamine and norepinephrine. The neuroscientific content seems to be there purely to put a new, modern gloss on ideas stemming from 1970s psychology. This is not to say that it is necessarily bad advice. But these are old ideas, given a slick re-packaging and being sold as brand new. The public seems to be easily impressed with this kind of pop-scientific kind of neuroscience right now, and business leaders do not have the scientific background to adequately critique these ideas. In the light of

¹ <http://www.neuroleadership.com/>.

academic critiques, those branches of affective computing that are linked to marketing must make sure to distinguish themselves from pop-neuromarketing in order to deliver what they are promising.

With very few currently available studies on the use of trackers in everyday life we have little knowledge about patterns of usages. Those few that do exist though (Rooksby, 2014) indicate that uses trackers are very different: not always logically organized, very often use at least two devices with the same functionalities at the same time, the usage is not continuous and chaotic, sometimes even unaware. In addition, there are various strategies of tracking: from pure documentation to enhancement and change of habits.

Even in light of the scarce information, one can rightly ask what kind of relationship is the user building with the device or devices, in the case of users of two or more trackers with similar functionalities. One can also ask if the trust that is built and based on the results achieved will be weakened due to the slowdown indicated by the tracker. What kind of role does the device play? Could we claim that the device obtains the role of an expert? Does the tracker or tracking community take over the role of experts previously believed to be legitimizing an appropriate knowledge in the field (eg. marketers, doctors, nutritionists, trainers, managers).

Surely, development and professionalization of tracking and the amount of user trust they harness can be correlated with deprofessionalization of many professions, as well as an increase in generalized lack of confidence in the human expertise. Instead, more confidence is bestowed in the procedures, averaged algorithms and machines. If the trust for (and in) the experts is replaced by a trust for devices and device-using communities validating user input, how is the trust itself managed? Does it depend on the continued use of trackers? Does the trust for a single device increase trust for others? What social process emerges from the allocation of trust in the equipment and communities gathered around it, and what organizational changes can we expect as an outcome of this process? Should the interest in quantification and turning everything into accessible data be interpreted as a specific manifestation of bureaucracy, in which the administration withdraws from organizational level to the level of the individual? The use of this type of innovative devices designed to measure the so far immeasurable, subtle and complex activity of the mind undoubtedly requires more effort from the user, but also raises many other consequences, such as a „distorted”, wider and

narrower at the same time sense of his or her own „accessibility” to him-/herself. What is more, whereas in the context of trust one can talk about a certain, individual symbiosis of the tracked and the tracker, such a device in the workplace most probably won't serve purely documentational purposes. Indeed, its goal is to measure intellectual efficiency and in this very context a tracking device may come out as alienating and stressful. To be sure, the use of trackers refers directly to the theme efficiency understood as the best effects in production, distribution, sales, or promotion (Stoner, 1994; Pillar, 1996; Castells, 2006). Finally, what is the impact of the phenomenon of auto-analytics identity: who is the „quantified I”?

Summary

Automation and algorithmization of life is already well documented processes happening for at least a century. Quantification of various processes, although it accompanied us for a long time, has so far been much less precise and personalized. Constantly growing precision and personalization of devices such as wearable technologies invokes a legitimate critical attitude toward it as another manifestation of instrumental managerialism (Zawadzki, 2012). Nonetheless, further interaction of man and machine is inevitable. The important question, however, is the question of how it will proceed. If the device to monitor the affect will simplify, gamify the affect reduced to a few emotional states it will not be a source of reliable knowledge, but a potential source of manipulation. Processing and sharing of data flowing directly from the brain activity may also give rise to legitimate fears of an Orwellian Big Brother, especially in the marketing context in which the customer will be placed in an even less enviable position. The negative consequences of addiction to tracking devices were already signaled in *The Wellness Syndrome* (Cedestrom and Spicer, 2015), where under the guise of caring about each other there rose a hidden system, which imposed biopolitical standards of self-care (wellness).

Another problem is that the use of wearable tracking technology (and so far only such can bring really meaningful results concerning affective states) very often is not lasting and thus not meaningful. Using one device quickly becomes a routine and after a month users begin to look for a worthy successor to the current tracker. It is difficult to imagine

that it will be different with neurotrackers. Will they have to explore more and more corners of the mind to keep our interest? Will they have to visualize, share, and commercialize any area of the brain? And who will have access to this data? On a happy note, we do see visible efforts to humanize tracking device: to make their interfaces were more friendly, and the data more useful to the user. In the proper conditions neurotracking may bring both the marketers and the general public a number of positive effects. However, as I already mentioned in the first part of this short text, neurotrackers can (and even should) be understood as units managing and producing the Self. When one adopts Marxist perspective, depending on who owns the means of production, the Self changes the purpose of use: the scenario of profit maximization: surveillance and externally imposed efficiency enhancement is unfortunately more likely than positive option: maximization of the social benefit envisaged in helpful and not harmful personalization.

References

- Affectiva (2015). <http://www.affectiva.com/> (06-10-2015).
- Alvesson, M. and Willmott, H. (1992). *Critical Management Studies*. London: Sage.
- Alvesson, M and Willmott, H. (2003). *Studying Management Critically*. London: Sage.
- Apple Research Kit (2015). <https://www.apple.com/researchkit/> (07-10-2015).
- Baldauf, M., Dusdar, S. and Rosenberg, F. (2007). A survey on context-aware systems. *International Journal of Ad Hoc and Ubiquitous Computing*, 2(4), 263–277.
- Berg, M. (1997). *Rationalising of Medical Work: Decision Support Techniques and Medical Practices*. Cambridge, MA: MIT Press.
- Breazeal, C. and Aryananda, L. (2002). Recognition of affective communicative intent in robot-directed speech. *Autonomous Robots*, 12(1), 83–104.
- Castells, M. (2006). *The Network Society: From Knowledge to Policy*. Washington, DC: Center for Transatlantic Relations.
- Castells, M. (2009). *Communication power*. Oxford/New York: Oxford University Press.
- Castells, M. (2012). *Networks of Outrage and Hope. Social Movements in the Internet Age*. Cambridge, MA: Polity Press.
- Cedestrom, C. and Spicer, A. (2015). *The Wellness Syndrome*. London: Wiley.
- Craik, F. and Lockhart, R. (1972). Levels of processing: A framework for memory research. *Journal of Verbal Learning and Verbal Behavior*, 11(6), 671–684.

- Ellen Quantum Lab (2015). <http://quantumlab.co> (06-04-2015).
- Endomondo (2015). <https://www.endomondo.com> (07-04-2015).
- Filar, E. (1996). *Biznes plan*. Warszawa: Poltext.
- Flowing Data (2015). <http://flowingdata.com> (06-04-2015).
- Foucault, M. (1980). *Power/knowledge: Selected interviews and other writings 1972–1977*. London: Pantheon.
- Foucault, M. (2011). *Narodziny biopolityki. Wykłady z Collège de France 1978/1979 (Naissance de la biopolitique. Cours au Collège de France 1978–1979)*. Warszawa: WN PWN.
- Friedman, B. (1997). *Human Values and the Design of Computer Technology*. New York: Cambridge University Press.
- Garmin (2015). <https://connect.garmin.com/pl-PL/> (10-10-2015).
- Greenfield, A. (2006). *Everyware: the dawning age of ubiquitous computing*. London: New Riders.
- Hines, K. (2016). *Facebook Reactions: What Marketers Need to Know*, <http://www.socialmediaexaminer.com/facebook-reactions-what-marketers-need-to-know/>.
- Homecamp (2015). <http://homecamp.org.uk> (06-04-2015).
- Hunersen, Ch. (2016). *How Facebook's New 'Reactions' Feature Works and What It Means for Marketers*, <http://blog.hubspot.com/marketing/facebook-reaction-buttons#sm.0001bsjsfpljeflz3y2iu0py3dwu>.
- Jawbone (2015). <http://jawbone.com/up> (06-10-2015).
- Kociatkiewicz, J. and Kostera, M. (2013). Zarządzanie humanistyczne. *Problemy Zarządzania*, 11(4), 9–19.
- Kostera, M. (2007). *Organizational ethnography: Methods and inspirations*. Lund: Studentlitteratur.
- Many Eyes (2015). <http://manyeyes.alphaworks.ibm.com/manyeyes> (06-04-2015).
- Misfit Wearables (2015). <http://www.misfitwearables.com> (06-03-2015).
- MyBasis (2015). <http://www.mybasis.com> (06-03-2015).
- Molina-Morales, F.X. and Martínez-Fernández, M.T. (2010). Social Networks: Effects of Social Capital on Firm Innovation. *Journal of Small Business Management*, 48(2), 258–279.
- Melon (2015). <http://www.thinkmelon.com> (06-04-2015).
- Mullins, L.J. (2007). *Management and Organizational Behavior*. Essex: Pearson Education.
- Nardi, B. and O'Day, V. (1999). *Information Ecologies. Using Technology with Heart*. MIT Press.
- Neurocritic Blog (2015). *Neurocrap Funded by the Masses: NeuroOn and No More Woof*, <http://neurocritic.blogspot.com/2014/01/neurocrap-funded-by-masses-neuroon-and.html>.

- Neuroon Kickstarter Campaign (2015). <https://www.kickstarter.com/projects/intelclinic/neuroon-worlds-first-sleep-mask-for-polyphasic-sleep/> (06-04-2015).
- Nike Plus (2015). http://www.nike.com/pl/pl_pl/ (12-04-2015).
- Quantified Self Global (2015). <http://www.quantifiedself.com> (06-04-2015).
- Pavlok (2015). <http://pavlok.com> (06-04-2015).
- Picard, R. (1998). *Affective Computing*. Cambridge, Ma: MIT Press.
- Polar Loop (2015). http://www.polar.com/en/products/get_active/fitness_crosstraining/loop (15-04-2015).
- Rheingold, H. (1993). *The Virtual Community: Homesteading on the Electronic Frontier*. London: MIT Press.
- Rooksby, J., Rost, M., Morrison, M. and Chalmers, M.C. (2014). Personal tracking as lived informatics. *Proceedings of the 32nd Annual ACM Conference on Human Factors in Computing Systems, 14*, 1163–1172.
- Runkeeper (2015). <http://runkeeper.com> (06-04-2015).
- Sebe, N., Cohen, I., Garg, A., Chen, L.S. and Huang, T.S. (2003). Facial expression recognition from video sequences: temporal and static modeling. *Computer Vision and image understanding, 91*(1), 160–187.
- Swan, M. (2009). Emerging Patient-Driven Health Care Models: An Examination of Health Social Networks, Consumer Personalized Medicine and Quantified Self-Tracking. *Int. J. Environ. Res. Public Health* 2009, 6(2), 492–525.
- Swivel (2015). <http://www.swivel.com> (06-04-2015).
- Tudor-Locke, C. and Basset, D. (2004). How Many Steps/Day are Enough? Preliminary Pedometer Indices for Public Health. *Sports Medicine, 34*(1), 1–8.
- Weibell, C.J. (2011). *Principles of learning: 7 principles to guide personalized, student-centered learning in the technology-enhanced, blended learning environment*, <https://principlesoflearning.wordpress.com>.
- Wolf, G. (2009, June 22). Know Thyself: Tracking Every Facet of Life, from Sleep to Mood to Pain. 24/7/365. *Wired*, 92–95.

Marta Zembik

Social Media in Small Enterprises: The Polish Market Example¹

Abstract

The article discusses the results of research into the adoption of social media among small enterprises operating on the Polish market. Enterprises can take advantage of social media in many different ways and scopes, especially in the context of marketing activities and managing customer relationships. In the case of small businesses, social media may become a very attractive tool thanks to the low costs of use and the virtually absent barriers to entry. The research focused on small businesses due to the fact that they make up for almost 99% of all businesses operating on the Polish market, and their contribution to the overall GDP at the end of 2012 was estimated to be 37.5%. The analysis covered especially: organizational awareness related to the functioning of social media, perception of the possibilities of taking advantage of the potential of social media in business, the level of impact of social media on the company's operations, and the forecasted development of social media in the context of the possibilities of making the most of its potential to the benefit of small businesses' operations. Gaining insight into various case studies has made it possible to point out that Facebook is the social networking platform used most often by small businesses in Poland, and the most frequent drive behind establishing some presence

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across social media is the famous statement saying that “If you’re not on FB, you don’t exist”. In the vast majority of companies included in the research, the person responsible for all activities pursued on social media is the company owner; the reason they don’t outsource these activities is that they are afraid of losing authenticity and credibility of their actions and intentions. Owners of small businesses view social media as a platform to build corporate image and form and maintain relationships with their customers; social media is also seen as an important channel of getting in touch with companies, replacing other channels, like e-mail messaging or phone calls, more and more often. Only two businesses out of the whole study group have admitted to see a real translation of their Facebook activities into the increase in sales.

Keywords: social media adoption, small enterprises, Polish market, case study

Introduction

Social media includes a range of web-based platforms enabling their users to create own content and to communicate with other users on-line (Kim, Jeong and Lee, 2010). The idea behind it was to make individual users able to communicate and share content (including multimedia) with others. Yet, as social media has developed and become more popular over time, its potential has caught the attention of companies who have taken advantage of it and employed it to pursue their operations (Fisher and Reuber, 2011; Bughin and Manyika, 2007). Initially, enterprises used social media mainly as a tool facilitating communication between them and their customers, but today, the range and scope of application of social media is becoming more and more advanced. The areas of business operations where social media is applied in majority are: marketing, communication, customer relationship management, sales, recruitment, marketing research, and many more.

What makes social media a highly attractive instrument to support business is the access to a multi-million community of users, the relatively low cost of use (or even nil in some cases), the low (or absent) barriers to entry, including the low level of the required IT skills (McCann and Barlow, 2015; Lacho and Marinello, 2010; Öztamur and Karakadilar, 2014). These factors make social media a very practical business tool, particularly for small businesses with usually rather limited marketing

budgets (Harris and Rae, 2009) or human resources with specialist IT knowledge and skills (Wielicki and Arendt, 2010).

There have been many studies showing the ways and the extent of utilization of social media in a corporate setting. However, their authors focus in majority on large businesses (Zeiller and Schauer, 2011). Meanwhile, the structure of enterprises operating within the European Union points to a domination of small- and medium-sized businesses. This is the reason why the subject of the research presented in this article includes small businesses operating in Poland (i.e. enterprises employing up to 49 employees). The motivation behind it is that small businesses constitute almost 99% of all businesses operating on the Polish market, and their contribution to the overall GDP at the end of 2012 was estimated to be 37.5% (PARP, 2013).

The market of social media in Poland is quite young. The Polish version of Facebook was introduced in 2008, and of YouTube – in 2007. But the number of social media users in Poland has been growing constantly, with 14 million active users reported for January 2016, which is 36% of the whole population of the country (SM Measure, 2016).

The research was conducted by means of qualitative research methods. In-depth interviews and observation have made it possible to grasp those aspects of implementation of social media in enterprises, which have been elusive and unidentifiable in the quantitative research methods applied so far. The research has also brought a deeper insight into the motives, aims, considerations, and ways of utilization of social media among small businesses from Poland.

The presented research is therefore an answer to the absence of studies into adoption of social media among small enterprises operating on the Polish market. At the same time, it extends the body of knowledge in this scope, pointing towards the areas of further exploration and research.

The studies and findings discussed in this article constitute a fragment of a project aiming to present a model approach to utilization of social media among small, medium, and large businesses operating in Poland.

Literature Review

Business Use of Social Media

With the arrival of the 21st century, practical use of the Internet and social media became a part of successful business strategies. One of the most

important reasons for enterprises to use social media is that it lets them be closer to their customers (Kozinets, 2002). Consumers use social media to search for information, but they are also keen on interacting with companies and brands (Schmitt, 2012). They describe their experience with products, services, and brands across social media in the form of “posts”, “tags”, or “digg”, or write about it in detail on their blogs and message boards (Stockdale, Ahmed and Scheepers, 2012; Kucia and Łapczyński, 2015). Enterprises have noticed the potential of social media, and now take advantage of adoption thereof. According to studies by McKinsey, 72% of enterprises included in the study group use social technologies, benefitting from: an increased access to knowledge and external experts, reduced communication costs, increased effectiveness of marketing activities with a simultaneous reduction of marketing costs, and an increase in the level of customer satisfaction (Bughin and Chui, 2011).

But social media is first and foremost a communication tool. Employed for business operations, it may offer a substantial support to many business processes. The most important of these processes is marketing (Kim, Jeong and Lee, 2010; Harris and Rae, 2009), but social media may be successfully applied in customer relationship management (Baird and Parasnis, 2011), obtaining knowledge from outside the organization (Zembik, 2014), sales (Curtis and Giamanco, 2010; Chase and Knebl, 2011), building business networks (Kim, Jeong and Lee, 2010), and recruitment (Melanthious, Pavlou and Constantinou, 2015) to name a few. Small businesses often use social web sites also as a corporate intranet (Kim, Jeong and Lee, 2010).

The dynamic development of social media and the appearance of newer and newer networking sites opens further paths for adoption of social media for the needs of other areas of business operations.

Social Media in Small Businesses

Small businesses constitute the majority of all enterprises across all economies in the world (Storey, 1994). In Europe, small and medium businesses make up for 99.8% of all enterprises, covering 2/3 of the total employment rate (Carayannis et al., 2006). Therefore, their global significance is huge, and the way they operate is very specific due to the close connection of these entities with their owners. The way a small company operates is based on its owner’s experience, knowledge about running a business, and involvement. Managing a small business is thus

highly personalized, and the decisions made reflect the individual personality of the entrepreneur – owner of a given enterprise (Hill and Wright, 2001). Moreover, as pointed out by Derham, Cragg and Morrish (2011), decisions made in small business “are not governed by typical business objectives such as profit, growth and competitive advantage but more by social and family motives, such as maintaining personal identity or maintaining family connections”. This translates also into the way of utilization of social media for the needs of business operations of any such small enterprise.

Such enterprises are often afraid of implementing new technologies into their business processes because they consider them costly, complex, and technically challenging. Studies show that the ease of use and the perceived utility are the most important determinants of adoption of e-marketing (El-Gohary, 2012) and e-commerce (Grandon and Pearson, 2004) solutions among small businesses. Moreover, it appears that small (and medium) enterprises are more willing to adopt IT solutions when their competition does it (Dahnil et al., 2014). In this context, small businesses can take particular advantage of user-friendly and easily-implementable technologies based on social software.

An analysis of the literature devoted to the subject and of the findings of studies conducted by various authors makes it possible to identify the business processes supported by social media in small (and medium) enterprises. As rightly assumed, SMEs use social media mainly as on-line marketing tools (Harris, Rae and Grewal, 2008), as a means of communication (Razmerita and Kirchner, 2011), of sharing knowledge and gaining it from customers – to learn of their needs, for instance (Derham, Cragg and Morrish, 2011; Razmerita and Kirchner, 2011), of brand building through improving communication with the market and establishing relationships with customers (Michaelidou, Siamagka and Christodoulides, 2011), of increasing customer engagement (Derham, Cragg and Morrish, 2011), and finally as a means to increase their ability to react to and manage relationships within the organization (Zeiller and Schauer, 2011).

Research Objective and Approach

The main objective of the presented research was to gain an in-depth knowledge about the motives, goals, and considerations related to adop-

tion of social media among Polish small enterprises. Moreover, another aim was to identify the business processes pursued by such enterprises with the support of social media. An investigation into the scope and ways of utilization of social media was conducted to complement the profile of a small business adopting it into its business.

In order to pursue objectives framed in this way, it was necessary to adopt an interpretivist research philosophy, followed by selection of the case study method as the research strategy.

The research involved conducting in-depth interviews with key respondents in 10 Polish small enterprises. The decision to select companies operating in different industries was made on purpose.

The data for the research was collected by means of semi-structured, face-to-face interviews, conducted on the basis of the following themes:

1. Organizational awareness of social media, including e.g.: practical utilization of social media, perceived significance and considerations of adoption of social media for business purposes, essential and desired resources and competence, perceived barriers in adoption, etc.,
2. Ways of using social media in business operations, including: set targets and tasks, business processes supported by social media, the process of content development, involvement of external entities, etc.,
3. The level of impact of social media on company operations, including e.g.: taking advantage of information gained from social media to modify and develop new products/processes, ways of acquiring and processing information from virtual communities (Internet monitoring), analysis of effectiveness of the conducted activities.
4. Familiarity with IT tools supporting business operations based on utilization of SM.
5. Forecasts for the development of SM – the perceived prospects of development of the social media market, as well as the future trends of utilization thereof by enterprises.

A semi-structured interview makes it possible to collect internally coherent information from different companies, but still remains a method flexible enough to allow new unexpected and interesting subjects to surface during the interview.

The descriptive parts of case studies have been developed according to the principles of grounded theory, according to which the process of theory creation occurs already during collection of empirical data. Data analysis was based on methods common to the methodology of grounded

theory and case study, and ran as follows: transcription of interviews (3 interviews were not recorded at the request of the respondents; they felt uncomfortable because of the presence of recording equipment), systematization of topics and identification of new aspects that were mentioned by the respondents, data encryption, categorization, analysis of patterns within and between the cases, drawing and developing conclusions.

Triangulation of data sources has been applied to supplement the information gained from the interviews with data about the companies' actual social media activity; this has been done by means of an analysis of the content shared by the companies included in the research on Facebook, YouTube, and other social websites.

Case Analysis

The companies used as cases are mostly micro-enterprises employing not more than 9 people. All of them are family businesses, established and run by the closest family members. In 9 cases, it was possible to interview the owners, and in 1 remaining case, the person interviewed was a person responsible for making marketing decisions (who was in a family relationship with the company owner). The intention was to select companies operating in different industries; the result was a study group composed of e.g. a company offering obstetric services, a translation company, an enterprise selling finishing materials, and a business designing and selling iPhone cases.

The companies included in the study group were interested in social media usually out of curiosity motivated by the growing popularity thereof – also among their competitors (“Everyone’s there”). The low cost of pursuing activities on social media seemed to be also an important reason (“People tell me that Facebook is the cheapest way to reach customers”).

Businesses noticed that social media offered a chance to ‘spread the word’ about their products and services among a broader audience, and in one case, the company owner admitted that “without social media, my company would not stand a chance”. There have been also comments that customers tend to use social media (not Google), mostly Facebook, to find information about companies. They use smartphones to this end, verifying information and visiting fanpages liked by their friends.

One conclusion is that the main social networking site used by the companies included in the research is Facebook. All of these companies have a fanpage on Facebook; they also consider the site as the main social website that needs to be adopted for business purposes. Table 1 presents the utilization of social media; it includes only those channels that are used actively and updated on an on-going basis.

Table 1. A summary of the social media services used by the enterprises included in the research

Sites	Facebook	Instagram	Twitter	YouTube	Tumblr	Pinterest	Snapchat
Number of companies	10	5	1	1	1	1	1

Source: own studies.

Small businesses adopt FB for their operations mainly because of its popularity. Among the reasons mentioned during the interviews were: “If you’re not on Facebook, it means you don’t exist”, “You have to be there”, “Everyone’s on Facebook”. But also “I wanted to try it, I was curious to see how it worked”. There was also a view that “Facebook offers the best targeting from among all advertising tools”, and that “it is the cheapest and best means of communication in a B2C model”.

One of the respondents highlighted the significance of Messenger – Facebook’s inbuilt instant messaging service. It makes communication with customers easier, and ‘shortens’ the distance – the conversations can be held in a more relaxed manner than in the case of e.g. a conventional e-mail message exchange.

Enterprises using both FB and Instagram tend to consider the former as the more “official” and “corporate” channel. Instagram, in turn, displays the more private side of life of company owners, or the behind-the-scenes activities of companies (e.g. behind the scenes of photo sessions or events). Moreover, thanks to hashtags, Instagram offers a worldwide reach (e.g. #newbornphotography). What’s more, Instagram and Pinterest are both considered ‘lures’. Businesses use eye-catching, lifestyle photos showing their more private, human face to attract users and make them search for information about the company and make it to its FB fanpage or website, where they’ll be given more information and – hopefully – become interested in the company’s offer eventually. The traffic on Instagram is also generated through “like

for like” activities. Those who use Instagram say it requires a day-to-day activity.

YouTube, although tried out by some of the companies included in the research, and considered an interesting and promising channel, turns out to be too demanding, mostly because of the fact that it takes too much time to prepare the content to be published, and that the videos need to be really unique and extraordinary to become popular. In one case, YT is used as a portfolio – the company owner shows their YT channel featuring the events they have organized so far at meetings with their potential clients. Two companies had their YT channels as well, but both of these channels were defunct, suspended and not updated for a longer while. YouTube’s potential depends on the industry a given company operates in. Some company owners believe that there is nothing worth showing on video in the industry they operate in (“I have no content worth sharing”).

Small enterprises are keen on getting involved in Facebook activities as they see virtually no barriers to enter. Most of them stress that time is the biggest limitation in terms of development of their activity on social media. Owners of small businesses manage the SM profiles of their companies alone, so it’s difficult for them to spend more time doing this. It’s been said that “You need to get addicted to Facebook” to make your FB activities effective. Social media require constant efforts, involvement, and enthusiasm. Enthusiasm and time were named the most important resources in the context of managing the presence of a company on social media. When asked about useful (although not essential) skills, the respondents pointed to the ability of writing interesting posts, i.e. posts that are concise, involving, and delivering advanced content (e.g. medical information) in a simple and reader-friendly way. One company owner pointed out that there were a lot of training programmes addressed to SMBs, which offered knowledge and skills necessary to adopt SM for business operations. In most cases, company owners used to set up company profiles on social media alone and from scratch, but it also occurred that some enterprises used external technical support – usually in the scope of graphic design.

The owners of the businesses included in the research did not make any spontaneous remarks about the costs of pursuing activities across social media channels. Only when asked about the matter directly, they praised the gratuitousness of the solution, stating it was impossible to compare the costs with the costs of promotion via traditional channels.

One of the respondents said that in the case of a small business, “there is no relationship between an expansion of promotional activities (on social media) and budget limitations”. Three of the companies participating in the research admitted to having paid for an FB advert, but were also quick to point out that it didn’t produce any better results than that achieved through the free forms of promotion. One of the enterprises intends to hire an external company to manage its fanpage; the cost of the service will amount to approx. 2500 zloty per month. However, companies are aware of the issue that Facebook – as well as other social networking sites – limit the ‘visibility’ of posts, and consider it a real threat to small businesses using social media for free. Some of the companies subject to the research say also that another obstacle, or even a threat to the pursuit of activities on social media is the fact that their competitors may use SM to “follow” them. This is why “it is necessary to think about what you share on Facebook”. However, the subjects of the research use social media to this end as well, viewing their competitors’ profiles and fanpages, “monitoring” them on-line, and seeing that “this way it’s possible to react quicker to the competition’s actions”. It has been also said that information of any introduced novelties and unique solutions should be published right away across all social media channels to prove one’s pioneership as it is more than certain that the competition will copy the idea sooner or later.

None of the companies subject to research had a plan of action, a strategy of adoption of social media for business purposes. “I had a plan to make my mark. I bought a book and gave it a go”, “I follow a gung-ho methodology”, “It’s a complete freestyle”, “There was no specific plan or idea. It was done ‘after hours’” – these are just some of the answers to the question about the plan of action for social media ‘operations’. A vital point was made by one of the company owners, who said that it was hard to plan a strategy for SM activities because of the very dynamics of social media. According to her, “Pre-designed campaigns are often rigid, not flexible, they don’t allow for interaction, and the content is not modified to suit the behaviour and actions of consumers. It then becomes an advert, like a TV commercial”. In this case, the strategy was about selecting the media channel, determining the frequency of posting, and the plan of application of the “like for like” rule, and following others. In another case, the company owner defined 5 types of posts that were to be published without any guidelines for the frequency or the time of publishing.

Owners of small businesses see social media as a platform to build and manage the corporate image of their companies, and to establish and maintain relationships with customers. Brand promotion is a target assigned most often to activities pursued on social media. Moreover, small businesses adopting SM into their operations expect to achieve the following goals (excerpts from original statements from the interviews): image building, building relationships (mostly with brand ambassadors active on social media), increasing brand's recognisability, market and feedback research, entering foreign markets, developing a network of contacts, word-of-mouth marketing, offer presentation, becoming present, showing e.g. one's equipment off, attracting customers, sales, looking for employees, market monitoring. Social media is becoming more and more frequent and common point of contact and channel of customer services because of the increasingly growing number of inquiries sent by clients via social networking sites. One person even said that "Facebook is a tool to get in touch with customers, not a tool to work", which may suggest that the respondent considers FB communication more convenient, less challenging, and less formal than e-mail exchange or phone calls.

The analysis devoted also a considerable amount of attention to the identification of business processes pursued by small enterprises with the support of social media. The main such process, resulting from the set targets, is the broadly understood marketing, which consists mostly of: image building, developing a network of contacts, and establishing relationships. Only two respondents have admitted explicitly that their involvement in Facebook activities has borne fruit in the form of new customers, and are now able to sell their products/services through this channel. Other small businesses see no direct translation of their activities across social media into an increase in sales. One company owner looks for employees through Facebook, posting job offers on the site.

In 9 of the analysed cases, it appeared that social media activities were pursued directly by the company owners; in the remaining one case, these activities were managed by a person responsible for marketing. None of the companies used external services in the scope of managing corporate profiles on SM or monitoring the results. One of them intended to work with an interactive agency and entrust it with managing the company's FB fanpage (medical industry). The aversion towards outsourcing in this scope comes mainly from the fear of loss of authenticity and of a lack of tangible benefits. The company owners motivated their reluctance in the following way: "I wouldn't entrust some external

company to manage my company's fanpage because it wouldn't be my fanpage anymore. It is emotions and my own involvement what counts in this context. I want it to be mine", or "I'm the only one to manage all company profiles. How is some from the outside supposed to "get the hang of it"?" One person also said that "it's important for customers to know who they're buying from. That's why we always have our photos and introduce ourselves when we talk with them. And we always respond to comments in person".

The companies participating in the research modify their operations (processes, offers, products) under the impact of social media to a little extent. The main drive behind such changes is rather what they find on their competitors' profiles, not the information they get from their customers. In one case, the unfavourable opinions posted on a message board by a customer made the company change its internal procedure of handing out documentation (medical industry).

None of the companies participating in this research project monitored the Internet or investigated the effectiveness of the activities pursued across social media. They use only statistics made available by particular services, but even these findings are of little importance to them.

When asked about the forecasts about the development of social media, the interviewees were convinced that this sector would evolve at a rapid rate. Some opinions were that "everything will be subordinated to Facebook" because "Facebook aggregates content and is a messaging service at the same time". But there was also a completely different view; the respondent said that "there will be a surfeit of information coming from FB". Services like Snapchat will become more popular because people are not fond of reading lengthy texts and watching long (longer than 60 seconds) videos. There will be even more direct forms of contact. Smartphones will be used for browsing social media to an even greater extent.

In the case of small businesses, using social media will become harder as the inevitable information overload will make it "increasingly difficult to make it to the 'surface' because Facebook already puts some constraints in this matter in its free form".

Conclusion

The research aimed to determine the ways and reasons small business use social media in their operations. The study group consisted of com-

panies operating in different industries to make the analysis cover cases with various background and experience.

The post-analysis conclusions are that in general, small enterprises use social media spontaneously, without any specific plan, and although they are aware that it is possible to take a greater advantage of Facebook and other networking sites, they usually lack the time, the knowledge, and – quite often – the will to get involved more. The practical implication drawn from the conducted research is that the social media strategies of small businesses differ even across very similar industries. This is why such businesses should choose social media tools according to the set objectives, which will let them use the resources at their disposal to benefit the most from the adoption of the said tools for their business needs and operations.

References

- Baird, C.H. and Parasnis, G. (2011). From social media to social customer relationship management. *Strategy & Leadership*, 39(5), 30–37.
- Bughin, J. and Chui, M. (2011). How social technologies are extending the organization. *McKinsey Quarterly*, 11.
- Bughin, J. and Manyika, J. (2007). How businesses are using Web 2.0: A McKinsey global survey. *McKinsey Quarterly*, 3, 1–9.
- Carayannis, E.G., Popescu, D., Sipp, C. and Stewart, M. (2006). Technological learning for entrepreneurial development (TL4ED) in the knowledge economy (KE). *Case Studies and Lessons Learned*, 26, 419–443.
- Chase, L. and Knebl, K. (2011). *The Social Media Sales Revolution: The New Rules for Finding Customers, Building Relationships, and Closing More Sales Through Online Networking*. McGraw Hill Professional.
- Curtis, J.C. and Giamanco, B. (2010). *The New Handshake: Sales Meets Social Media*. Santa Barbara, Ca: ABC-CLIO.
- Dahnil, M.I., Marzuki, K.M., Laggat, J. and Fabeil, N.F. (2014). Factors Influencing SMEs Adoption of Social Media Marketing. *Social and Behavioral Sciences*, 148, 119–126.
- Derham, R., Cragg, P. and Morrish, S. (2011). Creating value: An SME and social media. Pacific Asia Conference on Information Systems, 7–11 July. Brisbane, Queensland, Australia.
- El-Gohary, H. (2012). Factors affecting E-Marketing adoption and implementation in tourism firms: An empirical investigation of Egyptian small tourism organisations. *Tourism Management*, 33(5), 1256–1269.

- Fisher, E., and Reuber, A.R. (2011). Social interaction via new social media: (How) can interactions on Twitter affect effectual thinking and behavior? *Journal of Business Venturing*, 26, 1–18.
- Grandon, E.E. and Pearson, J.M. (2004). Electronic commerce adoption: an empirical study of small and medium US businesses. *Information & Management*, 42(1), 197–216.
- Harris, L. and Rae, A. (2009). Social networks: the future of marketing for small business. *Journal of Business Strategy*, 30(5), 24–31.
- Harris, L., Rae, A. and Grewal, S. (2008). Out on the pull: how small firms are making themselves sexy with new online promotion techniques. *International Journal of Technology Marketing*, 3(2), 153–168.
- Hill, J. and Wright, L.T. (2001). A qualitative research agenda for small to medium-sized enterprises. *Marketing Intelligence & Planning*, 19(6), 432–443.
- Kim, W., Jeong, O.R. and Lee, S.W. (2010). On social Web sites. *Information System*, 35, 215–236.
- Kozinets, R.V. (2002). The field behind the screen: using netnography for marketing research in online communities. *Journal of Marketing Research*, 39(1), 61–72.
- Kucia, M. and Łapczyński, M. (2015). Decyzje zakupowe śląskich e-konsumentów – ujęcie modelowe. *Marketing i Rynek*, 8, 310–321.
- Lacho, K.J., and Marinello, C. (2010). How small business owners can use social networking to promote their business. *The Entrepreneurial Executive*, 15, 127–133.
- McCann, M. and Barlow, A. (2015). Use and measurement of social media for SMEs. *Journal of Small Business and Enterprise Development*, 22(2), 273–287.
- Melanthiou, Y., Pavlou, F. and Constantinou, E. (2015). The Use of Social Network Sites as an E-Recruitment Tool. *Journal of Transnational Management*, 20(1), 31–49.
- Michaelidou, N., Siamagka, N.T. and Chistodoulides, G. (2011). Usage, barriers and measurement of social media marketing: An exploratory investigation of small and medium B2B brands. *Industrial Marketing Management*, 40(7), 1153–1159.
- Öztamur, D. and Karakadilar, I.S. (2014). Exploring the role of social media for SMEs: as a new marketing strategy tool for the firm performance perspective. *Procedia – Social and Behavioral Sciences*, 150, 511–520.
- PARP (2013). *Raport o stanie sektora małych i średnich przedsiębiorstw w Polsce w latach 2011–2012*. Warszawa: Polska Agencja Rozwoju Przedsiębiorczości.
- Razmerita, L. and Kirchner, K. (2011). How wikis can be used to manage knowledge in SMEs. A case study. *Business Information Review*, 28(3), 175–178.
- Schmitt, B. (2012). The consumer psychology of brands. *Journal of Consumer Psychology*, 22(1), 7–17.

- SM Measure (2016). Liczby polskiego Internetu, <http://smmeasure.eu/liczby-polskiego-internetu-2016/>.
- Stockdale, R, Ahmed, A. and Scheepers, H. (2012). Identifying Business Value From The Use Of Social Media: An SME Perspective. Pacific Asia Conference on Information Systems, 11–15 July, Paper 169. Hochiminh City, Vietnam.
- Storey, D. (1994). *Understanding the Small Business Sector*. London: Routledge.
- Wielicki, T. and Arendt, L. (2010). A knowledge-driven shift in perception of ICT implementation barriers: Comparative study of US and European SMEs. *Journal of Information Science*, 36(2), 162–174.
- Zeiller, M. and Schauer, B. (2011). Adoption, motivation and success factors of social media for team collaboration in SMEs. 11th International Conference on Knowledge Management and Knowledge Technologies, 7–9 September (Article No. 4). Graz, Austria.
- Zembik, M. (2014). Social media as a source of knowledge for customers and enterprises. *Online Journal of Applied Knowledge Management*, 2(2), 132–148.



4. COMMUNICATION IN THE DIGITAL WORLD





Grzegorz Hajduk

Challenges for Marketing Communications in the Digital Age

Abstract

The article discusses the challenges in marketing communications conducted in dynamically changing market conditions. A special attention has been drawn to the progress of in the area of information technology, and to the growth of the number of the available forms and tools of communication resulting therefrom. Increasing demands of recipients, their evolving communication habits and preferences, and the activities pursued by market competitors force enterprises to draw on to “digital era” solutions. These include tools that enable effective exchange of information with the market, which is a precondition for building a strategic position of every company and brand on the market. Considering high outlay for employee skills advancement, the use of external marketing communications professionals services has been suggested. A compilation of advantages and disadvantages of marketing communications has shown that it poses both an opportunity and a challenge to modern enterprises. Working with carefully selected service providers ‘from outside’ can produce excellent outcomes. Access to external specialists and to their potential is becoming increasingly easier thanks to the technological progress in the scope of exchange of information. Adoption of new information technologies and taking advantage of the new possibilities to work with experienced external professionals offers great opportunities to increase the efficiency of marketing communications, and, as a result, in business in effect.

Keywords: marketing communications, outsourcing, brand, marketing, strategy, digitalization

Introduction

Digitalization of communications is a progressing phenomenon, reflected in the way of planning and executing programmes of corporate marketing communications. It constitutes a component of wider phenomenon, which is defined as: digital economy, Internet economy, virtual economy, or web economy (Mazurek, 2012). The range of possibilities offered by the Internet and contemporary information technologies makes it possible to establish close and lasting relationships with customers, and facilitates working with external partners who may make marketing communications more effective.

Efficient utilization of marketing communications requires not only a very good knowledge of social phenomena and market processes, but also familiarity with instruments and technologies of information communication. Such skills and abilities are becoming crucial components of the leverage in market brand positioning. More and more companies turn to external agencies and professionals offering services in the scope of the broadly-understood communications management on a remote basis. The most often outsourced activities include: developing and managing websites and on-line shops, developing mobile apps, managing social media profiles/fanpages, running e-mail marketing campaigns, managing loyalty programmes, running on-line advertising campaigns, monitoring information flow on the Internet, etc. Thanks to the Internet and information technologies, such activities may be pursued effectively and easily even despite considerable distances separating the employer and the contractor. Many companies take advantage of such solutions and view marketing communications outsourcing as a way to increase the effectiveness of their own market activities. This necessitates adapting to the style of working with external partners, and insuring oneself against the loss of control over one's brand, however, the positive effects of outsourcing may indeed be impressive. Representatives of the marketing communications industry learn how to build credibility, renown, and reputation in conditions of limited opportunities for direct interaction with the employer. More and more of companies offering such services develop their operations on a global scale. They improve

their tools and perfect the ways of working with clients, changing the stereotypical approach to marketing, regarded so far as a corporate-internal function. The goal of the article is depict the specificity of the phenomenon of marketing communications outsourcing in the context of progressive digitalization and evolution of media.

Contemporary Marketing Communications

Both marketing theoreticians and practitioners agree that the key condition for marketing communications to be effective is its integration. All communication activities undertaken need to be consistent with respect to their content, and coordinated in time and space. There is even a term to describe the idea, which has become widespread across professional literature devoted to the topic; this term is *integrated marketing communications* (IMC). It is defined as a process which involves the management and organization of all 'agents' in the analysis, planning, implementation and control of all marketing communications contacts, media, messages and promotional tools focused at selected target audiences in such way as to derive the greatest economy, efficiency, effectiveness, enhancement and coherence of marketing communications effort in achieving predetermined product and corporate marketing communications objectives (Pickton and Broderick, 2005, p. 26). The objectives of IMC are to build and strengthen brand equity, which points to the strategic character and significance of processes related to marketing communications. American Marketing Association defines IMC as a planning process designed to assure that all brand contacts received by a customer or prospect for a product, service, or organization are relevant to that person and consistent over time (AMA Dictionary, 2016). The key to follow the assumptions of IMC and execute them effectively is to maintain control over the transmission of communications. This applies to both the content and the range of communications. Meanwhile, taking advantage of solutions based on utilization of the Internet is characterized by openness to dialogue involving inclusion of the audience in the process of creation and transmission of communications. It is stressed that social media is the biggest change since the industrial revolution. It offers amazing opportunities for establishing relationships with customers and other groups of recipients, which makes it possible to achieve quick and spectacular results of the brand equity building process. But this leads to situations

where customers, not companies, are controlling the flow of marketing information (Smith and Zook, 2011, p. 9). However, the loss of control over the course of a discussion devoted to a brand poses a significant threat to this brand's image.

Companies reaching for methods and tools of modern marketing communications are able to interact quickly with consumers. For instance, a well-planned mobile marketing campaign or a competition on Facebook make it possible to increase the level of interest in a given product, leading to a growth in sales thereof. On the other hand, relying on such "cut-corner" methods may stand in contradiction to the key values upon which the brand is built.

It is important to remember that regardless of the popular stereotypes, brand image is not built through the mass media or the Internet. It is created in the mind of potential customers. Just as it is impossible to take control of people's thoughts, it is similarly difficult to control the brand image produced in their minds. Brand image is an effect of processing a variety of information people receive and interpret selectively (consume). Consumption of information involves interpretation of received signals. It is a semiotic process that takes place over time (Oleński, 2001, p. 313). If we want to increase the likelihood that a set of associations concerning a given brand, which is in line with the expectations of this brand's owner, appears in customers' minds, we should make the most of many different ways to reach these customers with signals – messages – building and enhancing a consistent and positive brand image. Most of effects of communications intended to build brand image are not measurable and planned for a rather long-term perspective. This is why marketing communications in the digital era, just like when it was first employed in practice, should be based on certain predefined concepts, be in line with the identity of the company and the brand, and be utilized to achieve particular strategic objectives.

Continuous evolution is a characteristic feature of contemporary mass media and it is reflected in frequent arrivals of new tools and technologies. Taking full advantage of the potential lying in digitalization of marketing communications requires an cutting edge expertise and experience. The market of marketing services sees more and more enterprises and professionals with a wide range of services to support – or even substitute – corporate marketing departments in their activities. They offer specialist knowledge, experience, and tools that if applied in a proper way, may provide a substantial boost to communication with

the market, and contribute to a major market success. There are more and more companies who instead of investing in the development of their own marketing, communications, or PR departments, choose to rely on external entities in this respect.

Outsourcing as a Way to Effective Marketing Communications

An increasingly higher outlay on marketing communications does not necessarily translate into success. Managers responsible for marketing communications face a serious dilemma – whether to develop the competence within their own corporate marketing departments, or whether to reach for external support. For many companies, improvement and development of the skills and abilities of their human resources may be both difficult and costly. This is one of the reasons why more and more enterprises seek support among specialized external partners who deal with business marketing communications to a larger or smaller extent. And this is exactly how outsourcing works. Literature most often describes outsourcing most often as the practice of hiring functional experts to handle business units that are outside of your firm's core business. It is also a method of staff augmentation without adding to head count (Dominguez, 2005, p. 5). Some companies go even as far as to outsource functions and processes included within their basic scope of operations. The common reason behind such solutions is cost-cutting. Another notable phenomenon involves businesses looking for subcontractors and specialists outside the country a given company operates in. This is called offshoring. It refers to having work for a company done in another country, whether or not it is done by part of the same company (Amar, 2008, p. 322). This kind of strategic decisions help companies expand and gain economic profits.

Naturally, employing companies specializing in promotion, advertising, or image building services is nothing new in business. But in recent years, the scope of outsourced competence and decision-making authority related to marketing communications has been noticeably growing. The possibilities and models of cooperating with external service providers are changing. Some companies even opt for a full outsourcing and completely give up developing their own departments responsible for marketing communications.

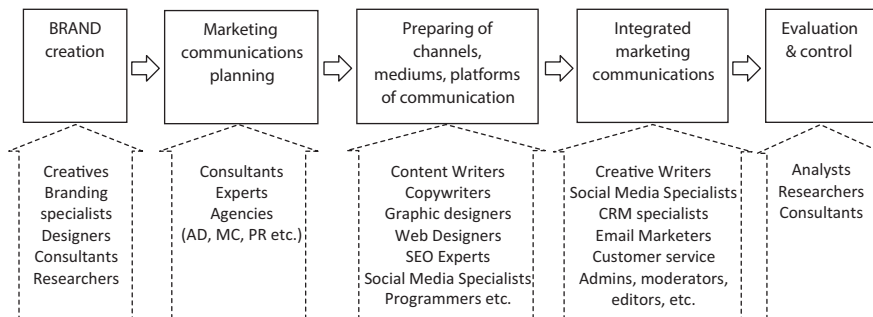
The market abounds with many types of entities able to act as sub-contractors in the scope of marketing communications. Among these, agencies of different profiles seem to play a major part. They can be referred to in general as marketing communication agencies. Advertising agencies are the ones with the longest market history. The so-called full-service agencies, established usually by way of extension of regular advertising agencies's portfolios, have the broadest range of services. Marketing communications agencies also include: public relations agencies and promotion/sales promotion agencies. Another dynamically developing group is formed by agencies that come to being as a result of market changes, profiled to specialize in particular communication methods and technologies. These include: direct marketing agencies, direct mail agencies, interactive and social media agencies, digital agencies, creative boutiques, branding and corporate identity design agencies, media buying agencies, and many other service providers with teams of experts whose potential can be taken advantage of to achieve certain communication and business goals.

Apart from agencies, the group of contractors who can act as skilful and efficient 'communicators' includes individual consultants and independent professionals. Their typical job is to assess a given situation and suggest specific solutions or to perform certain tasks constituting a part of some larger project. The latter can be entrusted to freelancers, who offer their services via various on-line sites and platform (examples of such services include: graphic design, website optimization, copywriting). The best known websites for freelancers and individual professionals are: guru.com, freelancer.com, or upwork.com. In the case of the latter, the site boasts nearly 30 000 registered sales and marketing professionals, and over 95 000 registered graphic designers. Requests for quotation are made on-line, and the contractors are selected on the basis of the quotation they provide and based on their professional portfolio – a collection of their work samples and skills. Such services offer constantly-improved systems of recommendations and care to streamline and facilitate cooperation between employers and contractors. The average time to find a contractor is several days. In Poland, the most popular sites of such type are, among others, oferia.pl and freelanceria.pl, which also act as platforms to make requests for quotations and to offer various types of services, including "marketing-advertising" services. Working with professionals found through such websites is an alternative to some tasks carried out on an in-house basis, and to services

offered by agencies. However, it is important to bear in mind that some more skilled, experienced, and reputable freelancers are often absent from such databases because of the price pressure and price dumping – phenomena unfortunately quite common to such platforms. They can be reached by way of recommendation, via social networking platforms (e.g. LinkedIn), message boards, or discussions forums.

It is possible to make use of services of many different external contractors at different stages of the process of marketing communications (Figure 1). It is good to base one’s decisions on common sense in this respect because the more subcontractors are involved in marketing communications, the higher the risk of losing control over its course and outcomes.

Figure 1. Examples of external contractors at particular stages of the process of marketing communications



Source: own work.

At the stage of brand creation, it is possible to turn to branding specialists for advice. They are usually able to support enterprises by developing brand strategies, coming up with brand names, designing logos, working out the principles of corporate visual identity, defining the Big Idea and the Claim accompanying the brand, and preparing auxiliary tools and manuals (e.g. brandbooks), etc. The next stage is about planning marketing communications. It involves setting the tactical objectives, determining the key messages, developing the marketing communication mix, and preparing press plans. When planning, it is possible to turn to external consultants and experts, or to marketing communication agencies. Before we start communicating with our environment, it is necessary to prepare and select the channels of transmission, the media, and the means and platforms of communication. This

is a stage which involves developing websites, setting up profiles on social media, and designing mobile applications. Here, one can take advantages of services offered by: web designers, social media marketing specialists, SEO specialists, graphic designers, content writers and managers, programmers, etc. An on-going communication with the environment often involves cooperation with many specialists at the same time. These specialists are: creative writers, social media specialists, CRM specialists, email and direct marketing specialists, customer service specialists, admins, editors and moderators of social networking sites, etc. It is also possible to use the support of experts at the stage of evaluation of already undertaken activities. Their assessment may provide enterprises with objective conclusions, which can then help them improve their future programmes of marketing communications.

In the digital era of today, finding and working with external contractors to manage certain projects is becoming increasingly easier. Also, geographical distance does not pose a problem anymore – companies tend to be more and more willing to work with partners spread across the whole world, regardless of their actual location. The standards of building relationships and of direct communication are changing as well. It is increasingly common to see employers and contractors establishing fruitful relations and cooperating successfully without the need for a face-to-face meeting. While personal interaction in business seems to be of extreme value to older generations, the youngest market players appear not to attach such great significance to the matter. Actually, they even tend to speak more in favour of on-line communication, highlighting many of its advantages and praising it for: its multimedia nature, making it possible to work on shared documents, to transfer and share other files, record, save, and replay discussion sessions, etc. But the biggest plus is the possibility to save the time that would otherwise be spent on travelling in order to meet. In the Anglosphere, partner meetings are usually limited to a single ‘kick-off’ meeting, where the employer and the contractor meet in real life in a certain place and at a certain time to briefly arrange the terms and conditions of their cooperation. The communication that follows is usually exchanged by means of:

- e-mails,
- phone calls,
- smartphones and other mobile devices with own communication protocols (e.g. Apple’s FaceTime, BlackBerry Messenger),

- commonly-available video and voice messaging services (e.g. Skype, Hangout),
- dedicated voice messaging services for business (e.g. VoIPstudio),
- teleconferences based on dedicated business solutions,
- teleconferences organized as virtual meetings with an option to book a “room” for a closed group of participants (e.g. T-Mobile Conference),
- platforms and applications for exchanging information and team-working (e.g. Slack, Podio),
- internal platforms and applications for project management with an option of adding users from outside (e.g. JIRA by Atlassian).

On account of the value and significance of contracts concluded between employers and contractors, the most important moment is the signature of agreement concerning a given order. While the development of the contents of such agreements, and any later consultation, discussion, or modifications in the scope thereof may be easily performed on-line, it is not always the case when signing the document. There are solutions that make secure exchange and signature of documents possible (e.g. DocuSign), and they are becoming increasingly popular worldwide, but many companies are still not ready to trust and adopt such standards. In such circumstances, an alternative to a face-to-face meeting is to send documents via courier mail.

For companies offering a very broad range of marketing communication services, the opportunity to work for different clients on a remote basis is a great convenience and a big chance for development. Yet, it is important to note that like in the case of other fields of business, the best way to find new clients is – and always will be – to be recommended by one’s current clients. An attractive offer on an agency’s website, the way one showcases their activity across social media, and the way a professional presents examples of completed projects for reference purposes all play a significant role in gaining trust and credibility in the eyes of potential new clients. But it cannot compare to the power of recommendation, which is still the most decisive factor in selecting business partners.

Pros and Cons of Outsourcing in Marketing Communications

In order to make an objective assessment of utilization of outsourcing in marketing communications, it is reasonable to compare the advantages

and disadvantages of such solution. It's not easy to prepare a general list of benefits and drawbacks because of the complexity of the issue. The list below has been developed with consideration of the criterion of motive behind the decisions of employers. Motives have been divided into three categories, i.e. related to: finance, management, and effectiveness and innovation of performance (Table 1).

Table 1. Pros and cons of outsourcing in marketing communications

Motives	Pros	Cons
Finance	No need to purchase devices and technology to be used by contractors. Limitation of personnel costs in the employer's company, a change of the cost structure. Settlement on the basis of results, not on the basis of worktime. A possibility to optimize expenses by way of tendering procedure and comparison of offers.	Possible larger expenses because of the need to pay middlemen and cover the costs of commission-based system. Significant costs of remuneration to be paid to reputed contractors. Costs necessary to be borne if the contractor abandons the project.
Management	Possibility to focus on the key operations. Access to specialists without the need to employ them. Possibility to change/select different contractors. Responsibility and risk split between the employer and the contractor.	No full control over the activities undertaken outside the company. Risk of deviating from strategic assumptions, e.g. related to brand building. Risk of unauthorized disclosure of company secret. Risk of loss of reputation because of the contractor's mistakes and irresponsibility.
Effectiveness and innovation	Access to knowledge and skills of professionals specializing in narrow fields. Increased range of operations thanks to the potential of the cooperating partners. Increased efficiency, quickness, flexibility, and interactivity of communication. Opportunity for the company's staff to gain new knowledge and experience.	Risk of choosing ineffective solutions, profitable only to contractors. Possible loss of intuition and customer insight. Contractors may copy and/or use illegal/non-original solutions.

Source: own work.

Marketing communications managed in cooperation and through external entities can bring many benefits. While it is not always possible to gain from outsourcing in economic terms, the advantages related to the improvement of efficiency of marketing communications are much more feasible. In conditions of strong competition and intense advertising activities, a professional support from outside may translate into

a significantly improved quality of communication with the market. Such external specialists are able to pursue – and complete – communication objectives faster, more effectively, and on a larger scale. Experienced with the media environment, they have the ability to match a given message to a given context, making it consistent with the media reality. Relying on the potential and competence of external professionals liberates companies from many organizational and decision-making problems, letting them focus on their core operations.

The main disadvantages of outsourcing concern the risk of loss of control over the process of building brand equity. The way many agencies operate is not compliant with the requirements of a rational, long-term brand policy. Agencies and other external contractors concentrate usually on the success of individual campaigns. Yet, brand policy develops over time and requires all means to be considered at once, in a fully-integrated way in the long run (Kapferer, 2012, p. 47).

Effectiveness of marketing communications depends most of all on the appropriateness of decisions (what information to communicate, who to communicate it to, and in what form to do it), and then on the efficiency of the process of transmission of a given message. Accuracy of decisions in this sphere is a consequence of experience and creativity. Experience comes from the number and scope of the delivered communication programmes, campaigns, and projects of various nature and range. Even an employee with a long history of employment in a department responsible for marketing communications (or marketing, advertising, public relations etc.) is simply unable to gain as much experience as agencies involved in a great number of diverse projects delivered on a tremendous scale. This kind of experience cannot be substituted with knowledge learnt from secondary sources. Furthermore, external specialists are able to come up with original and unconventional ideas, which is often outside the horizons of people who have been a part of a given industry for years. By combining the experience and competence of external professionals with the knowledge of own product/services and the familiarity with the market – a domain of company in-house employees, enterprises may achieve much better outcomes of communication activities than they would if they operated on the basis of their own resources only.

Conclusion

Modern enterprises have now an increasingly broader repertoire of communication solutions at their disposal. Information technologies are evolving, new channels and tools of communication are appearing on the market, and the models of “information consumption” are changing. At present, effective information is as important as the ability to “listen to the market”. Interacting with the audience of certain communication activities can be a great way to generate new content, to engage the recipients, and to keep the discussion going, but also to get inspired with ideas for new products, or to modify and improve the existing ones. Companies who wish to take advantage of these new opportunities should be really close to their customers. If their target audience uses social media and contemporary channels of access to information more and more often, their priority should be to identify and make use of these new digital-era tools of communication.

Keeping up with technological progress is becoming a challenge and a key component of competitive advantage. An alternative to developing own technological resources and improving the competence and skills of own staff is to outsource marketing communications. Taking advantage of an offer of external entities makes it possible to make the most of the potential of modern communication channels and technologies and stay focused on one’s key operations at the same time. It is also a way to draw the attention of the target audience – and to gain competitive advantage in effect. An important condition in achieving a strategic upper hand is to retain control over the process of building brand equity, which should be based on fixed and unique values. A real challenge for marketing communications in the digital age is to be flexible, make efficient use of the available tools, and facilitate cooperation while maintaining the delivered content consistent and compliant with corporate strategic objectives.

References

- AMA Dictionary (2016). <https://www.ama.org/resources/Pages/Dictionary.aspx?dLetter=I> (05.04.2016).
- Amar, G. (2008). *Outsourcing and Offshoring of Professional Services: Business Optimization in a Global Economy*. IGI Global.

- Dominguez, L. (2005). *The Manager's Step-by-Step Guide to Outsourcing*. McGraw-Hill Professional.
- Kapferer, J.N. (2012). *The New Strategic Brand Management: Advanced Insights and Strategic Thinking*. London: Kogan Page Publishers.
- Oleński, J. (2001). *Ekonomika informacji. Podstawy*. Warszawa: PWE.
- Pickton, D. and Broderick, A. (2005). *Integrated Marketing Communications*. Financial Times–Prentice Hall.
- Smith, P.R. and Zook, Z. (2011). *Marketing Communications: Integrating Offline and Online with Social Media*. Kogan Page.



Barbara Mróz-Gorgoń, Grzegorz Szymański

How to Make Young Ones “Like It”? Facebook as a Modern E-Marketing Tool

Abstract

Marketing is changing, and one of the main sources of this change is technology. The Internet is both a form of direct communication and a mass medium. Through the Internet, you can disseminate information to both mass audience and individual users, including information based on direct contact. In the case of marketing, an evolution from traditional marketing towards a new concept, i.e. electronic marketing or e-marketing can be observed. Social Media is becoming increasingly crucial in the new era of modern marketing, and becomes a great part of the so-called visual culture.

The purpose of this article, which is a part of an overview trend, is to introduce the role of Facebook as an e-marketing tool, as well as to analyse its influence on young generation. This article is based on studies of both foreign and Polish literature, as well as on the authors' own observations.

Keywords: E-marketing, Social Media, Facebook, young generation

Introduction

Marketing is changing, and one of the main sources of this change is technology. Technology has changed the rules of competition, becoming

a source of sustainable competitive advantage for companies. (García Martín, 2010, p. 241). Modern society, and young people in particular, almost naturally reach for the Internet every time they look for some information in order to fulfil the need for knowledge. As the results of a study conducted by Taylor Nelsons Sofres show, as much as 95% of young people feel that the Internet and computers are important to them, 53% are of the opinion that the Internet makes their lives easier, helping them stay in contacting their friends, whereas 44% claim that the Internet makes it easier for them to be in touch with their friends (Kubiak, 2012, p. 173).

In the context of the wars between upstart Internet retailers and the existing bricks-and-mortar retailers, many e-marketing techniques have been invented (Kalyanam and McIntyre, 2002, p. 487). Change management is perhaps one of the most important entrepreneurial processes that the majority of big companies need to face at least once. It is important to be aware of the role to play in the change management process. Also, if this change is a technological change, the effect is even faster and more abrupt (García Martín, 2010, p. 223).

In the case of marketing, we can see a shift from traditional marketing, or Jurassic Marketing (De La Rica, 2000) towards a new concept of electronic marketing, or e-marketing. Compared to conventional marketing mix, e-marketing mix has more overlapping elements and represents personalization – an aspect of segmentation – directly as a basic function. The existence of multiple elements that are basic and overlapping in e-marketing mix means that integration across elements should be more commonplace compared to traditional marketing mix (Kalyanam and McIntyre, 2002). The key to obtain a sustainable competitive advantage lies in intangible assets (company brand, company image, guarantees, customer attention service, the domain, the Web, etc.). And in this technological environment, the Internet can help us improve the intangible assets of our company. First, by increasing the customer perception of our products (electronic catalogues, multimedia elements, personalization of products – colour, model, size – etc.). Secondly, by user interaction (interactive advertising, obtaining user feedback, ‘humanizing’ the process of purchase, etc.). In this context, some authors have considered the importance of the 5th P of marketing mix – People; this implies involving customer in the achievement of marketing objectives. (García Martín, 2010, p. 223–224). People – Internet users are the core ingredient of social network creations.

There are three basic concepts in relations established through the Internet: user’s familiarity, server’s reputation, and user’s fidelity (Flavián and Guinalíu, 2007). García Martín highlights that web servers must increment familiarity with the web site as well as the server’s reputation that users perceive in order to increase user’s fidelity (García Martín, 2010, p. 224). An important issue is to create a belief that the available content is reliable. In order to do so, many brands let users add their opinions about the content, products, or services on their web sites or on Facebook fanpages.

In the increasingly user-generated Web, users’ personality traits, gender, and age may be crucial factors leading them to engage in this participatory media. Literature devoted to the subject suggests factors such as extraversion, emotional stability, and openness to experience are related to the use of social applications on the Internet. As Correa, Hinsley, and de Zúñiga have pointed out, while extraversion and openness to experiences are positively related to social media use, emotional stability is a negative predictor, controlling for socio-demographics and life satisfaction. These findings differed with respect to gender and age. While extravert men and women were both likely to be more frequent users of social media tools, only the men with greater degrees of emotional instability turned out to be more regular users. The relationship between extraversion and social media use was particularly important among the young adult cohort. Conversely, being open to new experiences emerged as an important personality predictor of social media use for the more mature segment (Correa, Hinsley and de Zúñiga, 2010).

Ellison, Steinfield and Lampe pointed to a gap in scientific research – a lack of study of Facebook influence on young generation (Ellison, Steinfield and Lampe, 2007). The purpose of this article, which is a part of an overview trend, is to introduce the role of Facebook as an e-marketing tool, as well as to analyse its influence on young generation. This article is based on studies of both foreign and Polish literature, as well as on the authors’ own observations.

Facebook as a Popular E-Marketing Tool

As Achrol and Kotlers note, as the twenty-first century dawns, marketing is poised for revolutionary changes in its organizational context, as well as in its relationship with customers. Driven by a dynamic and

knowledge-rich environment, the hierarchical organizations of the twentieth century are disaggregating into a variety of network forms, including internal networks, vertical networks, intermarket networks, and opportunity networks (Achrol and Kotler, 1999). Classical advertising, as a rule, is different from online advertising, which results from the fact that the Internet is a different medium. The Internet is both a form of direct communication and a mass medium. Through the Internet, you can disseminate information to both mass audience and individual users, including information based on direct contact, and this is the main advantage of Social Media marketing.

One of the oldest social networks is SixDegrees.com (which – at its peak – had one million users), created in 1997. It functioned until 2001. Recently, it has ‘reactivated’, but the access to it is restricted only to those users who had been previously registered or who have been invited by their friends. Blogger is also worth mentioning in this context. It was launched in 1999. Today, this is a very strong brand that benefited much after it had been taken over by Google (2003) and integrated with Picasa (Kawik, 2011). Of course, new players appeared on this market later on. Today, these players are the most popular Social Media sites and they include LinkedIn (May 2003), MySpace (July 2003), Facebook (February 2004), and Twitter (March 2006) (Mróz-Gorgoń, 2014). Social network sites such as Friendster, CyWorld, and MySpace allow individuals to present themselves, articulate their social networks, and establish or maintain connections with others. These sites can be oriented on work-related contexts (e.g., LinkedIn.com), romantic relationship initiation (the original goal of Friendster.com), connecting those with shared interests such as music or politics (e.g., MySpace.com), or uniting college student population (the original incarnation of Facebook.com). Participants may use the sites to interact with people they already know offline or to meet new people (Ellison, Steinfield and Lampe, 2007).

From the global perspective, Facebook is the leader among all Social Media, with more than 1.15 billion active users monthly. Further places are occupied by Google+ (more than 343 million active users monthly) and Twitter (more than 288 million active users monthly) (Poczęsna, 2013).

Created in 2004, Facebook was reported to have more than 21 million registered members by 2007, generating 1.6 billion page views each day. The site is tightly integrated into the daily media practices of its

users: A typical user spends about 20 minutes a day on the site, and two-thirds of users log in at least once a day (Cassidy, 2006). The portal has become a global phenomenon, and not just because it has given rise to a new model of communication among Internet users. Its unique position results from the economic impact it has on other entities. These results show that Facebook affects the economies of countries both in a narrow sense, through the daily activities of the company itself, as well as in a wider spectrum of the activities of third parties that use its ecosystem (Deloitte, 2012). Capitalizing on its success among college students, Facebook launched a high school version in early September 2005. In 2006, the company introduced communities for commercial organizations; as of November 2006, almost 22,000 organizations had Facebook directories (Smith, 2007). In 2006, Facebook was used at over 2000 United States colleges, and was the seventh most popular site on the World Wide Web with respect to total page views (Cassidy, 2006).

Social Media is becoming increasingly crucial in the new era of modern marketing, and becomes a great part of the so-called visual culture. Different from the one-way communication across the most mass media channels, Social Media has revived the older decision-making processes prevalent before the emergence of mass media, when the exchange of opinions between one’s families, relatives, friends, and neighbours was the basis for purchasing decisions. As a digital version of word-of-mouth, Social Media represents a materialization, storage, and retrieval of word-of-mouth content on-line (Pan and Crotts, 2012, p. 73).

Today, e-marketing and online advertising take on very different forms – depending on access to technology and developers’ creativity, as well as on the technical capabilities (i.e. mainly the dataflow capacities of the network) (Habryń, 2002). This proves the thesis that one picture can explain more than a thousand words, and that a movie, as an animation, can do even better. And that gives Social Media a great power in becoming a very important part of modern marketing and in creating visual culture.

Forms of Facebook Adverts Addressed to Young People

Facebook, as the most popular Social Media site, offers many advertising forms and tools, adapted to the skills and the level of marketing knowledge of a given advertiser. The simplest – and the least customizable –

advertising tool is fanpage-based advertising. It makes it possible to promote a post or a profile, to select the demographic parameters of the target audience, and the total cost of the campaign for a limited time of 14 days at most. Another option is to take advantage of Facebook's ads manager, which lets us choose the purpose of our campaign, ranging from simple post boost to more complex solutions: promotion of an event, offer, or a video to increase the conversion rate, or even to secure new business contacts. This method ensures a more precise targeting of our communication at the desired audience, taking their relation to a given event, profile, or app into account. This tool gives also more freedom in the selection of the area of budget and scheduling. Yet, the most powerful solution is an app called Power Editor, which makes one able to manage every stage of a given advert campaign in a very advanced and detailed way; however, the broad range of possibilities translates into overcomplicated usage. Each of the presented models makes it possible to target campaigns to young people, with the option to set the age of the target audience to 13. At present, according to Facebook terms of service, Facebook is a site for persons aged 13 or above, but according to the Wall Street Journal, studies show that in 2011, over 7 million children aged below 13 used Facebook, and 5 million of them were aged even below 10 (Troianovski and Raice, 2012). That's why the regulations introduced by the European Parliament in December 2015, stating that persons aged under 16 were to lose access to Facebook, Instagram, or Snapchat, seem to be not very rational. EU member states may determine the lowest age limit individually and locally, but it may not be lower than 13; these changes are to be implemented systematically until the end of 2017.

The most often used forms of advertising on FB including: post and profile (fanpage) adverts and website adverts. The lesser known form of advertising is the so-called carousel format, making it possible to display several adverts in one post. However, the most effective forms of advertising are solutions based on information about the behaviour and characteristics of the target audience of a given ad. Planning a campaign addressed to young people involves application of dynamic contextual forms that make it possible to match the displayed adverts to products viewed earlier on WWW. It is also possible to take advantage of the interests of the target audience, focusing on groups, bands, services, or hashtags that are currently most popular among young people. Young target audience seems also to be fond of video advertising as Generation

Z has been growing up with permanent access to the Internet, mobile phones, and virtual communication at hand. People from this generation are very demanding and impatient; they are also skilful multi-taskers ready for constant interaction, able to function in and move swiftly through today’s abundance of information and vast body of adverts (Kozłowski, 2012, p. 27–28). That’s why video communication seems to be the right format to suit the preferences of today’s young people, which is proven by the increasing popularity of Snapchat which is based on short videos as means of communication.

Evaluation of effectiveness of marketing activities on Facebook is, on the one hand, quite simple thanks to automatically calculated statistical coefficients (Fagerstrøm and Ghinea, 2011), but there may be a problem with the credibility of the results, as implied by the existence of fake profiles, i.e. the so-called like-farms, and the issue of purchasing of likes (Roge, 2013, p. 172). An important parameter to be taken into account when planning advert campaigns is ‘Edge Rank’ – an algorithm used to determine if a given post is attractive to a given audience. Not all elements the algorithm takes into consideration are known, but the number of likes, comments, and shares constitute the key features thereof.

Most young people using Social Media try to hide their activity from their parents, with recourse to different methods, including: clearing their browsing history, using devices their parents don’t check, using incognito browsing mode, or using several profiles (McAfee Inc., 2016), (Mullen and Hamilton, 2016). But users’ activity is permanently monitored and saved in databases, which are then made available to advertisers to let them customize their adverts better; however, it is impossible to gain access to detailed data whose analysis could improve the effectiveness of particular advertising activities even more. Various studies to date have already proven that advertising has a strong impact on young people (Ramos and Navas, 2015; Jasielska and Maksymiuk, 2010, p. 38–40). Children and young people, regardless of age, are willing to give negative opinions on adverts, but they still appear to be well familiar with them, and are able to recognize the advertised products and brands very quickly and effortlessly (Sibińska, 2013; Szymański, 2014; Gutowska and Ozimek, 2008). Almost 25% of young people aged 15–16 experiment with their identity, pretending to be someone else on the Social Media platforms they use, which carries greater risk of exposure to different types of ‘e-threats’ (Kirwil, 2011). It was proven already in 2009 that young people were addicted to FB (Park, Kee and Valenzuela,

2009), where most of the surveyed believed the site became a part of their life, and were keen on boasting about their Facebook profiles among their friends. This phenomenon is one of the drivers behind the increase in the popularity of adverts on Social Media, with young people becoming a particular type of target audience.

Conclusions

Facebook's immense popularity (over billion users using the service daily close to the end of 2015) implies a permanent increase in the expenditures on advertising designed for Social Media. Young people are the most active users of Social Media, which is why the adverts displayed on-line are more and more often targeted exactly at them. There is, however, no in-depth research into the effectiveness of particular forms of advertisements presented on Facebook, targeted at Generation Z. The research gap results most likely from the number of determinants, with the most significant of them being low credibility of the results of questionnaire-based studies conducted among young people, not willing to share their true attitudes and views, lack of access to data aggregated by Facebook, and the size of the group of children aged below 13 but pretending to be older. If we are to analyse the different forms of adverts and the behaviour of young people, we can only guess that adverts relying on enhanced customization and based on video format are more effective.

References

- Achrol, S.R. and Kotler, P. (1999). Marketing in the Network Economy. *Journal of Marketing*, 63, *Fundamental Issues and Directions for Marketing*, 146.
- Cassidy, J. (2006). Me media. *The New Yorker*, 50–59.
- Correa, T., Hinsley, A.W. and de Zúñiga, H. (2010). Who interacts on the Web?: The intersection of users' personality and social media users' personality and social media use. *Computers in Human Behavior*, 26(2), 247–253.
- De La Rica, E. (2000). *Marketing en Internet y e-business*. Madrid: Anaya Multimedia.
- Deloitte (2012). *Measuring Facebook's economic impact in Europe*. Deloitte.
- Ellison, N.B., Steinfield, C. and Lampe, C. (2007). The Benefits of Facebook "Friends". Social Capital and College Students' Use of Online Social Net-

- work Sites. *Journal of Computer-Mediated Communication*, 12(4), 1143–1168.
- Fagerstrøm, A. and Ghinea, G. (2011). Co-Creation of Value through Social Network Marketing: A Field Experiment Using a Facebook Campaign to Increase Conversion Rate. In: M.J. Smith and G. Salvendy (Eds.), *Human Interface and the Management of Information. Interacting with Information* (p. 229–231). London–Berlin–Heidelberg: Springer.
- Flavian, C. and Guinaliú, M. (2007). Desarrollo y validación de escalas de familiaridad, reputación y lealtad en las relaciones a través de Internet. *ESIC Market*, 126, 189–222.
- García Martín, G. (2010). Marketing is changing. An Econometric Model on Marketing and New Technologies. *Esic Market*, 137, 221–246.
- Gutowska, K. and Ozimek, I. (2008). *Zachowania młodych konsumentów na rynku żywności*. Warszawa: Wydawnictwo SGGW.
- Habryń, M. (2002). Formy reklamy w Internecie. In: M. Ostrowicki (Ed.), *Estetyka reklamy* (p. 287). Kraków: Agencja Wydawniczo-Poligraficzna Art-Tekst.
- Jasielska, A. and Maksymiuk, R. (2010). *Dorośli reklamują, dzieci kupują. Kinder marketing i psychologia*. Warszawa: Wydawnictwo Naukowe Scholar.
- Kalyanam, K. and McIntyre, S. (2002). The e-marketing mix: A contribution of the e-tailing wars. *Journal of the Academy of Marketing Science*, 30(4), 487–499.
- Kawik, A. (2011). *Krótką historia rozwoju mediów społecznościowych*. Socialpress, Social media in practice, <http://socialpress.pl/?s=kr%C3%B3tka+historia+medi%C3%B3w+spo%C5%82eczno%C5%9Bciowych>.
- Kirwil, L. (2011). *Polskie dzieci w Internecie. Zagrożenia i bezpieczeństwo – część 2*, <http://eprints.lse.ac.uk/46445/1/PolandReportPolish.pdf>.
- Kubiak, K. (2012). *Zarządzanie w sytuacjach kryzysowej niepewności*. Warszawa: Warsaw College of Promotion.
- McAfee Inc. (2016, 04 12). *Hidden Behavior Includes Everything from Adult Content to Cheating on School Work, Up from 45% since 2010*, <http://www.mcafee.com/us/about/news/2012/q2/20120625-01.aspx>.
- Mróz-Gorgoń, B. (2014). *Marketing aspects of using social media by fashion brands in Poland*. Human Capital without Borders: Knowledge and Learning for Quality of Life. Management, Knowledge and Learning International Conference, 25–27 June 2014 (p. 959). Portoroz: ToKnowPress.
- Mullen, C. and Hamilton, N. (2016). Adolescents’ response to parental Facebook friend requests: The comparative influence of privacy management, parent-child relational quality, attitude and peer influence. *Computers in Human Behavior*, 60, 165–172.
- Pan, B. and Crotts, J.C. (2012). Theoretical Models of Social Media, Marketing Implications, and Future Research Direction. In: M. Sigala, E. Christou

- and U. Gretzel (Eds.), *Social Media in Travel, Tourism and Hospitality: Theory, Practice and Cases* (p. 73–74). Farnham: Ashgate Publishing, Ltd.
- Park, N., Kee, K. and Valenzuela, S. (2009). Is There Social Capital in a Social Network Site?: Facebook Use and College Students' Life Satisfaction, Trust, and Participation. *Journal of Computer-Mediated Communication*, 14(4), 875–901.
- Poczęsna, J. (2013). *Potencjał mediów społecznościowych to duże wyzwanie dla firm*, Bankier.pl: <http://www.bankier.pl/wiadomosc/Potencjal-mediow-spolesnosciowych-to-duze-wyzwanie-dla-firm-2997750.html>.
- Ramos, C., Navas, J. (2015). Influence of Spanish TV commercials on child obesity. *Public Health*, 129(6), 725–730.
- Rogę, M. (2013). Zmiany w funkcjonowaniu serwisu społecznościowego Facebook i ich wpływ na jego użyteczność marketingową. *Acta Universitatis Lodzianis Folia Oeconomica*, 287, 172.
- Sibińska, A. (2013). TV advertising and its influence on children brand perception. Results of qualitative study. *Zeszyty Naukowe Szkoły Głównej Gospodarstwa Wiejskiego w Warszawie. Polityki Europejskie, Finanse i Marketing*, 10(59), 651.
- Smith, J. (2007). *Updated lists of all companies and regions on Facebook*, insidefacebook.com: <http://www.insidefacebook.com/2006/11/15>.
- Szymański, G. (2014). Postawa dzieci wieku wczesnoszkolnego do reklamy telewizyjnej. (M. Zastempowski, ed.) *Acta Universitatis Nicolai Copernici, Zeszyty Naukowe Zarządzanie XLI(1), Nauki Humanistyczno-Społeczne*, 41, 163–173.
- Troianovski, A., Raice, S. (2012). *Facebook Explores Giving Kids Access*, <http://www.wsj.com/articles/SB10001424052702303506404577444711741019238> (22.04.2016).

Monika Ratajczyk

Between the Mainstream and the Niche: How Social Media Promote Consumption Trends

Abstract

The matter of social media is covered in literature devoted to marketing most often in relation to different aspects of on-line brand promotion, while monitoring the behaviour of consumers in the virtual environment may offer a valuable insight into their general consumption behaviour. In this article, the author's own qualitative research conducted at the end of 2015 and the beginning of 2016 (virtual ethnography) is used to analyse how various social networking platforms (Facebook, Pinterest, and Instagram) can affect the purchase decisions of consumers, which is accompanied by a presentation of the key trends in consumption, popularized by these platforms (hedonistic lifestyle, smart living, conscious living, individualism).

Keywords: trends in consumption, consumer behaviour, social media, Facebook, cyber-ethnography

Introduction

Consumers, regardless of their own preferences, remain constantly under the influence of other people. The relationships they form (both closer and more distant) and the cultural standards they follow influence them all the time, shaping and changing their purchasing attitudes.

Of course, consumers are not always aware of this influence, and it is not always easy to explore it in more detail, mainly due to the fact that it is a long-term process, and all changes taking place as a result thereof are an outcome of a multitude of factors that will differ among individuals (Stasiuk and Maison, 2014, p. 328–270).

Some time ago, consumers were mostly influenced by their families and their closest milieu when it came to making market choices. Today, however, the circle of influencers has grown considerably. The increasing popularity of the Internet, and especially of social networking sites, has given us an outstanding range of tools that let us decide if we want to pursue the habitual purchasing standards (by e.g. drawing inspiration from other countries or cultures), but on the other hand, we – as consumers – are continuously subject to judgment of an ever-expanding circle of (increasingly more distant) friends and acquaintances. By sharing information about oneself – be it either some textual content (posts) or graphical content (photos, videos), people make their lives public, which may – in effect – influence the behaviour of others (by e.g. encouraging to make some purchase because of jealousy or out of the drive to aspire to some social group) (cf. Kaleta, Kornaś and Przepióra, 2013, p. 107–114).

The article covers an analysis of the impact of selected social networking platforms (Facebook, Instagram, and Pinterest) on purchasing behaviour (including their role in shaping consumption trends).

The Dynamics of Development of Social Media in Poland

The number of people with access to the Internet has been increasing steadily both in Poland and across the world. In 2016, the global penetration of the Internet amounted to 46%, and that of social media to as much as 31% (with 27% based on mobile devices); it is a 10% increase compared to the previous year (and a 17% increase with respect to the number of mobile social media users). In Poland, Internet penetration is higher than the average rate, reaching almost 70% (the case is similar with the use of social media – 36%, and 26% in the case of mobile social media users). As much as 74% of people use the Internet on a daily basis. Each day, an average Pole spends 4.4 h on-line (with Brazil and Philippines ‘scoring’ highest in this category with 5.2 h), with 1.3 h spent on-line using mobile devices (Thailand and Brazil take the lead

with the highest average of 4 h per day) (We are social, 2016, p. 7–8, 322–336).

We use the Internet not only to search for information, but also for entertainment and staying in touch with others. The sphere of social media has been developing rapidly in recent years. Both the number of social networking platform users and the time we spend using such platforms is increasing. Thanks to mobile applications, we can now access the Internet virtually anytime and anywhere.

The huge and constantly growing popularity of social networking sites makes virtual networks replace traditional forms of human interaction, becoming the most important means of exchanging views and expressing opinions. This goes in hand with the increasingly more common phenomenon of addiction to social networking (Charzyńska and Gózdź, 2014, p. 163–185) since participation in the life of virtual communities may be a form of escape from one's own life and responsibilities, as well as a way to kill time. On the other hand, more and more people opt for not using social networking platforms (the trend of being off-line).

The motivation behind the need to use social networking sites differs, ranging from e.g. entertainment, keeping in touch, access to information, creating one's image on-line (personal marketing), including negative motivation as well (e.g. unwillingness to differ from friends, acquaintances, and peers) (cf. Kulikowski and Potasz, 2013, p. 100–106).

Methodological Note

The article has been written on the basis of author's own qualitative marketing research conducted by using the method of netnography (the research covers the period of October 2015–March 2016). The observation focused on consumer behaviour on three social networking platforms most popular in Poland, i.e. Facebook, Pinterest, and Instagram. The analysis covered: the types of content shared across these platforms, the content itself, the activity in consumer groups with respect to the topics related to the broadly-understood consumption – with a special focus on the needs and expectations expressed there, and with consideration of the understanding of the way Internet users viewed certain issues.

The Impact of Social Media

When consumers spend their time on social networking sites, they remain under a constant influence of the content (messages) shared by others. These include their friends and acquaintances, but also entities they follow, such as e.g. brand profiles (fanpages). Interestingly enough, brands are not only companies that wish to promote their products/services and build and maintain relationships with their current (or potential) customers, but also individuals not involved in business activities. Some of them can be dubbed 'celebrities', who use social media to attract and take advantage of publicity. But this is not the only such group. It is increasingly more common to come across people who have become popular (with thousands of followers and fans) not because of some controversial acts, but because of the valuable and useful content they share. These can be people passionate about certain things, sharing knowledge about their pet subjects, or people showcasing their talents; there are also those who use their knowledge and experience to help others make better – more informed – decisions. They have become authorities to many; their followers and fans trust them more than brands because they are ordinary people who – according to what is commonly believed – do not have to sell anything. Moreover, such people tend to be very knowledgeable about certain matters and they do not promote any specific solutions (products, brands), but rather depict the reality as it is. Furthermore, they build their authenticity on the grounds of their everyday struggles or challenges, which brings them closer to consumers since they understand their dilemmas better. Many of such 'role models' are active in the broadly-understood field of health (exercising, nutrition, treatment, healthy lifestyle), personal finance (managing home budget, saving and investing), or personal development (managing self in time¹, building relationships, dealing with stress and negative emotions in our life).

Social media is also a where consumers can find like-minded people. It is easier for them to present their opinions and exchange views that are e.g. not accepted in their closest environment, or not in line with the cultural standards in a given community. By forming and participating

¹ Much content in this scope is addressed to women, young mothers, who wish to fulfil themselves both at home and professionally.

in certain groups (which are becoming more and more specific and thematically-narrow), they gain knowledge, inspiration, and support to walk the path their family and friends disapprove of. The author managed to reach such groups, i.e. groups that oppose to the consumerist lifestyle (the cult of ownership is still widely promoted in Poland) and opt for minimalism. It can take on different forms. Starting from the simplest way, i.e. getting rid of unnecessary things to clear one's space (selling, giving away, exchanging things) through limiting the number of new products purchased (making conscious decisions about whether a given thing is actually necessary to fulfil some need, or just a whim) ending with more advanced forms, where a consumer does not own an apartment and is able to fit all their belongings to a rucksack, which makes them feel free (when they do not own valuable things, they are not afraid of being robbed), able to make the most of their life by traveling, and take more advantage of the opportunities they come across (e.g. moving to a different apartment, or to a different country). In spite of appearances, minimalism is not only a way of life for singles or childless couples. This approach to life is becoming also common among families with children, who want to raise their kids in a spirit of what's non-materially important and valuable, teaching them to focus on rather being than having.

Virtual communities offer great opportunities to exchange views and opinions. There are a couple of factors behind it:

- participants of a given discussion do not have to know each other, but they still may debate freely (this is, in fact, often helpful in expressing one's true views);
- the content of a given discussion is saved, which makes it possible to continue this discussion for a long time, raising different topics (depending on the need), and come back easily to the core topic; it is also possible to only follow the discussion (even not necessarily as it develops) without taking part therein and join it at any moment;
- the transcription of the discussion makes it possible to browse it and become familiarized with different arguments and standpoints that might be more difficult to present in real life, face to face.

In consequence, the fact that people are constantly surrounded, flooded, by various content (notes and texts by other people, describing their line of thought, their outlook, their priorities, accompanied by photos/videos illustrating their lifestyles) on different social networking platforms leads

to emergence of three very significant factors triggering a change in consumer attitudes:

1. An increase in the level of consumer awareness (affects the cognitive and the emotional component) – thanks to staying in permanent touch with other people in the virtual world, consumers are able to see more than they would be able to see in real life (in which the rules governing interpersonal relationships are more demanding and require following a certain etiquette, while on-line, it is perfectly acceptable to appear for a brief moment, see as much or as little as one wants to, sift through the shared content, and “leave”, which would be considered at least inappropriate in the real world). The virtual world lets us be up to date with others’ activities (depending on the number of those we follow), which is rather impossible off-line. This permanent access and exposure to other people’s opinions and lifestyles lets one broaden their horizons and become familiar with a behaviour and standards of consumption unknown before. It serves as a source of inspiration (e.g. by viewing photos of Greek wedding ceremonies, many female consumers decided to resign from a traditional Polish wedding party and go for a more modest, relaxed, and natural way to celebrate the wedding day) and/or a way to see the darker side of the coin related to certain matters (e.g. what it costs in terms of people and the natural environment to make and market very cheap products).
2. A change of convictions (cognitive and emotional component) – the constant following of other people’s activity and the access to the content they generate makes it possible to revise one’s own attitude towards virtually any issue (including consumption). Thanks to e.g. active traveller communities, many consumers have found that travelling cheap across the world is actually possible and cheaper than it would seem. Groups focusing on cheap travelling offer ideas on how to find air tickets that cost often less than 1 euro, or how to save on accommodation, which has made many people change their attitude to the issue (e.g. mistrust towards such ‘cheap’ ways of travelling).
3. A change of lifestyle (behavioural component) – after the two afore-said phases take place, the key change is possible to happen; it involves consumer making other purchasing decisions than they would make originally. A lifestyle change may be an outcome of a conscious act (e.g. consumer has seen other consumption standards and found

them convincing), as well as of a subconscious aspiration to make one's lifestyle similar to that of others (the effect of imitation, jealousy, aspiration to some social group).

Trends in Consumption and Social Media

The analysis of Internet users' behaviour across social networking sites has led to identification of four consumption trends that have a strong influence on further decisions in the purchase-making process. Two of them, named *hedonistic lifestyle* and *smart living*, can be defined as mainstream. As a counterpoise, two other trends, which although developing can be classified as niche, have presented as well; they are called *conscious living* and *individualism*.

Hedonistic lifestyle

The content that is most often shared and generates the biggest engagement across social media users involves posts with photos. Young people, raised in a pictorial culture, are keen on consuming this type of content since requires little time to be digested and is rich in ideas (on a non-verbal level). Internet users take advantage of social networking platforms (mainly Facebook and Instagram) to share selected moments of their life with their friends. Their photos usually present their lifestyle, highlighting the events they take part in and the pleasures they experience (e.g. trips, meetings, shopping) and the standard of living (although it may actually be different in reality because the photos often show the best angles, and the impression is additionally enhanced by layers of filters). Others may then view and treat such consumption standard as a point of reference. A big number of beautiful, eye-catching photos (consumers have increasingly better equipment at their disposal, which lets them take really good photos and enhance them using different types of free software) showing happy and smiling people (who are good-looking, well-groomed, well-dressed, with careful make-up) having fun, celebrating moments of success, documenting more and more personal aspects of their lives (e.g. a new haircut) may make others believe that such lifestyle, involving virtually nothing but pleasure and consumption, is possible, and will want to live such life too. But people are not aware that this is not how others live in reality – and that's why

they still aspire to such kind of lifestyle. This leads to an increase in the level of consumption of products and services (especially from the category of fashion and beauty) people have not even considered necessary before (e.g. consumers wishing to boast of the effects of exercising among their friends, they buy special sportswear because it makes their photos look more credible and spectacular).

Consumers who consume the content shared across social media rather casually, focusing only on what they see, are the first to fall into the trap of comparing themselves to others. They are not aware that the image they see is incomplete, devoid of the underlying context. The mechanisms of functioning of communities make people share only selected information about themselves, which makes them (even unconsciously) create an image of the “perfect self” (cf. Dąbrowski, 2013, p. 48). By sharing the happier moments and omitting the less pleasant facts or hardships of everyday life (which everyone prefers to keep to themselves, of course, or share them with a selected few rather than make them public), people present their lives in a distorted light.

Even when Internet users do not have people of such expressive lifestyle and with a penchant for sharing private moments in public among their friends, they still remain under the influence of brands, who make every effort to tempt and encourage both their current and potential customers to promote their products (it’s quite often a requirement if one wants to take part in a competition or prize drawing). As a result, consumers become surrounded yet again with attractive photos with beautiful models present new collections of clothes or cosmetics, or with tasteful interiors of homes and apartments.

All these stimuli have a very strong impact on the emotional level, and consumers spending their time using social media are inundated with them, which may lead to an intensification of desires they have not felt before at all (induced e.g. as a result of comparing oneself to others).

Smart living

Studies show that product price has been one of the most important purchase-related factors in Poland for many years. This is why a very common shopping attitude is that of a smart shopper – a consumer who makes their purchase-related decisions on the basis of the price-to-quality ratio. It does not mean that such consumer buys the cheap-

est products because they cannot afford it otherwise (according to Internet users, cheap products break quickly and need to be repaired/replaced over and over, which generates additional costs). Such people are able to wait to buy a given (good quality) product for a better price. They display a high level of shopping intelligence, they use price comparison tools, and they are willing to join shopping clubs to get access to better offers and preferential shopping terms. Such attitude may become more and more popular because of the influence of virtual communities. By joining groups where consumers exchange information about special offers, sales, and competitions, people have access to the latest shopping know-how, and the effort it takes to find such information is much smaller, which makes it easier to adopt such attitude. Opinions and recommendations of the aforesaid authorities also play a significant part in this context; they help people make more informed shopping decisions and reduce the effect of post-purchase dissonance. The knowledge contained within social networking platforms lets consumers buy cheaper and reach better products they have been previously not familiar with (or have not taken them into consideration).

Conscious living

Social media is also a perfect environment to share one's knowledge and experience in all aspects of life (cf. du Vall, 2014, p. 1): work, finance, health, nutrition, relationships, pastimes, consumption, etc. Since consumers have been given a tool and space to communicate freely, they have also gained an opportunity to question and review the messages delivered in adverts they are constantly surrounded by, whether they like it or not. Social media are full of people who have embarked upon a mission to spread the awareness that the image of the world created by the media is not real, illustrating their words with their own stories. Such examples come in plenty, in fact. There are fanpages of people who write how e.g. conventional medicine has ruined their health (by pointing to the actual way certain drugs work, or the principles doctors follow when prescribing such drugs), who tell their accounts of the negative consequences their attempts to lose weight and follow a healthy lifestyle based on raw food and regular exercising have had on their psyche, on the relationships with others, and on the level of satisfaction with life in general (the media promote a slim silhouette as a cure-all to many

life problems, which does not work in reality), or who tell stories of the effects of workaholism and an excessive strive for material wealth, etc. Thanks to the fact that there are people who share their experience (often bitter) and that there is access to a less-publicized but valuable knowledge (e.g. natural medicine, conscious consumption, work-life balance), based very often on scientific research, consumers start questioning the consumption standards promoted across the media, which leads to a change of shopping attitudes in different spheres of life.

Individualism

Satiety with mass production and consumption has encouraged people to look for ways to stand out. Communities have appeared to be great tools to make it possible. On the one hand, they show different possibilities (you can live and look different than others, and enjoy different things than the majority) and make it possible to promote niche artists who would find it difficult to become known otherwise. This is how the significance of hand-made products grows. On the other hand, sites like Facebook or Pinterest inspire their users to e.g. re-use the already available products and turn them in a quick, easy, and relatively cheap way into unique, fancy everyday articles (the trend of upcycling, DIY – *do it yourself*). Such products and objects become especially important to consumers aiming to improve the aesthetics of their life.

Figure 1. Individualism – examples of a creative re-use of everyday articles



Source: Pinterest.com.

Conclusion

Virtual communities may have a strong impact on consumption trends. They act as outlets to views other than those promoted in the media or supported by the closest environments of consumers. Among the advantages the Internet has over face to face communication is that what has been 'said' on-line, remains there forever, so it is easier to come across certain content. Another advantage is that it's easier to express one's views and join discussions on-line (despite the phenomenon of hate speech, which involves reacting to other people and/or their opinions with hatred instead of being respectful and sharing one's thoughts politely) because every discussion may be continued when the atmosphere becomes less heated. Furthermore, on-line discussions do not require active participation; it's enough to follow them, but the presented views may still affect one's purchasing decisions (e.g. an increase in the level of awareness concerning the unfair practices of cosmetic companies may change one's attitude towards a given product, resulting in a search for alternatives, or turning to making cosmetics oneself).

Watching how communities, or consumers within these communities, function shows that consumers' behaviour and shopping decisions may be influenced by more factors than those that can be usually found in various studies (e.g. brand, price, friends' recommendations). The author's research shows that a membership in virtual communities may have a strong impact on one's emotions, which in turn affect their behaviour later on. Following other people's lifestyles may inspire one to change, but may also lead to envy, a sense of dissatisfaction with one's standards of consumption or with one's life; it can also affect the perception of self. All these issues may determine one's later purchase-related decisions.

The magnitude of impact of communities on intensification of any of the abovementioned trends may depend on several factors. What matters is surely the time a given consumer spends on digesting the content shared across the communities they belong to, the similarity between this consumer and their friends/acquaintances (if they share a common life philosophy, the consumer receives more content with a certain message, and if they are rather different, the consumer may expand their horizons and see other standards of consumption than they have been following so far), and the interests they share (the consumer groups they belong to and the brand profiles they follow will influence a given consumer in a similar way). The consumer's persona-

lity is of importance as well. Is this consumer self-confident, or rather impressionable? Do they follow a certain pattern when they make purchase-related decisions because they feel it is consistent with their inner self, or because they have been taught this way but have never thought about it in more detail (do they feel it's consistent, good for them and for their environment)?

Taking into account the fact that consumers spend more and more time on-line and use social networking sites with an increasing involvement (especially Generation Z), it seems essential from a marketing point of view to monitor their behaviour not only across physical channels, but also – and especially – in the virtual environment. Such careful monitoring makes it possible to better understand how the process of shopping evolves and how consumers' needs change, but it also gives a valuable insight into a part of concealed attitudes and behaviour (Stasiuk, Maison, 2014, p. 356–362) (which people would rather not admit to in traditional quantitative research).

References

- Charzyńska, E. and Gózdź, J. (2014). W sieci uzależnienia. Polska adaptacja Skali Uzależnienia od Facebooka (the Bergen Facebook Addiction Scale) C.S. Andreassen, T. Torsheima, G.S. Brunborga i S. Pallesen. *Chowanna*, 1(43).
- Dąbrowski, A. (2013). Onofflineowe życie wspólnotowe. In: M. Wysocka-Pleczyk and B. Świeży (Eds.), *Człowiek zalogowany*. Kraków: Biblioteka Jagiellońska.
- Du Vall, M. (2014). Infoaktywizm. Strategie komunikacyjne społeczników ery cyfrowej. In: M. Marczevska-Rytko (Ed.), *Haktywizm. Cyberterroryzm, haking, protest obywatelski, cyberaktywizm, e-mobilizacja*. Lublin: Wydawnictwo UMCS.
- Kaleta, A., Kornaś, I. and Przepióra, N. (2013). Wirtualna zmiana postaw: wpływ wirtualnego upubliczniania postaw na portalu społecznościowym Facebook. In: M. Wysocka-Pleczyk and B. Świeży (Eds.), *Człowiek zalogowany*. Kraków: Biblioteka Jagiellońska.
- Kulikowski, K. and Potasz, K. (2013). Po co nam Facebook? Próba analizy zachowań użytkowników w obrębie portalu. In: M. Wysocka-Pleczyk and B. Świeży (Eds.), *Człowiek zalogowany*. Kraków: Biblioteka Jagiellońska.
- Stasiuk, K. and Maison, D. (2014). *Psychologia konsumenta*. Warszawa: WN PWN.
- We are social (2016). *Digital in 2016*, <http://wearesocial.com/uk/special-reports/digital-in-2016> (29.05.2016).

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Engagement in Content Sharing Across Social Media Platforms

Abstract

The World Wide Web has been developing intensely over the last years. The continuous development, the extensive reach, and the two-way communication of Social Media make it a very powerful tool. The intention of this article is to determine factors explaining why users engage in sharing content across Social Media (SM). In order to discover the possible reasons why users engage in sharing content on Social Media (specifically on Facebook), the article will explore hypotheses related to consumer psychology of motivation in order to show what psychological factors correlate and thereby may influence one's inclination for sharing. The presented data has been collected using an Internet-based questionnaire. The population examined includes students of Kozminski University, pursuing English-language bachelor's or master's level studies in the fields of business, finance and marketing. The survey was sent out by email to the entire population counting 1132 students. Each student was provided with a briefing message prior to the survey, which explained the purpose of the study, ensured confidentiality of the responses provided, and covered the matters related to obtaining the results of the survey. The data has been analysed using Pearson's correlation analysis in relation to six hypotheses defined in advance. It is important to note that due to the fact that the sample for this study was obtained through

convenience sampling, it was impossible to make general interpretations with respect to the participating population. Nevertheless, the study gives fundamental knowledge regarding a particular sample, which can serve as an indication for future studies. Based on the correlation analysis, it has been found that all hypotheses have a significant correlation and therefore all have been accepted.

Keywords: social media marketing, customer engagement, social media platforms, Web 2.0, Facebook

Introduction

Social Media

The concept of Social Media (SM) is identified in numerous ways throughout the literature on the subject. The terminology used to describe the notion is vast and often vague. Kaplan and Haenlein (2010) suggest a broad term of Social Media, i.e.: “a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content”. Unfortunately, this definition while being quite accurate, is very general as it does not provide any specific examples that could portray the environment of Social Media of today. Johnson (2012), on the other hand, went a step further and narrowed down the definition to specific categories based on particular features of a given platform, proposing the following categories: social networking, social news, bookmarking, media sharing, micro blogging.

It is important to keep in mind that the term “Social Media” is constantly evolving and changing, and therefore it is a term difficult to define specifically and accurately. The differences between the categories are slowly fading away and converging, many of them including more and more overlapping features. The definition proposed by Cohen (2011) is a clear and distinct explanation of Social Media, and will be therefore used for the purpose of this article: “Social Media are platforms that enable interactive web by engaging users to participate in, comment on and create content as means of communicating with their social graph, other users and the public”.

Engagement

The terminology of engagement is extremely vague and becoming increasingly difficult to define. Based on Google search alone, the word “marketing engagement” aggregates 47 million hits (Corcoran, 2012). Since 2005, it has been a term gaining a lot of interest; nevertheless, outlining a unanimous definition has proven to be a struggle. Five years later, Marketing Science Institute (MSI) still stressed the necessity for further research of the concept in order to develop a way to define and measure the notion (Marketing Science Institute, 2010). Now, another six years later, researchers still find the term troublesome to both define and measure. Evans provides a definition of engagement which has been specifically adapted to the interactive environment of the Social Web: “Willingness of customers to take their time and energy to talk to you- as well as about you- in conversation and through processes that impact your business” (Evans and Cothrel, 2014). The author further breaks down the notion into four “social actions”, which intend to define by what means one can build strong engagement with customers (Evans, 2010): consumption, curation, creation, and collaboration. Until today there has been no unanimous answer as to how engagement should be measured. Multiple researchers suggest that the meaning behind the notion of engagement will vary depending on the objectives of an individual or a company (Hollebeek, 2011; Brodie, Hollebeek, Jurić and Ilić, 2011; Peterson, 2008). The following definition of the term ‘engagement’ will be used for the purpose of this article: “Willingness of customers to take their time and energy to talk to you – as well as about you – in conversation and through processes that impact your business” (Evans and Cothrel, 2014).

For the purpose of this article, user will be considered “engaged” when at least one action of curation and creation, or two actions of creation take place:

- **Curation:** Taking part in at least one of the following activities: rating, reviewing, commenting, liking, subscribing/following, and hash tagging;
- **Creation:** Submission of at least one instance of own content (e.g., photo, video).

Consumption has not been taken into consideration as it is a passive activity that serves as a base for commencing involvement. Furthermore, the block named “collaboration” has also been disregarded due to the

fact that it directly relates to higher levels of engagement and therefore is of no use when identifying factors defining the basic level of engagement.

Content Sharing

In order to gain a full understanding of why people engage and share information across Social Media, it is imperative to define what content sharing means and how it works in the area of SM; Organization for Economic Co-operation and Development (OECD) stipulates three requirements that UGC needs to fulfil (OECD, 2007): it is required to be published on a publicly accessible site, creative efforts need to be presented in the published content, and it cannot be created as part of professional efforts made for the commercial market. Different SM platforms encourage different means of communication and sharing. Bickart, Fournier, Sekhon and Trudel (2014) present a typology of “brand identification strategies” in their publication, which denotes four categories of the ways consumers share information: having, doing, loving, sharing of opinion. Another way of sharing one’s opinion may involve reviewing a service or a product.

Facebook

FB is the most elaborate SM platform with respect to the possibility of engaging and sharing information. It allows for various types of interaction to take place. The most basic way to share information is through setting up a profile. This includes sharing some personal details such as: name, photo, cover photo, date of birth, attended schools, workplace, family members, relationship status, additional contact information, and personal interests. Moreover, users can engage in further sharing of content including e.g., posting videos, photographs, locations, and texts (comments, posts, replies, mentions, and reviews) that can be both long and short. Additionally, FB permits users to communicate their gratification towards published material by using the famous ‘like’ button. One of the newest updates to the ‘like’ button option allows users to choose an emoticon representing a range of six feelings (the classical thumbs up, a heart, a smiley face, a surprised smiley, a sad smiley, and an angry smiley).

Consumer Psychology of Motivation

Self and Social Identity Theory

One of the most common theories within the field of human motivation is the *Hierarchy of Needs* developed by Abraham Maslow. Maslow divides human needs into five categories; physiological needs, safety needs, belongingness and love needs, esteem needs, and – lastly – the need of self-actualization (Maslow, 2013). It is of no surprise that people are motivated to purchase various products and services in order to fulfil these needs and go up the pyramid, ultimately to achieve self-fulfilment. Humanistic psychologist Carl Rogers agreed with Maslow’s arguments in terms of self-actualization. According to Rogers, everyone strives to further develop themselves. However, the way people behave in certain situations varies depending on their perception of a given situation. Rogers developed the notion of self-concept; “organized, consistent set of perceptions and beliefs about oneself” in order to explain when the process of self-actualization takes place (McLeod, 2014). Three factors play a part in defining one’s self-concept:

- Self-worth: the way we think about ourselves,
- Self-image: how we perceive ourselves,
- Ideal self: how we would ultimately like to be perceived.

Developing and defining both the real and the ideal self-identity is only one part of the process. The notion of self-identity “refers to all selves, identities and self-schemas that comprise people’s sense of who they are” (Häubl and Kettle, 2011). There are many factors exerting influence on how one develops and expresses their self-identity. People particularly develop their self-identity from the “people, things, places, institutions and informational structures” to which they relate (Varey, 2002). According to Belk (1988), what one possess greatly contributes to their identity. The next need that comes to light is communicating this image to the society. Displaying items, wearing the clothes bought, using different gadgets, hanging up taken photos or framing one’s diplomas are only a few ways by which people figuratively express their identity on a daily basis (Karahanna, Xin Xu and Zhang, 2015). Social Media offer a wider scope for self-expression, where the user has a complete control over what is seen and who can see it. Having such control over the information shared in an on-line setting and the inability of direct verification of the information leads us to the questions of whether

people share information about their real self or not, and whether they try to create an ideal self-identity they want others to perceive them through.

H1: Ideal Self Identity engagement has a positive relation to Self-Concept engagement on Facebook

Social Psychologists Henri Tajfel and John Turner, however, assert that an individual's self-concept is partly developed by the status of social groups to which they belong (Tajfel, 2010). Many people belong to different groups and thereby are able to assume multiple social identities (Champniss, Macdonald and Wilson, 2015). For example, a woman can identify herself with multiple groups such as: 'single mother', 'fitness lovers', 'vegan', 'Catholic' and 'chocolate lover'. At the moment when someone identifies themselves with a particular group, they will be governed by certain behaviours that are believed to be "appropriate" (Champniss et al., 2015). As a result, the second hypothesis will state:

H2: Self-Concept engagement has a positive relation to Social Identity engagement in sharing content on Facebook

Gratification Theory & Social Media

Understanding why people spend so much time using and communicating by means of these various SM platforms could provide good insight into why they engage in sharing content. Social media has developed into a strong mass media communication tool over the years. A common communication theory in the mass media communication environment is the "Uses and Gratification Theory" (U&G) established by (Katz, Blumler and Gurevitch, 1973). It provides comprehensive reasoning as to how people use media. What makes this concept stand out is the fact that consumers are seen as active decision makers who are aware of actions they take and seek to interact with media (Katz et al., 1973).

'Cognitive need' refers to one's need of gaining knowledge and acquiring information (Katz et al., 1973). Social Media has provided users with an additional opportunity to share their knowledge with their social graph present on the platform. Cognitive needs may be fulfilled in many ways: watching YouTube videos, reading newspapers, product reviews, sharing own recipes, and more. Raacke and Bonds-Raacke (2010) found that an important reason behind the use of Social Media comes from customers' desire to stay informed about important social events taking place. Therefore, the third hypothesis will state:

H3: Cognitive engagement has a positive relation to Self-Concept engagement in sharing content on Facebook

The second need identified within the framework of the U&G theory is the need for affection. This need puts emphasis on satisfying one's emotional needs. A study conducted by Rimé (2007) focused on obtaining insight as to why people share emotional experiences. Some of the main reasons identified are: obtaining empathy, drawing attention, validating emotions, bonding with one's social graph, and more (Rimé, 2007). Therefore, the fourth hypothesis will state:

H4: Affective Integration engagement has a positive relationship with Social Integration engagement in sharing content on Facebook

The 'personal integrative need', on the other hand, relates to one's need of enhancing their status and building their sense of self. Providing information about "you" to social networks can fulfil such self-esteem need. The fourth need in Maslow's pyramid refers to humans' need of obtaining esteem and gratifying the need of being accepted and valued by their social graph (Maslow, 2013). Leary's (1995) Sociometer theory points out that humans have a fundamental need to belong. Based on this theory, self-esteem serves the purpose of measuring the probability one will be socially accept or rejected. Therefore, the fifth hypothesis will state:

H5: Personal Integration engagement has positive relation to Social Identity engagement in sharing content on Facebook

Humans are social beings and seek interaction with their closer environments – such as family and friends. This notion is referred to as 'social integrative need', which can be fulfilled by Social Media through interacting with your social graph across various SM platforms. Personal integration belongs to the third tier of the pyramid (Maslow, 2013). The need to belong can be identified as "the need to give and receive attention to and from others" (Fiske, 2003). Baumeister and Leary argue that the notion of belongingness is rooted so strongly in human motivation that it has the ability to influence our being (Baumeister and Leary, 1995), and thereby also our self-identity. As a result, the sixth hypothesis will state that:

H6: Social Integration engagement has a positive relation to Self-Concept engagement in sharing content on Facebook

Methodology

The applied methodology involved development of an Internet-based questionnaire as such solution gives an opportunity to handle a big

number of respondents and is very user-friendly. The population examined includes students of Kozminski University, pursuing English-language bachelor's or master's level studies in the fields of business, finance and marketing. The choice of this particular population has been motivated by the fact that the group consists of a pool of participants with a variety of nationalities and backgrounds, which will enhance the generalizability and enrich the study. Moreover, the study sets focus on Social Media users, so its results will therefore reflect the habits and preferences of actual users of various SM platforms. Lastly, this population was chosen due to its accessibility through e-mail and Facebook, and the respondents' ability to communicate fluently in English. Prior to sending out the survey, two pilot tests were conducted in order to ensure best understanding and structure of the questionnaire. The survey was sent out by email to the entire population counting 1132 students. Each student was provided with a briefing message prior to the survey, which explained the purpose of the study, ensured confidentiality of the responses provided, and covered the matters related to obtaining the results of the survey. The data has been analysed using Pearson's correlation analysis. It is important to note that due to the fact that the sample for this study was obtained through convenience sampling, it was impossible to make general interpretations with respect to the participating population. Nevertheless, the study gives fundamental knowledge regarding a particular sample, which can serve as an indication for future studies. Furthermore, it is important to point out that according to Mazur, Rószkiewicz and Strzyżewska's (2011) observations for the field of social research, a correlation of $r = .4$ may be considered as a rather strong correlation, $r = .3$ -.4 as moderate, $r = .2$ -.3 rather weak, and less than $r = .2$ is considered weak.

Results

Table 1. Full Hypothesis Testing Results

Hypothesis Category	Variables Related to the Hypothesis	Significance (2-tailed)	Pearson's Correlation Coefficient	Hypothesis Accepted/ Rejected
H1	Ideal Self	0.00	0.633	Accepted
	Self-Concept			
H2	Self-Concept	0.00	0.563	Accepted
	Social Identity			

H3	Cognition	0.00	0.471	Accepted
	Self-Concept			
H4	Affection	0.00	0.513	Accepted
	Social Integration			
H5	Personal Integration	0.00	0.423	Accepted
	Social Identity			
H6	Social Integration	0.00	0.476	Accepted
	Self-Concept			

- **H1:** The correlation is strong, so hypothesis H1 has been accepted. This may imply that when users share information about themselves, they tend to share content displaying the best version of how they want to be perceived by their audience.
- **H2:** The analysis has identified a positive relation, which can be classified as rather strong. Therefore, H2 has been accepted. This correlation may suggest that the information shared about one's social identity relates to how someone identifies themselves. Hence, this may indicate that connecting marketing content to groups that customers engage with may effectively reach customers' self-identity and thereby become more significant to a given person.
- **H3:** The above average correlation lets us accept hypothesis H3. The results may yield the following indication for marketers: providing cognitive information in shared content may help in relating the information to customers' self-concepts and result in an increase of their engagement in sharing such content.
- **H4:** The correlation analysis has identified a rather strong relationship between engagement in sharing affective content and engagement in sharing content for social integration purposes. As a result, H4 has been accepted. This outcome may indicate that humans' need to "belong" positively influences their engagement in sharing emotional content. It can also imply that engaging in sharing emotional content may assist them in "belonging" to their closest community. Hence, it should be kept in mind that content of emotional value can help customers relate to their social graph and thereby increase the possibility of such content being shared.
- **H5:** The conducted analysis identified an above average correlation between the two constructs, leading thereby to the acceptance of hypothesis H5. This could signify that sharing content concerning

our belongingness to various groups may positively impact the content we share in order to build our own self-esteem. It may indicate that providing content related to customers' social groups could relate to their self-esteem and thereby may be shared more willingly.

- **H6:** The analysis denotes a fairly above average positive correlation between engagement in sharing self-concept content and engagement in sharing content for social integrative purposes. The correlation may suggest that the content people share with respect to their self-identity may positively affect the content they share with their closest environment.

It is important to note that due to the fact that the sample for this study was obtained through convenience sampling, it was impossible to make general interpretations with respect to the participating population.

Conclusion

The purpose of this study was to establish reasons as to why users engage in sharing content across Social Media. The results of the study show that there are many psychological factors impacting one's inclination to share. One of the strongest correlations occurs between our ideal self and self-concept. This may provide an indication that people are more inclined to share content which relates to who they are and who they ultimately want to become. Furthermore, the analysis shows that people are generally inclined to engage in sharing information that is relatable to them on different levels such as: personal (self-concept & ideal self), group (social identity), and closest social graph. Adding emotional and/or cognitive elements to relatable messages may also stimulate the predisposition to share.

References

- Baumeister, R.F. and Leary, M.R. (1995). The Need to Belong: Desire for Interpersonal Attachment as a Fundamental Human Motivation. *Psychological Bulletin*, 117(3), 497–592.
- Belk, R. (1988). Possessions and the Extended Self. *Journal of Consumer Research*, 15(2).
- Bickart, B., Fournier, S., Sekhon, T. and Trudel, R. (2014). Being a Likeable Braggart: How Consumers Use Brand Mentions for Self-presentation on Social Media. *Consumer Psychology in a Social Media World*, 34.

- Bonds-Raacke, J. and Raacke J. (2010). MySpace and Facebook: Identifying Dimensions of Uses Gratifications for Friend Networking Sites. *Individual Differences Association*, 8(1), 27–33.
- Brodie, R.J., Hollebeek, L.D., Jurić, B. and Ilić, A. (2011). Customer Engagement: Conceptual Domain, Fundamental Propositions, and Implications for Research. *Journal of Service Research*, 14(3), https://www.researchgate.net/publication/232906670_Customer_Engagement.
- Champriss, G., Macdonald, E.K. and Wilson, H.N. (2015). Why Your Customers' Social Identities Matter. *Harvard Business Review*, 1–2, <https://hbr.org/2015/01/why-your-customers-social-identities-matter>.
- Cohen, H. (2011, September 5). *Social Media Definitions*, <http://heidicohen.com/social-media-definition/> (30.05.2015).
- Corcoran, S. (2012, December 4). *Revisiting the Meaning of “Engagement”*, http://blogs.forrester.com/sean_corcoran/11-04-12-revisiting_the_meaning_of_engagement (31.05.2015).
- Evans, D. (2010). *Social Media Marketing: The Next Generation of Business Engagement*. John Wiley & Sons.
- Evans, D. and Cothrel, J. (2014). *Social Customer Experience: Engage and Retain Customers through Social Media* (1 edition). Indianapolis, IN: Sybex.
- Fiske, S.T. (2003). *Social Beings: A Core Motives Approach to Social Psychology* (1 edition). Hoboken, NJ: Wiley.
- Haenlein, M. and Kaplan, A.M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons the Journal of the Kelley School of Business, Indiana University*, 53(1), 59–68.
- Häubl, G. and Kettle, K.L. (2011). The Signature Effect: Signing Influences Consumption-Related Behavior by Priming Self-Identity. *Journal of Consumer Research*, 38(3), <http://www.jstor.org/stable/10.1086/659753>.
- Hollebeek, L. (2011). Exploring customer brand engagement: definition and themes. *Journal of Strategic Marketing*, 19(7), <http://iranarze.ir/wp-content/uploads/2015/01/customer-brand-engagement.pdf>.
- Johnson, J. (2012, October 16). Types of Social Media Tools, https://www.ibm.com/developerworks/community/blogs/socialtools/entry/types_of_social_media_tools6?lang=en (04.09.2015).
- Karahanna, E., Xin Xu, S. and Zhang, N. (2015). Psychological ownership motivation and use of social media. *Journal of Marketing Theory and Practice*, 23(2).
- Katz, E., Blumler, J.G. and Gurevitch, M. (1973). *Uses and Gratification Research*, *The Public Opinion Quarterly*, 37(4), 509–523.
- Leary, M.R., Tambor, E.S., Terdal, S.K. and Downs, D.L. (1995). Self-esteem as an interpersonal monitor. The sociometer hypothesis. *Journal of Personality and Social Psychology*, 68(3), 518–530.
- Marketing Science Institute. (2010). *2010–2012 Research Priorities* (p. 13), <http://image.sciencenet.cn/olddata/kexue.com.cn/upload/blog/file/2010/9/201091515178616316.pdf>.

- Maslow, A.H. (2013). *A Theory of Human Motivation*. Martino Fine Books.
- McLeod, S. (2014). *Carl Rogers*, 2015, <http://www.simplypsychology.org/carl-rogers.html> (10.08.2015).
- OECD (2007). *Participative Web: User-Created Content* (p. 74). Organization for Economic Co-operation and Development, <http://www.oecd.org/sti/38393115.pdf>.
- Peterson, E.T. and Carrabis, J. (2008, July 9). Measuring the Immeasurable: Visitor Engagement. Web Analytics Demystified the Web Analytics Thought, https://www.researchgate.net/publication/265448833_MEASURING_THE_IMMEASURABLE_VISITOR_ENGAGEMENT.
- Rimé, B. (2007). *Handbook of Emotion Regulation* (J.J. Gross). New York: Guilford Publications, <http://spl.stanford.edu/pdfs/2007/Gross%20HBER.pdf>.
- Tajfel, H. (Ed.). (2010). *Social Identity and Intergroup Relations* (Reissue edition). Cambridge: Cambridge University Press.
- Varey, J.R. (2002). *Marketing Communication Principles and Practice*. London: Routledge.

Magdalena Sobocińska

Website Management in the Context of User Experience Design

Abstract

Website management requires taking different categories of user experience into consideration. This stems from the fact that customer experience adds a new dimension to offers, and a proper design of this experience may translate into a permanent competitive advantage. Given the multifacetedness of experience on the one hand, and the growing number of types of websites on the other, the paper focuses on the main categories of experience consumers gain on-line by using websites. Emphasizing the great potential of websites in creating experience, the attention has been drawn to the types of website content and the processes of designing impressions, information, and interactions. The paper covers also a specific type of experience of customers who co-participate in the processes of creating value on the Internet. Another highlighted aspect is the role of marketing research in management of websites oriented on shaping customer experience.

Keywords: websites, consumer experience, website marketing research

Introduction

The recent development of digital economy and of the so-called network society, as well as the growing importance of experience as a marketing category define the ways of building customer relationships anew. A net-

work society is characterized by the increasing penetration of the Internet, common presence of digital technologies of network communication and information distribution management, and network-like forms of social organization. The impact of new media technology on our society is associated with intensification of the dynamic time-space compression and deterritorialization (Barney, 2008, p. 76). Modern technology changes the way we perceive time as there are new terms to define time, such as “virtual time” or “instant time” (Urry, 2009, pp. 179–180). This is accompanied by emergence of new types of experience.

The aim of the article is to depict the mechanisms related to consumers’ use of websites in the aspect of experience accompanying this process. The objective of the paper formulated in this way calls for presentation of the concept of experiential marketing, as well as of the resulting implication for website management, including the matter of designing websites and conducting marketing research for the purpose of management of these websites. In order to provide a practical example of the issues subject to discussion, the paper includes a reference to a campaign promoting one movie shown on Disney XD channel, where the main axis of marketing communication was a website.

The Concept of Experiential Marketing

The recent multidimensional changes in consumer behaviour are related to the emergence of a new type of economy – one based on experience. This leads to a situation where companies pursuing marketing activities refer not only to buyers’ rationality, but also to their emotions, feelings, and senses because consumers, in fact, do not buy products or services, but rather the sensations, or experience, they carry. According to the assumptions of economy based on experience, consumers are also treated as individuals aspiring towards independence and forming communities centred around values they consider important or relevant (Schmitt, 1999).

In this context, customers’ experience becomes a new feature of offers. Its role manifests itself in the appearance of a new marketing paradigm based on an assumption that customers expect something special, including sensations that enhance a given offer in a significant way, granting them new experience. At the same time it is necessary to point out that consumers tend to remember unexpected experience – and moments related thereto – best. Moreover, the mechanisms of manage-

ment of customer experience need to be adjusted to the needs of particular groups of customers. Customer engagement is also essential because when a customer is engaged, the value of the product/service they purchase grows thanks the sensations they experience (Lebiecki, 2002; Pine and Gilmore, 2011, p. 34).

The main ideas of experiential marketing include fulfilling customers' needs through activities of symbolic meaning, leaving lasting impressions by way of transactions involving customers, stimulating customers to share their experience with others, and taking advantage of aesthetics in marketing activities (Skowronek, 2012, p. 105).

The aim of experiential marketing activities is to engage consumers on different levels, including through providing them with stimuli on the sensory, emotional, intellectual, behavioural, and relational level (Dziewanowska and Kacprzak, 2013, pp. 178–179). Taking the ever-increasing virtualization of marketing into account, the question about the nature and types of experience accompanying the use of the Web seems to be reasonable in this context.

Website Users' Experience

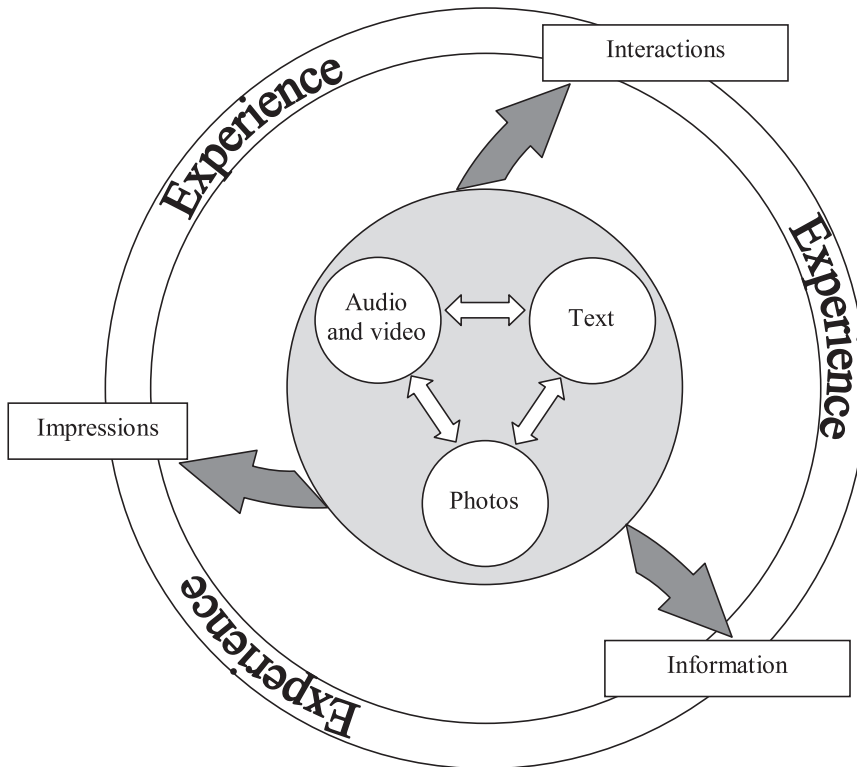
Websites are usually axes around which all activities pursued on the Internet revolve (Łopaciński, 2015, p. 29). Given the fact that nowadays entities operating in different industries and sectors have their own websites, the experience consumers gain through interaction with websites may be analysed in the context of both autotelic and instrumental value, with the latter increasing the value of the offered products and services.

Since websites serve different purposes, perform various functions, and find application at different stages of the consumers' decision-making process, there may be also many different sources of diverse experience, including:

- consumer's realization of the way to fulfil a need as a result of marketing activities pursued on the Internet,
- on-line search for information on how to fulfil certain needs,
- making a purchase on-line,
- expressing opinions on-line about the purchase made, with the opinions being an outcome of evaluation of the product/service and of the extent the company has satisfied consumers' expectations.

This means that the experience resulting from the ways and circumstances in which consumers use websites is three-faceted, and can be divided into pre-purchase experience, purchase experience, and post-purchase experience.

Figure 1. Content of websites in the aspect of designing the 3I (information, impressions, interactions)



Source: own work.

Websites have a great potential for generating user experience. This stems from the fact that their impact is based on different types of content, such as text-based or photo-based content, as well as audio and video materials. Solutions in this context should be selected taking many factors into consideration, such as e.g. the fact that although video content is, in general, more attractive to Internet users, it is the text-based content that is more effective from the point of view of the specificity of

functioning of on-line search engines (Kępiński, Kordowski, Sałkowski and Sztubecki, 2015, pp. 88–91). Moreover, the experience of consumers-website-users depends largely on the solutions adopted at the stage of design in the scope of 3I, i.e. information, interactions, impressions (cf. Figure 1).

Bearing in mind the components of attitude, as well as the types of experience, it is necessary to point out that placement of information about a brand on websites effects a change of attitude through a cognitive element. The more informative a given website is, the higher the probability of changing the recipient's attitude towards the brand by way of affecting the cognitive element. This is possible to achieve by means of publishing detailed information about research findings, test results, certificates, descriptions of changes introduced to a given product/service offer, descriptions of new solutions applied, or of ways how to use a new product across company and corporate websites or on corporate blogs.

Taking into consideration the fact that brands are placed on websites in a pleasant, attractive, and user-friendly visual and sound setting, often accompanied by animation, the positive emotions invoked by such form of communication are transferred onto a given brand. A change of attitude inspired by the impact of a given website on the behavioural element of our attitude takes place when a website offers e.g. an option to buy – or to customize – certain products.

Bearing in mind the essence of website design based on information, interaction, and impression, it is important to stress that websites can influence both the beliefs and the emotions of the target audience; they can also affect their behaviour and shape their sensory experience. With regard to the evolution of websites, expressed by the growing importance of blogs and social networking services, it should be emphasized that the experience resulting from the use of such platforms has a relational dimension and is connected to consumers' expression of their social identity.

At the same time, it's important to point out that designing and creating experience for website users requires taking into account that the behaviour of Internet users differs with respect to the following:

- motivation behind using the Internet,
- attitude towards the Internet,
- frequency and scope of use of new media,
- IT knowledge and skills,

- demographic-economic features,
- ways of taking advantage of the Internet related to the devices used by a given consumer to pursue their on-line activities.

Creating Experience of Customers Classified as Generation Z: Case Study

Explaining the role of websites in creating user experience calls for a reference to the occurring generational changes. Among the approaches to classification of generations found in the reference books, the concept that proposes a division into the Builders Generation, the Post-WWII baby boom generation, Generation X, Generation Y, and Generation Z seems to play a special role. Considering the issue raised in the paper, it should be pointed out that distinguishing Generation Z from Generation Y has been dictated by the former generation's greater keenness on using the Internet in different spheres of life and accepting on-line communication as best suited to the needs of representatives of this generation. Among the impact factors, opinions express by members of virtual communities appear to be of particular importance. It should be also stressed that representatives of Generation Z tend to consider membership in on-line communities an opportunity to express themselves. Generation Z expects individualized products and interactive marketing communication (Aniszewska, 2015, pp. 2–7).

The way of designing experience of consumers classified as Generation Z is exemplified by the promotional campaign of a movie from the series “Phineas and Ferb”. Its core ideas have been listed in Table 1.

Table 1. Creating experience of consumers classified as Generation Z on the example of the promotional campaign of “Phineas and Ferb the Movie: Across the 2nd Dimension”

Market context
<ul style="list-style-type: none"> • the market of children's TV channels is mature and highly competitive • the development on the media market involves fragmentation expressed in the growing significance of thematic channels • the main channels addressing their offer to children are: Disney Channel, Disney XD, Cartoon Network, Mini Mini, Nickelodeon; the main competitor of Disney XD is Cartoon Network, with a similar target audience profile

Brand initial position
<ul style="list-style-type: none"> • Phineas and Ferb are the main characters of an animated series that used to be broadcast on Disney Channel before Disney XD was launched • Disney XD had a limited number of strategic items in its programme offer • after the first two seasons of the series, the protagonists of the show earned a big fanbase • the activities promoting the show – and the movie later on – aimed to increase the awareness of existence of these protagonists, who were to become one of the key brands of the Walt Disney Company
Main marketing challenges and objectives
<ul style="list-style-type: none"> • to arouse interest in the series and to maintain it over 5 months among a very demanding young target audience • to reach an audience for the Phineas and Ferb movie at the level of 140 000 children aged 4–15
Target group
<ul style="list-style-type: none"> • the main target group was determined on the basis of the profile of the audience of Disney XD, addressed mainly to boys aged 6–14, looking for new experience, enjoying challenge, interested in adventure • the target group devotes a lot of time for playing with peers, and displays an interest in new technologies
The essence of communication strategy and implementation thereof
<ul style="list-style-type: none"> • the goal of marketing communication was to create a mechanism making children willing to identify themselves with the characters from the movie and want to actively experience their adventures • the experience was supposed to take on a form of long-term involvement, lasting until the premiere of the full-length movie • implementation of the communication strategy was supported by a series of secret missions where the target group could explore new dimensions of fun • an important part of the strategy involved application of solutions based on Augmented Reality • over three months before the premier of the movie, the movie-dedicated website featured regular updates with tasks to be solved, which was supposed to create an atmosphere of suspense and keen anticipation • before the premier of the movie, the information about the date and time of its screening was distributed across the Internet, in the press, and via outdoor adverts
Results of the campaign
<ul style="list-style-type: none"> • the premiere showing of the movie was seen by 285 000 viewers, and the result turned out to be a record-breaker in the channel's audience measurement history • the number of unique users of Disney XD website reached 351 000, which was four times larger than the average for the five months preceding the pursued promotional activities

Source: developed on the basis of: The Effie Awards, 2012, pp. 168–171.

The above example proves that websites designed to create memorable positive user experience can become major tools supporting enterprises – including those addressing their offer to Generation Z – in the pursuit of their objectives.

Creating Experience in the Aspect of the Growing Role of Consumer in the Processes of Creating Value On the Internet

Another matter worth raising is that the development of the concept of experiential marketing can be viewed from the angle of the increasing number of websites enabling consumers to take active part in different processes of creation. A special type of experience is that involving co-creation of products and services through specific platforms designed to this end (Prahalad and Ramaswamy, 2004, pp. 5–14).

Such processes lead to the disappearance of the traditional division of market entities into enterprises responsible for value creation and customers acting merely as passive recipients of marketing activities (Vescovi, Gazzola and Checchinato, 2010, pp. 41–57).

The reasons for customers' interest in co-creation of value should be sought in megatrends including individualization of consumer behaviour, development of the needs for new forms of social integration and for innovation in different spheres of life. Addressing these needs on-line grants consumers better opportunities of self-fulfilment, but most of all, it improves their position against enterprises and other market entities. Participation of customers in designing and shaping offers may involve not only expressing their impressions and sharing their experience related to consumption, but also presenting new concepts and ideas in the process of creating value, which itself may eventually become a source of new experience. It's important to add that the scope of activity of customers in processes of creating value depends on their level of engagement, which is influenced by the extent of understanding of tasks, as well as the skills and motivation to perform these tasks (Roberts and Alpert, 2010, pp. 198–209).

The Role of Marketing Research in Management of Websites Oriented On Shaping Customer Experience

A strategic approach to website management taking the context of creating user experience into account requires application of triangulation understood as research including websites and their users, conducted from different points of view on the basis of various methodological perspectives, especially triangulation of data, its sources, and research

methods and techniques. This requires a combination of measurements based on consumer declarations and automated measurements.

At the stage of planning and designing of websites, marketing research is carried out to determine the profile (demographic, psychological, social, behavioural) of users and to learn of their expectations with respect to the textual and graphical content, as well as to identify the solutions applied successfully (and unsuccessfully) in this scope by competitors. Such research may also constitute a basis for selection of one of the developed versions of a given website. Testing of the features of a website before making it available to users makes it possible to see what impressions it makes, and whether the website is user-friendly and difficult/easy to use and navigate through. Website eye-tracking studies based on special equipment monitoring and recording the point of gaze or the motion of an eye relative to the head have been gaining in significance. They make it possible to find out where users look most often, where they look first, and how long they keep their sight fixed at particular elements of a given website. Yet, the conclusions drawn from analyses of the lengths and directions of sight paths, their spatial density, the number of gazes at particular areas, and the relation of the duration of saccades to the time of fixation need still to be supplemented by other research methods, including interviews (Mościchowska and Rogoś-Turek, 2015, pp. 308–313). Website management can be also much easier thanks to information gained through site-centric research, where the sources of data are adserver systems. There is, however, a need for qualitative and quantitative studies to be conducted among website users, which comes from the fact that automated measurements do not let us gain information about all aspects related to the functioning of a given website – and to the experience it generates.

Conclusion

Managing websites taking the context of customer experience into account should translate into a bond between an enterprise and its customers – willing to recommend it to others. Virtual consumption per se involves ‘consuming’ experience. Therefore, it plays a vital part in popularization of such perception of market offers (Kacprzak, Dziwanowska and Skorek, 2015, p. 10). In the context of the premises of the concept of customer experience management and marketing virtualization, it

should be noted that the functions of marketing management are changing. Although such functions as: analysis and planning, implementation, and control are not considered of lesser importance, they are becoming somewhat modified or extended. New marketing management functions are described in the context of identification, provision, execution, and learning. In an enterprise open to its environment and proficient in forming network relationships with the entities of this environment, analysis as a function of marketing management is no longer a separate stage in the decision-making process, but becomes a constant identification of stakeholders' – including customers' – needs in order to better understand their experience. Planning becomes substituted with provision because of the fact that non-material company assets are to be created and integrated, not just purchased and allocated. The motivation behind rendering implementation as execution is the move away from separation of planning from action, as well as from the traditional division into higher-rank decision-makers and regular employees acting as 'executors'. A significant change in the approach to marketing management functions is regarding controlling as a learning process. This means that the effects of marketing activities constitute an important part of the learning loop. Such understanding of marketing management functions leads to an observation that the scope of the coordinative role of marketing is expanding, serving now a purpose of not only integration of processes of creating company value for customers, but also of co-creation of values together with customers as part of a network relationship, which should become a source of positive experience (Lusch and Webster, 2010, pp. 28–34, as cited in Rupik, 2013, pp. 101–102). Adopting a perspective according to which the buyer becomes an active participant of intra-organizational processes necessitates elimination of information asymmetry and basing on bonds formed between the parties to the exchange (Mazurek, 2012, pp. 124–125).

To conclude, it is important to highlight that website management in the context of creating user experience calls for an extended and broadened cooperation between marketing and IT departments, as well as development of effective organizational solutions in this aspect. The growing significance of experience of website users determines the directions of development of website design, but also breeds a number of implications for research based on both automated measurements and studies carried out with the participation of customers ready to provide their input in the form of valuable opinions in this scope.

References

- Aniszewska, G. (2015). Zmiany pokoleniowe a decyzje i wybory konsumenckie, *Marketing i Rynek, 1*.
- Barney, D. (2008). *Spółeczeństwo sieci*. Warszawa: Wydawnictwo Sic!.
- Dziewanowska, K. and Kacprzak, A. (2013). *Marketing doświadczeń*. Warszawa: WN PWN.
- Kacprzak, A., Dziewanowska, K. and Skorek, M. (2015). *Gospodarka doświadczeń. Perspektywa polskiego konsumenta*. Warszawa: WN PWN.
- Kępiński, Ł., Kordowski, M., Sałkowski, D. and Sztubecki, K. (2015). *Marketing internetowy. Nowe możliwości, nowi klienci, nowe rynki*. Warszawa: Poltext.
- Lebiecki, M. (2002). Gospodarka doznań. *Modern Marketing, 1*, <http://www.modernmarketing.pl>.
- Lusch, R. and Webster, F. (2010). *Marketing's Responsibility for the Value of the Enterprise*. Marketing Science Institute Working Paper Series (Report No. 10–111).
- Łopaciński, K. (2015). *Skuteczność promocji internetowej*. Warszawa: PWE.
- Mazurek, G. (2012). *Znaczenie wirtualizacji marketingu w sieciowym kreowaniu wartości*. Warszawa: Poltext.
- Mościchowska, I. and Rogoś-Turek, B. (2015). *Badania jako podstawa projektowania user experience*. Warszawa: WN PWN.
- Pine, B.J. and Gilmore, J.H. (2011). *The Experience Economy*. Boston, Ma: Harvard Business Review Press.
- Prahalad, C.K. and Ramaswamy, V. (2004). Co-creation experiences: The next practice in value creation. *Journal of Interactive Marketing, 18*.
- Roberts, Ch. and Alpert, F. (2010). Total Customer Engagement: Designing and Aligning Key Strategic Elements to Achieve Growth. *Journal of Product & Brand Management, 19*(3).
- Rupik, K. (2013). *Planowanie marketingowe przedsiębiorstw – ujęcie zintegrowane*. Katowice: Wydawnictwo Uniwersytetu Ekonomicznego w Katowicach.
- Schmitt, B.H. (1999). Experiential Marketing. *Journal of Marketing Management, 15*.
- Skowronek, I. (2012). *Marketing doświadczeń. Od doświadczeń klienta do wizerunku firmy*. Warszawa: Poltext.
- The Effie Awards (2012). Warszawa: Stowarzyszenie Komunikacji Marketingowej SAR.
- Urry, J. (2009). *Socjologia mobilności*. Warszawa: WN PWN.
- Vescovi, T., Gazzola, P. and Checchinato, F. (2010). Invading customers. New market relationships. *Journal of Marketing Trends, 1*.



5. BRANDING IN THE DIGITAL WORLD





Anna Górska

Personal Brand Building Through LinkedIn

Abstract

Recruiters and employers shift to Social Media (SM) for recruitment purposes, as data are more accessible and cheaper, therefore the importance of one's digital brand is becoming a matter of necessity, not only a choice – especially for young people which are only entering labor market. Purpose of this research was to find out whether (and how?) young professionals build their professional personal brand online through SM. The paper reports the results of the survey conducted among 151 junior and senior management students. Overall, students are not efficiently utilizing SM for the purposes of professional personal brand management, still limiting it's potential to entertainment purposes, with only 1/5 of respondents using SM primarily to personal brand management. Moreover as much as 30% of respondents do not build their professional brand online. Patterns of using SM differ with regard to program, track and year of the studies. Presented results could be applicable in the business schools, as research presents the need from the students side for courses focused on personal brand management.

Keywords: social media, personal digital branding, networking

Introduction

Various studies present that business students are unfamiliar with how to use efficiently Social Media in professional personal brand building (Russ, 2015; Lewis, Messina and Wellington, 2014).

Research also suggest that students are not utilizing available social media (SM) tools as LinkedIn in building and maintaining professional connections. Social Media (SM) became for society not only a mean to spend free time and entertainment, but it has emerged as a tool for building and maintaining a professional networks and spreading ideas. SM refers to electronic means through which people and organizations are allowed to communicate: experiences, facts, knowledge and opinions in variety of forms including; text, pictures, music, videos, presentations. As they are created, modified and exchanged – SM communities develop (Lewis, Messina and Wellington, 2014). SM are changing the way people communicate, network but as well how they pursue their careers. SM gives people opportunities to share their knowledge, opinions, but as well their achievements and qualifications. While recruiters already understand the potential of social media, but do students-young professionals, which will soon enter the labor market, understand its importance? Are students aware of all the possibilities that SM may bring to them? And finally, do they effectively use it in building a professional brand and network?

While most students are using and communicating through SM with their friends and family, still majority are unfamiliar with using SM for professional purposes. Thus, students are not fluent with utilizing SM for creating a personal brand, building professional network and a don't perceive it as a tool for career development (McCorkle, McCorkle, 2011).

Recruiters are switching to SM, as it is cheaper, data are more accessible and the data base is not limited as in comparison to traditional recruitment process, thus SM have fundamentally changed the way companies recruit. World's most important and largest social network for professionals is LinkedIn, with 400 million users in 200 different countries (in 2015). With LinkedIn available, companies have a new way of identifying and connecting with passive job seekers that were unattainable before (Gale, 2013). "LinkedIn has turned the procedure upside down", as now employers are the ones that initiate contact with candidates – says Claire Schooley, senior analyst in Forrester Research Inc. (Gale, 2013). Similarly, Twitter and Facebook are introducing tools for employers to track and sent job offers to users which fit into their desired profile (Struzik, 2016).

Despite of new ways of recruitment, students which will in no time enter labor market, are not utilizing SM for professional purposes and

they constitute only of 15.5% of all LinkedIn users (2015). LinkedIn is a tool dedicated for job search, with possibilities to self-promotion, networking and career development. LinkedIn should be viewed as a professional version of Facebook, where people instead of leaving their pictures, leave their resume (McGinley, 2010), as employers often observe potential candidates through LinkedIn. In this matter, it is even more surprising that young people are not frequent users of LinkedIn, despite they spent on average 27 hours per week online and constitute majority on Facebook, Instagram and Snapchat users.

About LinkedIn

LinkedIn has become a standard tool for recruitment, out of Fortune 100, 88 companies have licensed the software to find and track potential candidates. LinkedIn has already disrupted the traditional recruiting industry, as an example Unilever in 2012 through licensed LinkedIn server accounted for 54% of company's revenues (Hempel, 2013). But not only large companies use LinkedIn for finding new employees, social network became a competitor of head hunters and work agencies – as process of finding and attracting new candidate does not have to be outsourced anymore, according to Paul Maxim, head of global recruiting for Unilever (Hempel, 2013). Moreover, LinkedIn gives more opportunities for minorities, and for those from disadvantaged backgrounds, which can create their own personal brand and network, easier than in real life (Russ, 2015). LinkedIn helps companies to reach and canvass most talented candidates, but it the same time it gives even greater opportunities for individuals to pursue an interesting career. As companies use more often LinkedIn as a place to tracking potential candidates, individuals must learn how to draw attention of them to increase their competitiveness and to standout. Individual users, have possibility to use LinkedIn in various ways – as a business card, virtual resume, place to spread their ideas, to network and to keep in touch with people from professional and personal circles – but most importantly it is a tool to build a professional image and brand. Thoughtful and distinguishable profile, may contribute to increased interest from the companies, clients or professionals interested in networking. Understanding how does the platform work and what content is found by employers interesting, is crucial for its effective usage.

Personal Digital Brand

For the purposes of this research, personal digital brand is defined as the strategic self-marketing effort, created via social media platforms, which aims to present individuals professional value. Right now it's not the question whether to be present on social media or not, but rather, whether to proactively control their public image through the use of social media or not. The consequence of not being on SM is being virtually invisible and even may lead to speculations what does one "is trying to hide" (Hill, 2014). It means that not having a digital identity also sends a message of its own – that nonusers have no control over.

Social Capital, Career Success and LinkedIn – Literature Review

Literature has found a link between social capital and career success (Burt, 2009), where social capital represents that one's family, friends, associates constitute an asset, that can be utilized in a crisis or directly for a gain – as finding a job (Russ, 2015). Social capital can be evaluated basing on the size and structure of networks and the nature of the social resources of the network (Russ, 2015). Thus, career success of an individual is closely related to one's access to scarce information, resources and mentoring (Siebert et. al 2001). Even though the influence and importance of higher education in career success is proven, still, especially in case of student's, social capital is a relevant factor in this matter (Russ, 2015). Therefore, creating own capital is crucial for young people to increase their chance for career success. Branding on a corporate-level is something natural, but today we understand branding is equally important on a personal level – as after all it is people that work with people and this is what makes business relationship valuable (Patel, Agius). Thus, creating a recognizable personal brand opens professional opportunities as a better job, network of business partners and recognition. In today's competitive job market, people need to stand out to be noticed, and thanks to Internet – it is easier than ever. Despite that young professionals know how to maneuver in the world of social media well, they lack knowledge of how to utilize social media for their professional gain – as creating a personal brand or professional network (Lewis, Messina and Wellington, 2014).

LinkedIn became one of the most powerful business tools on the planet for recruitment, networking and development of personal image, but research show that business students are inexperienced with it and their knowledge is limited (Russ, 2015). Research suggest that business students are more fluent in usage SM as Facebook, Instagram and YouTube, while a great majority of them don't benefit from LinkedIn or Twitter. Thus, students are not using potential of SM to build their professional brand or to create a valuable network which may contribute to their career, but they use SM in majority to upkeep non-professional network of friends and for entertainment purposes (Lewis, Messina and Wellington, 2014).

Social Media and Professional Networking

Usage of social media to develop professional networks is inevitable. In case of students and young people, that have recently entered or only will enter the labor market, networking is sometimes the only way to obtain any position and to present their skills. It is estimated that 80% of all available vacancies and positions are not publicly available and that a majority of people obtained their last position got it though networking (Russ, 2015). Despite, that Universities offer their students and alumni's career centers, SM gives access beyond what Universities will ever have in their offer.

Broadening networks and thoughtful usage of social media in that sense is an investment into one's career. As companies and recruiters are not only limited to LinkedIn, users of other SM have to be aware that content which is published or shared may also be a critical in being hired. Hence, conscious usage of all SM is important and one has to be aware that companies and employers are not limited only to LinkedIn, but as well are analyzing profiles on Facebook, Instagram and Twitter.

Methodology

In the research study, a quantitative survey was conducted among students of Kozminski University. Questionnaire was previously tested on a pilot sample of 10 participants. Research was anonymous. A total of 151 respondents have participated, out of which 99 where students from

English track and 52 from Polish track. 64% of respondents were master students, 28% bachelor and remaining 8% postgraduate and doctorate students. Overall, there were 92 respondents from management program, 40 from Management in Virtual Environment, 10 in Finance and Accounting and 9 MBA students. Females constituted 58% of respondents while males 42%.

Aim of the research was to examine the following hypotheses:

H1: The way of using SM and LinkedIn in particular varies between management and Management in Virtual Environment (MinVE) students at Kozminski University (KU)

H2: The way of using SM and LinkedIn in particular varies between men and women

Study was aimed to answer following supporting research questions:

RQ1: How KU students use LinkedIn and for what purpose?

RQ2: Do KU students utilize LinkedIn in a way that can boost up their career opportunities?

Analysis of Surveys

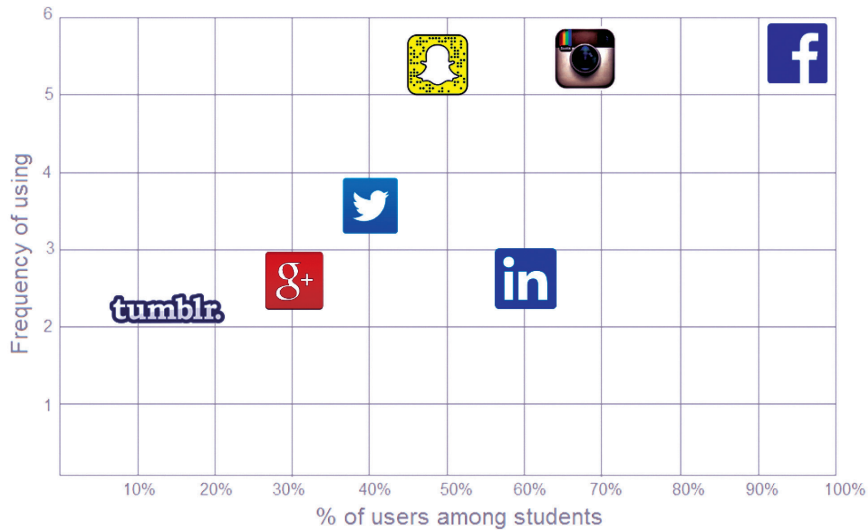
Following analysis took under consideration only bachelor and master students, as MBA and doctoral students may have different patterns in usage of SM, due to their work experience and age. Overall, 97% of all respondents use social media, moreover 69% of them use it daily. Majority of respondent use SM to see what their friends and family are doing, while only 11% of respondents use it in order to build professional personal brand online.

Most popular social network among respondents is Facebook with 93% of all respondents actively using it, second most popular SM among all respondents is Instagram (66%), third is LinkedIn (60%).

For master students, LinkedIn is second most popular SM, while for bachelor only fourth (after Instagram and Snapchat), moreover the difference between master and bachelor students in using LinkedIn amounted to almost 40 percentage points difference. There has been found statistically significant ($p < 0.05$) difference between choice of SM for women and men, whereas almost 30% more of women use more likely Instagram and Snapchat, compared to men. Management in Virtual Environment (MinVE) students use LinkedIn 20% more likely than Management and Finance students (75% of MinVE students are on

LinkedIn, compared to only 52% of Finance and Management students). Similarly, MinVE students are more often on Instagram, Tumblr and Snapchat than remaining students. Facebook is still number one in frequency of usage as over 91% of all students claim to use it daily or several times a day. Second and third most used SM media are Instagram (62% use it daily) and Snapchat (30% of undergraduate and 42% of graduate students). Despite the fact that LinkedIn was third most popular SM for all respondents, only 17% of them use it daily, 8% of undergraduate students, 19% of graduate students.

Despite the high reach of LinkedIn, it was one of the least used SM. The graph below present the reach of given SM and frequency of their usage.



In case of postgraduate, the frequency of usage of SM significantly differs, as on average LinkedIn is most frequently visited SM, leaving behind even Facebook. Among all respondents, MinVE students are those who in majority are present on LinkedIn (with 75% of respondents), but they are also the ones that visit LinkedIn least frequently (in majority claiming to visit the website once a month only).

Research indicate that despite women are more frequent users of SNW as Facebook, Instagram and Snapchat, men are the ones that use LinkedIn and Google+ more statistically significantly more likely and more frequently.

Respondents are overall aware of the possible consequences of the shared content online and its effect on professional brand, especially on Facebook (84% of respondents), LinkedIn (65%) and Instagram (63%).

In case of LinkedIn, only 53% of respondents share content in order to attract recruiters, 35% on Facebook, 19% on Instagram and 16% on Twitter. Remaining SM are not used for this purposes and less than 10% thinks about potential recruiters or employers when sharing content. Gender differences also indicated large differences, especially in SM as Instagram, Twitter and Snapchat, where in all three, women do not believe that recruiters could be interested in the content.

On the other hand, respondents asked whether they build their SM profiles in order to enhance their future careers, majority claimed to think about it only when using LinkedIn (53% of respondents), while majority of respondents claimed that they do not on Facebook (66%) and other SNWs. Similarly, Twitter profile is also used to enhance future career for only 18% of respondents. Respondents, overall are aware that content that people share online can have an impact on their future career development, but there are still over 10% of respondents that do not consider SM in this context. Among statements, which suggest why young professionals use SM, the most frequently chosen answers were “to see what my friends and family are doing” (86% agree with the statement), “build network of friends” (84%), “share content I find important” (88%), while the least chosen where those concerned with self-development, as building personal brand, enhancing career and building professional network. Gender of the respondents indicated that “showing others what I am up to” is more important for women than for men (with statistically significant difference $p < 0.05$), while men statistically chose more often as the purpose of using SM to “enhance career”.

Results suggest respondents are consciously sharing data, on LinkedIn (3.4 average on 4 point scale), while in case of Instagram, Facebook and Twitter, respondents were rather undecided (2.3). Polish track students are more concerned about what they share on SM in context of their future careers as, in every listed SM, their average was at least one third higher, than for English track students. Highest differences between the two groups was observed in relation to Twitter (almost 1 point) and Instagram (0.81 point). Even results for LinkedIn, indicated the 10% difference. There have also occurred differences among genders, as women use Instagram thinking about the future career more likely

than men, while men are more focused on LinkedIn in this context (10% more likely than women).

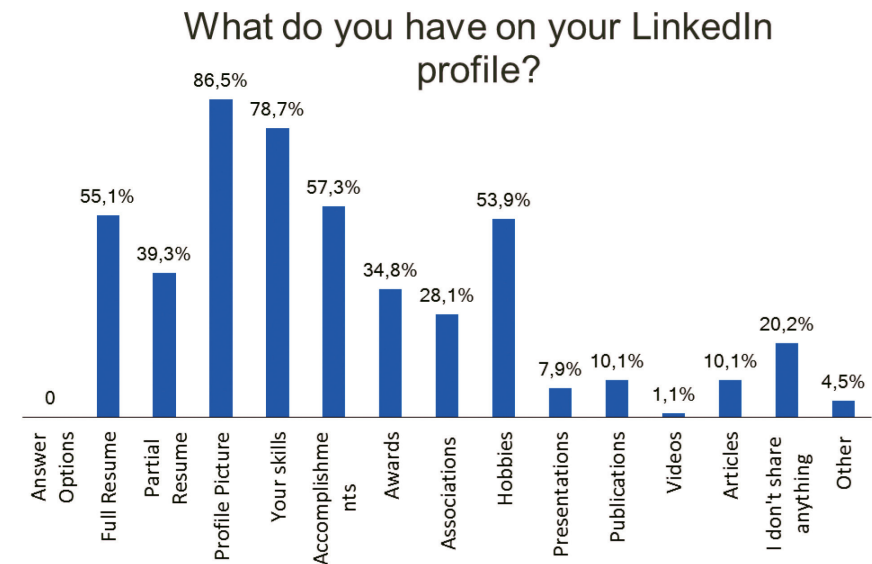
Over 70% of LinkedIn users believe that recruiters may be interested in the shared content, similarly, 48% of Facebook users and less than 40% of Twitter users. But in the same time as much as 30% of students does not build their professional personal brand online at all, while remaining 70% build it in majority on LinkedIn (73%) and Facebook (47.4 %). Instagram turns out to be also an important tool for personal brand management with 28.9 % of responses, while Twitter and personal website was chosen only by 15% of respondents.

Polish track students don't build their personal brand online at all more often (39% and 26% of responses accordingly). Moreover, Polish track do not use Twitter for their brand management (only 7% of responses), compared to English track, out of which over one fifth uses it for this purposes. Which SM are used for brand building are also differentiated in terms of gender, as women are more likely to build personal brand on portals as Instagram (25%) and Facebook (27%), while LinkedIn is a tool to managing personal brand for only 44% females, compared to 62% of males. Additionally, women are less likely to build professional brand at all, as 37% of them does not do it, compared to 20% of men.

Over 20% of respondents are not aware of the fact that recruiters and employers use LinkedIn as a tool to find potential employees. It is also visible that MinVE students are more aware of how LinkedIn can be utilized, as 26% of management students is not aware that LinkedIn is a common tool for recruitment, compared to only 13% MinVE students.

When it comes to the ways of utilizing LinkedIn by students, Polish track students are more likely to use it every day, while English track only once a week. Gender indicated high discrepancies as well, as one fourth of men use LinkedIn everyday compared to only 6% of women (statistical significance with 95% sureness). Most often chosen option for men in this regard was "everyday" (27%), while for women it was "I don't have a LinkedIn account" (42%) and only then "once a week" (15%). Most frequent answer in case of MinVE students was everyday (23.1%), while in case of Management students most frequently was used "I don't have a LinkedIn account" (37.1%), while second was "once a week" (19.1%). Moreover, research prove that students share content on LinkedIn less often than once a month, while only 5% of respondents claims to do it more often than once a week. Poor frequency of shared content is also reflected in the results of what is shared on LinkedIn, as

only 57% of respondents upload their full resume on LinkedIn, 86.5% profile picture, 78% their skills and only 57% upload their accomplishments. Only 1 person claimed to share videos on their account, similarly articles and presentations are not frequently shared (10% and 8% accordingly). Moreover, as much as 20% of respondents claims not to share anything else on LinkedIn apart from profile picture. From the gender perspective, statistically significantly, men more likely upload their full resume, accomplishments, associations and community involvements and profile pictures than women. The graph below represents what is shared on students' LinkedIn profiles.



Basing on the above results, it is highly visible that LinkedIn is not effectively utilized for the professional brand building, thus results that indicate that 79% of those who use LinkedIn believe that their profiles should be improved should not be surprising. Moreover, as much as 60% of those does not know how to do it. Similarly, 81% of respondents thinks that they need more knowledge on how to build their professional personal brand online. Particularly management students believe that more knowledge for them is needed (74%). Similarly, women fell less secure about their ability to build personal brands as over 84.5% of them believes that the need more education on the topic, compared to only 49.4% of men. Due to the fact, that students claim to miss knowledge on effective brand building, as much as third of them states that they do not

benefit from their LinkedIn account, but in the same time they believe that it is worthwhile to be present there. MinVE students are more confident that it is useful to be on LinkedIn (61.5%), compared to management students (46%), as they are also the once that are more aware that network is frequently used by recruiters.

Conclusions

Being present on SM is not anymore a question of choice, as already we are present there, whether we want to or not, but our choice is how well do we manage the personal brand that is already there. The first step in building professional brand online is to join the online community through activation of profile on adequate social network, with regard to what does one want to pursue. As for young managerial professionals, LinkedIn should constitute a base for brand creation, as its most frequently used tool for recruiters and employers. Additionally, Twitter and Facebook are also implementing tools for employers to help them find adequate candidates.

Despite the growing importance of usage of SM for personal brand building, as much 30% of business and marketing students does not build their professional brand online, additionally only half of them does it though LinkedIn – which is believed to be most important recruitment and professional networking tool online. Moreover, students chose Instagram over Twitter as a more important tool for personal brand development, while recruiters find words (Twitter), over pictures (Instagram) as more valuable. Research also indicated that despite the fact that SM can significantly influence one's career, majority of students do not notice potential of it in career development, still limiting SM to mostly socializing.

Patterns of using SM differ with accordance to program of the studies (bachelor vs. master), course (management and finance vs. MinVE), track (Polish vs English) and gender. It is visible that overall women, bachelor students and management students do not use SM for brand building and are least likely to use LinkedIn and Twitter, compared to men, master students and MinVE students. Frequency of using given SM, indicate that despite that LinkedIn is most popular SM, only few of students use it daily, while majority uses daily Facebook, Instagram and Snapchat. Most importantly, respondents claim to share content on

LinkedIn less often than once a month, while only few students does it once a week. Men compared to women use LinkedIn significantly more often, while women prefer Instagram and Facebook – which was reflected also in the purpose of using SM, as women more likely than men use SM to share personal life, while men to enhance their careers.

Important aspect of the study is that students do think about the consequences when sharing content on various SM, not only LinkedIn, additionally, they are in majority aware that it may have an impact on their future career development. But in the same time it is also visible, that students may not be fully aware how to attract recruiters, as twitter in this context is underestimated (while Instagram perhaps overestimated). Important information from this research is that majority of LinkedIn users believe that their profile should be improved, but they either do not want to or do not know how, additionally majority of students is willing to increase their knowledge in personal brand building, believing that its insufficient, which is reflected on what they upload on their profiles. Despite the fact half of respondents claims that they do know what recruiters are paying attention to on a LinkedIn profile, still only few of them have built an effective profile – as almost half of them does not upload their full resume, accomplishments and practically no one uploads presentations or community involvements. Moreover, students do not engage in sharing their ideas, articles or participate in the discussion on LinkedIn. While research prove, that incomplete LinkedIn profile is seen negatively by the recruiters, as well as not being engaged on professional Social Media platforms.

Usage of LinkedIn has been limited to virtual resume, while idea of LinkedIn is to make both recruiters and candidates more active, students remain passive – without engaging on LinkedIn, as on other SM.

This study proves that young professionals do not effectively utilize SM in building personal brand, and they still lack knowledge in this region. MinVE students are in fact more fluent with SM, but they lack knowledge in digital personal branding.

Various research emphasize the importance of usage of SM for personal brand building and its effects on future career development, while this study presents that students do not fully use the potential of SM for professional purposes. Despite the fact, that users are aware of the consequences of shared content, still they do not seem to be aware of consequences of *not* sharing content – through not managing personal online brand, students may lose the opportunity to enhance their careers,

find interesting job offer or network in professional sense. Users should be informed about the available possibilities that business social networks give and how to use them, with emphasis how to create business profile and personal profile accordingly.

Therefore, students should be educated how to build their personal brand and on which SM, as Instagram (in managerial career path), should never outdo LinkedIn or Twitter.

References

- Burt, R.S. (2009). *Structural holes: The social structure of competition*. Cambridge MA: Harvard University Press.
- Damjanović, V., Matović, V., Cicvarić Kostić S., Okanović M. (2012) The role of the LinkedIn Social Media in Building the Personal Image. *Journal for Theory and Practice Management*, 65.
- Gale, S.F. (2013), In e-recruiting, there's a new "recruit". *Workforce Management*, 92(5).
- Hempel, J. (2013). LinkedIn: How its Changing Business – And how to make it work for you. *Fortune*, 168(1).
- Hill K. (2014, October 9). Beware, tech abandoners: People without Facebook accounts are 'suspicious'. *Forbes*, 2012, <http://www.forbes.com/sites/kashmirhill/2012/08/06/beware-tech-abandoners-people-withoutfacebook-accounts-are-suspicious/>.
- Lewis, S.A, Messina, M.J., Wellington, J.F. (2014). *Social Media Survey of Marketing Students*. Marketing Management Association.
- McCorkle, D.E., McCorkle, Y.L., (2012). Using LinkedIn in the marketing classroom: exploratory insights and recommendations for teaching social media/networking. *Marketing Education Review*, 22(2), 157–166.
- McGinley, J.J. (2010, June 17). Well connected. *Money Marketing*, p. 51.
- Peterson, R.M., and Dover, H.F. (2014). Building student networks with LinkedIn: The potential for connections, internships, and jobs. *Marketing Education Review*, 24(1), 15–20.
- Russ, K.R. (2015), Building Professional Social Capital Among Minority Business Students, *Academy of Educational Leadership Journal*, 19(3).
- Struzik, B., (2016), *Idealnego pracownika znajdziesz na... Twitterze*, [http://nf.pl/manager/idealnego-pracownika-znajdziesz-na-twitterze,,54591,1\(26.04.2016\)](http://nf.pl/manager/idealnego-pracownika-znajdziesz-na-twitterze,,54591,1(26.04.2016)).



Jacek Kall

Commercial Mobile Applications in the Context of Brand Creation

Abstract

In the face of the growing popularity of mobile devices (smartphones and tablets), it is impossible to ignore the increasing interest in mobile apps – short for applications. One can even get the impression that more and more managers succumb to the overwhelming “craze for applications”. Yet, if applications are to be used effectively in the process of brand creation, it is important to explore their utility to brand customers at different stages of the so-called “customer journey”. The article discusses objectives that marketing experts may achieve thanks to different applications, and gives an outline of the process of development thereof. This is coupled with an analysis of advantages of various applications (compared to other activities in the scope of mobile marketing) and a presentation of their main shortcomings.

Keywords: mobile application, brand, customer journey

Thanks to mobile applications, smartphone has become a special mobile phone that is no longer used only to handle calls and exchange of text messages. Smartphone usage statistics (*Mobile Audience, 2015*) show that phone calls make only 9% of the time spent using these devices; exchange of text messages makes 7% of this time; the amount of time spent on mobile browsing equals 10%, and the remaining 73% is the time spent using mobile applications. Over 90% of smartphone owners use at least one application between 9:00 to 23:00 during working days. Applications are used to handle certain specific tasks (planning, making

travel arrangements, checking the news, etc.), but also to kill time when there's nothing more interesting to keep one's mind busy. BBDO and ALO studies (*Seven Shades of Mobile*, 2013) show that almost half of episodes of smartphone use (two-thirds of the time spent with the device itself) does not serve any particular purpose – smartphone is just there to “kill time”, exactly as stated above. Studies by Mobile Posse and Phoenix Marketing (2013) also reveal that reaching for smartphone to idle away time is mentioned twice more often as compared to the need for dealing with some particular task. Psychologists observe that the vast majority of smartphone users (especially Millennials, with 60% of them) tend to reach for smartphone rather than do nothing when not involved in any specific tasks. Some say that they turn to smartphones for “reassuring comfort” (*One in six smartphone...*, 2013). In the light of the above statistics, it is hard to be surprised with the fact that the most popular category of mobile apps are those designed for entertainment in its broad sense. According to studies by Flurry (*Game Apps Are No. 1...*, 2014), games take over one-third of the total time spent on using mobile applications. Games constitute also the largest category of free applications to download from Google Play and AppStore.

Brand applications offered by manufacturers or service providers are far less popular. According to JiWire (*Mobile Audience Insights Report Q3*, 2013), only one out of eight smartphone users has some brand applications installed on their device. The author's own studies (Kall, 2016) show that in the case of (for instance) female smartphone users aged 20–40, only one out of three has at least one clothing brand application installed on her device. If companies take advantage of mobile applications to communicate with their customers, these applications are usually used to:

1. **Showcase** the brand's product portfolio – enhancing the brand's **image** at the same time, which does not necessarily contribute directly to the increase in sales. In such case, applications present different products from the company's offer (e.g. car models, smartphone models, etc.) offered under a given brand, or showcase a broad range of products (e.g. clothing brands' apps) of a given brand; the latter are usually downloaded much more often.
2. Increase **sales** – sales apps are offered mainly by retailers, but also by chain restaurants, hotels, airlines, or cinema chains. Mobile apps of some restaurant chains generate even 30–40% of the total on-line

sales, competing effectively with orders placed via desktop versions of their sites.

3. Offer **tips** on how to use, apply, and maintain a given product. This way, mobile apps can become a substitute of hotlines and user manuals, providing users with tips and guidelines, offering them in a more useful form.
4. Establish and maintain **relationships** with customers by e.g. encouraging them to take part in loyalty programmes. However, it needs to be pointed out that not all customers of a given brand are willing to take advantage of such offer. According to studies, two-fifths of smartphone users are not interested in applications integrated with loyalty programmes, although still almost one-fifth of them takes advantage of one at least once a week (*Mobile Content...*, 2015).
5. Provide users with **entertainment** (games). For instance, in November 2012, Mondelez – the owner of Oreo brand, offered a mobile app called *Twist, Lick, Dunk* – with its title based on the famous tagline used in the adverts of Oreo cookies. The game ranked first in rankings in fifteen countries across the world (Sacks, 2014).

It's easy to see that in most cases, branded mobile applications are targeted at current brand customers, with the aim to encourage them to buy a new product, to facilitate the process of purchase and make the stage of product use easier, with the eventual goal to build successful relationships with them. Only game-based applications are addressed to a wider audience, not necessarily connected with a given brand.

Coming back to the idea of “customer journey” (Court et al., 2009), it is possible to attempt to analyse the role of mobile applications at different stages of formation of consumer-brand relationships.

1. **Awareness** – this is a stage where brand owners aim to make their brands recognizable; this is to make consumers who might have been unaware of the existence of a given brand realize that the brand is out there on the market. Only entertainment-related apps (games) may have any impact whatsoever in this context. We can imagine that a consumer unfamiliar with Oreo cookies before installs *Twist, Lick, Dunk* on their smartphone, and the name of the brand becomes embedded in their memory more and more as they keep on playing the game. The only problem is that such brand-specific entertainment application has to compete with hundreds of thousands of other

games. If it is not listed among the most popular apps, the odds for it to play a part in brand awareness building are really small.

2. **Engagement** – this is a stage where brand owners attempt to raise the level: of understanding of their brand’s advantages and of the perceived reliability and attractiveness of the brand. It seems that typical brand applications (information apps, sales apps, ‘how-to’ apps, or relationship building apps) are still of minor significance in this context. It’s hard to expect a smartphone user to be willing to install a mobile application of every brand/product they know to exist only to find out more about their values. It’s actually important to realize that some companies (e.g. Sony, Samsung, Disney) offer a few hundred mobile apps while an average smartphone user uses only 23–24 apps per month, with five most popular of them (in the USA: Facebook, Gmail, Instagram, Weather and YouTube; in the UK: Facebook, WhatsApp, Gmail, eBay and Twitter) take as much as five-sixths of the overall time spent using apps (Forrester Research, 2014). It is hard to imagine a situation where a consumer installs all apps offered for a given market segment before each single purchase (e.g. of a car) in order to acquaint themselves with the market offer – a waste of time, a waste of smartphone storage space, and a waste of (precious) mobile data.
3. **Active consideration** – this is a stage when brand owners focus on provision of information and opinions which might make consumers view the brand in a better light, encouraging them to get in direct touch with the brand (testing). Applications showcasing product values (e.g. a new car or smartphone model, etc.) seem to play a key part at this stage, but let’s remember that they are not able to meet the set objectives alone, without the support of other communication activities. In the case of a consumer who tends to compare various product alternatives – e.g. different car models – actively, a mobile app will be useful provided that this consumer knows a given model exists, is willing to trust a given brand (if only provisionally), and is ready to verify (if necessary) the availability of a mobile app showcasing the car’s values. For many products (furniture, home appliances), the role of dedicated mobile apps may be to convince the customer that the product will fit the environment they live in (applications based on augmented reality, like Amica Mobile or IKEA’s Home Planner). It’s still hard to resist the impression that also at this stage

consumers will turn to applications offered by brands they already know and trust.

4. **Purchase** – once a choice has been made, a mobile app may help turn intentions into action (purchase), regardless of the whereabouts of the smartphone user. If a smartphone user has (for example) chosen the film they would like to watch on a Friday afternoon, Multikino's or Cinema City's mobile app will let them buy the ticket for the showing – regardless of where they are and if they have access to a computer. This also works for purchasing accommodation (especially when made “on the way”), rail or air tickets, or any other product available in on-line shops or offered on Allegro.
5. **Consumption** – managers seem to highly underrate the stage of use of a given product/service, where the role of mobile applications is to enhance user experience – for instance, by providing users with tips on how to make the most of a given product, or how to diagnose any instances of malfunction. Examples of such ‘how-to’ apps include Saeco Avanti, Volvo Manual or Škoda Manual. They function as great substitutes for printed manuals (which tend to be read less and less often).
6. **Relationship building** – this is a stage where brand owners concentrate on assuring their customers that they have made the right choice, aiming to form an emotional bond between the customers and the brand. For example, a mobile app by American Best Buy offers its users a possibility to credit their loyalty card with additional points in exchange for each ‘check-in’ at any of the company's shops. It also offers access to daily special offers at the shop where the smartphone user has checked in. Shell Motorist, an app downloaded over million times, works in a similar way – once the user logs in to their Shell ClubSmart account, they can check the current number of points they've collected and the transactions recorded on their card, and view the current prize offer. It also lets users receive information about special offers, learn more about products offered currently at Shell petrol stations, and locate Shell petrol stations in the vicinity.
7. **Advocacy** – the moment when brand owners wish to make it easier for customers satisfied with their experience with a given brand to share their stories and accounts with others. Here, every brand application, combined with social media or purchase-supporting apps (such as e.g. TripAdvisor, Foursquare, Yelp, or Zomato for tou-

rism or food and drink industry), has a chance to contribute to the increase in the level of recommendation – provided that the experience with a given brand has been positive, of course.

It is quite easy to see that most of the objectives pursued by brand owners through offering branded applications to customers could be just as well met by means of mobile sites optimized – or even designed especially – for mobile browsers. However, business practice shows that companies clearly prefer branded applications over sites. In the case of the American market of mobile advertising, budgets are split between applications and mobile sites in a ratio of 7:3 (*Mobile Content...*, 2015, p. 7–8). So what is it that makes mobile applications so attractive then (Kall, 2015; Kates, 2014)?

First, let's notice that using an application costs far less data compared to using a mobile site, which translates into quicker and smoother interaction – and a better user experience. Moreover, applications can be used to some extent off-line (without Internet connection) whereas mobile sites require permanent network access. When an application runs “in the background”, it may display alerts and notifications – unlike mobile sites. Applications are far more flexible and offer greater usability, which results from direct access to different smartphone features (camera, calendar, geolocation, etc.); also, their interface is usually more attractive and more user-friendly. Applications ensure full integration with social apps, which makes sharing photos, comments, etc. much easier. Application users may also benefit from customized offers and prizes (for instance, in exchange for frequent use of a given app). It's also important to note that it is easier to link and integrate mobile apps with safe payment systems. As a result, as proven by the author's own studies (Kall 2015b, 2016), there are fewer consumers using brand mobile applications compared to the number of those using mobile sites, but the former, having “discovered” the various advantages of mobile apps, are more keen and frequent users of the selected means of staying in touch with their brands than the latter. Lastly, it should be noted that mobile applications feature more advanced analytical tools (also off-line) to measure the frequency and duration of use, as well as to trace the effectiveness of accomplishment of tasks which a given app is designed and has been downloaded for (e.g. shopping).

The main issue to be considered in the context of brand mobile applications is that related to costs. First of all, every application needs to

be developed for different operating systems (including at least Android, iOS, and Windows Phone). The process is not only expensive (several to more than a dozen thousand zloty per each operating system on average), but also time-consuming (taking at least several weeks to complete), not to mention the specialist knowledge and skills it requires. There are also further costs, generated by the need for regular software updates (two-fifths of companies offering brand apps update them at least once a month), as well as by marketing activities aiming to promote applications among smartphone users – and encourage them to use them. The statistics for downloads and initiations of mobile applications – especially branded apps – speak for themselves. According to Mikowska (2014), typical brand applications are downloaded on average over a dozen thousand times in the first two-three months after they are launched, and crossing the number of 20 thousand downloads is considered a major success, while there are still many apps downloaded even less than 500 times. Deloitte's analyses (2013) show that even 80% of mobile applications of British brands is downloaded 1000 times at most. As for the usage of already downloaded apps, studies by Silverpop (2014) show that every fifth application is run only once, and three out of five are used 10 times at most! It is also important to remember that the sole process of designing and developing an app eats up only 20% of all costs, whereas the remaining 80% includes the costs of modification of various processes taking place in the company, and of supporting technology platforms. For example, Hilton Worldwide has spent USD 550 m. for better customer service provided to mobile customers – in order to improve the overall brand experience offered to tourists (Forrester Research, 2014).

Such comparison of the advantages of applications over mobile sites (and the other way round) is a significant component of the key stage of development of mobile applications, which involves finding the answer to the following question: “Do we really need a mobile application?” In the case of many companies, especially those offering services (e.g. legal firms), a mobile site – much cheaper to develop – will be most likely a sufficient solution to solve all the problems their potential customers might face on their “customer journey”. After all, one doesn't need a mobile application to find some address on a map, or to make a phone call to reach the front office (if one e.g. gets lost in a big office building). Therefore, a decision to opt for a brand mobile application needs to be clearly dictated by an argument that the solution is essen-

tial to solve specific customer problems. Mobile app designers have to take three issues into consideration in the process of design (Nicol, 2013): *the context of use* and *the content*, closely related to the former, as well as the matter of *user engagement*. First, it is important to consider when/in what circumstances a given application is to be used (context), and then match it with the right content. Let us use the example of the New York Times' mobile app which adapts the language and the scope of topics covered to the time of the day. In the morning, it offers information such as news briefing, weather forecast, or (if the user is in New York) information about any underground delays. During lunch hours, the displayed news become more 'analytical', and the bottom section features some lighter reading. Each day, the app offers around 50–80 articles from the printed edition of the New York Times, but also some selected articles from other newspapers. In the first week after this paid application was launched (the monthly subscription fee is USD 7.99), it was ranked first among the most often downloaded news apps (Assir, 2014). Engaging users in a relationship with a brand stems from the sole nature of smartphones – the touch-based interface and the intuitive design, as well as the facility of use and the wide range of customization options make mobile apps offer far greater opportunities to build a deep – even near-intimate – relationships with customers than any other tools of digital communication. The very fact of installing a branded application and placing its icon on the main screen of the smartphone is a certain manifestation of one's loyalty towards a given brand.

Getting down to facts, application creators need to highlight the main user advantages of their mobile app. These may be: (1) unique features (e.g. providing real-time information about flight delays, or an e-boarding pass in the case of airline mobile apps), preferably still unavailable for traditional computers (for instance, Coca-Cola's app called "Freestyle" lets the user find all nearby Coca-Cola's machines (touch screen soda fountains) where the user can use the app to prepare a drink based on their own mixture of selectable flavours); (2) an additional bonus a given brand offers only for mobile apps (e.g. apps by hotel offer integrators, such as HRS or Hotels.com, offer special discounts, unavailable when making bookings via PC); (3) entertainment – usually in the form of some game (like e.g. different parts of the "Serce i rozum" game offered by Orange); and (4) – "social benefits" related to either typical possibilities of informing friends of the user's whereabouts ("checking

in”) and sending photos to them, or some opportunities in the scope of the so-called social gifting.

At the stage of application design, it is necessary to define the scope of information about the users of a given app to be collected, so that it is possible to improve the app itself and streamline the process of mobile customer service.

From a marketing perspective (and experts have no doubt that the expenses on mobile application marketing are considerably higher than the costs of development of apps; Eslinger, 2014), four issues seem to be of particular significance: (1) the name of the application; (2) successful download of the app; (3) avoidance of deletion after the first use of the app, and (4) maximization of the number of initiations and of the time spent on using the app.

As for the name, it is generally reasonable if it refers somehow to the name of the brand, and alludes to certain features or benefits the app offers at the same time. There may be problems with branded names of symbolic, evocative, or arbitrary nature (based on e.g. names of cities, animals, or historical figures) because in such cases, there can be many different applications found under a given name (it’s easy to see when we try to search for an application named, for instance, ‘Żywiec’).

In order to achieve a high number of downloads, it is not enough to make sure that the app is offered at the most popular app marketplaces – it is necessary to let the customers of a given brand know it is available, and to encourage them to install it on their devices. This can be done by adding appropriate information about the app on the website of a given company or brand, or by displaying QR codes across company shop displays, on product packages, or across print ads in the traditional mass media. One way to reach customers directly can be to use a link to the app and add it to e-mail messages sent by Customer Service Centre, place it on business cards, or across the company social media channels (brand fanpage). It is also important to make sure the app is reviewed on websites dealing with smartphones and mobile technologies, to join in the discussions about the app on certain Internet forums, and to upload a video to the brand’s YouTube channel to show how to use the app in practice.

In order to make sure that the app is not uninstalled after it is first used, it is necessary to work in great detail on the first stages of its development (what problems does it address? what benefits does it offer?) and to test it thoroughly with respect to its performance and functionality. The frequency of use, in turn, will depend on the satis-

faction of the app's users, which is why it is reasonable to supplement "bare" data such as the frequency of use of the app, the time spent using the app, the intervals between subsequent initiations, etc. with additional questions addressed to users (Ng, 2013), concerning their satisfaction with the app (is it user-friendly? is it easy to find the information you need? is it reliable?) and their perceived impact of the app on the brand's image.

To conclude, it would be good to reconsider Kates' observation (2014, p. 96): "apps have the potential to be a brand's most impactful use of mobile technology and represent a great opportunity for your brand to deeply engage customers on the go and in different and unique ways."

References

- Assir, F. (2014). We Imagined The App As a Person At a Bar. *Fast Company*, October.
- Court, D., Elzinga, D., Mulder, S. and Vetvik, O.J. (2009). The Consumer Decision Journey. *McKinsey Quarterly*, 3.
- Deloitte (2013). *The Deloitte Consumer Review: Beyond the Hype – The True Potential of Mobile*.
- Econsultancy (2015). *The Quest for Mobile Excellence: Quarterly Digital Intelligence Briefing*. London.
- Eslinger, T. (2014). *Mobile Magic: The Saatchi & Saatchi Guide to Mobile Marketing*. New Jersey: Wiley, Hoboken.
- Forrester Research (2014). *Predictions 2015: Most Brands Will Underinvest in Mobile*, 11.
- Game Apps Are No. 1 for Amazon, Apple and Google* (2014). <http://www.emarketer.com/Article/Game-Apps-No-1-Amazon-Apple-Google/1010739> (30.03.2016).
- Kall, J. (2015a). *Branding na smartfonie: Komunikacja mobilna marki*. Warszawa: Oficyna a Wolters Kluwer Business.
- Kall, J. (2015b). *Aplikacje mobilne w budowaniu relacji ze szkołą wyższą*. Konsument na rynku edukacyjnym – przemiany pokoleniowe a marketing szkoły wyższej, 16–17 September. Poznań: WSB w Poznaniu.
- Kall, J. (2016). *Witryny i aplikacje mobilne w komunikacji marek odzieżowych*. Komunikacja rynkowa: Technologia. Relacje. Zaufanie, 14–15 April. Poznań: Poznań University of Economics and Business.
- Kates, A. (2014). Mobile Marketing: Innovation On the Go. In: E. Greenberg and A. Kates (Eds.), *Strategic Digital Marketing*. New York: McGrawHill Education.

- Mikowska, M. (2014). *Smartfonizacja w Polsce 2014*.
- Mobile Audience (2015). Spicy Mobile. February.
- Mobile Audience Insights Report Q3 (2013). JiWire.
- Mobile Content and Activities Roundup (2015). eMarketer. April.
- Nicol, D. (2013). *Mobile Strategy: How Your Company Can Win by Embracing Mobile Technologies*. New York: IBM Press Pearson, Upper Saddle River.
- Ng M., (2013). *Marketers: What's "App" with Your Brand?* Millward Brown Point-of-View.
- One in six smartphone owners use them for purchasing* (2013). <http://www.iabuk.net/about/press/archive/one-in-six-smartphone-owners-use-them-for-purchasing#XSk5rd8XOVkpQWcL.99> (30.03.2016).
- Sacks, D. (2014). Oreo Tags Pop Culture. *Fast Company*, November.
- Seven Shades of Mobile* (2013). BBDO, AOL.
- Silverpop (2014). *7 Key Marketing Trends for 2015 and Tactics for Succeeding in the New Year*.



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The Content Challenge: Engaging Consumers in a World of Me-Formation

Abstract

The aim of this paper is to contribute to the understanding of the influence of the digital world on branding, with a focus on the role of content management and its ultimate impact on the consumer brand relationship. The authors propose that engagement with the online brand community, through social media platforms positively affect the strength of the relationship between brand love and co-creating behaviour and in turn positively affecting co-creation and ultimately brand loyalty, while the brand building behaviour of the employees positively affects the level of online consumer engagement.

Keywords: online marketing, social media marketing, online brand communities, content management, co-creation

Introduction

There has been a plethora of publications, presentations and posts written about the currently occurring paradigm shift from traditional to digital marketing. A distinctive characteristic of the time we are living, working and thinking in is the enormous, unstoppable production of content, surmounting the demand, posing new challenges for marketers but also for the consumers of content to design and absorb this content. A fundamental need as humans seems to be increasingly to promote ourselves, support our beliefs and share our ideas (Zhu and Chen, 2015).

This has found an outlet through the limitless possibilities of the Internet and the social media, creating a stream of “me-formation”, to take the term proposed by Rutgers University a step further (Naaman et al., 2010). According to these authors’ research, about half the content posted online is about “me”, sharing of personal information, moments and perceptions through status updates, tweets and photographs, reflecting a modern way to express our identity related need to talk about ourselves. From a business point of view, the same need goes for promoting products, support brand values and share messages funneled to the same digital channels; in the end, the content created, broadcasted and shared on the Internet is overwhelmingly much and ultimately creates a digital noise that influences the behavior of the receiver. Readers/consumers/users and platforms (like Google or Facebook) are now struggling to find the ways to sort out what is really interesting and relevant, and standards are quite different than in the analogue world.

The purpose of this article is to address the key issues related to the ways brands can thrive in the digital world and how marketers should adjust their mindset and practices to embrace the impetuous streams of change. In times where new paradigms are introduced, companies cannot afford the insecurity felt with the new status quo, but have to adjust timely and effectively. Lamentably, research findings reveal that the integration of traditional and online marketing is not achieved by the majority of brands, and professionals struggle with existing organizational structures that jeopardize the evolution. Given the urgency and practice relevance of these issues, the authors of this paper have deliberately chosen an inductive approach by relating to practical cases first keeping a focus on the practical dilemmas of contemporary marketing before theoretically synthesizing and conceptualizing.

When it comes to the comparison between traditional and digital marketing, it is very accurate to talk about a shift in focus: beyond the Service Dominant Logic (Vargo and Lusch, 2004) to new era of Co-Creation Dominant Logic. Traditional marketing is mostly about the products/services and the brand, and, even if it is customer-focused, the presence of the company is intense throughout the communication. For example, there is zero possibility to watch a TV commercial with the product being absent, or the brand logo not being presented. Vice versa, however, in the online marketing context, where it is not the strongest one but the most interesting and relevant one that survives, the focus is on what is useful for the readers, what matches their interests, what type

of content they want to consume and what engages them. For those dedicated to online marketing, first come the readers' appetite and habits and then the content creation process intending to achieve congruence between their needs and the brand messages (Zhu and Chen, 2015). This is why online users might see kitten videos on a fashion brand Facebook page, tips on how to keep the car seats clean on a car dealership's blog, or inspirational quotes on a consulting firm's Instagram profile.

Content as a Product

In the digital marketing vocabulary, content is anything posted on websites and social media – from blog posts to status updates and from 'selfies' to the bucket challenge video series. Almost everyone is a content creator, everybody has something to share, people, pets, NGOs, celebrities, brands and those on the professional side tend to create more elaborate, expensive and exciting material. At the beginning of the Internet times, the best content was the most visible one, a kind of digital fairness and justice due to relevant scarcity of supply. But, due to the immense production of content, today, getting a share of voice online is neither easy nor straightforward although strokes of luck still occur. In most cases however, it is the result of thorough marketing research, meticulous planning and precise, consistent execution, on a daily or even hourly basis.

Drawn from the examples mentioned above, what a brand will post on their online pages is not always self-explanatory; otherwise what is the use of kittens for a fashion retailer. But, in this battlefield for attention and engagement, content becomes as important as the product itself, whilst not constrained by the narrow limit of the product category. For example, Red Bull has built an extensive strategy based on content creation, in the extreme of dedicating a website to content dissemination alone (<https://www.redbullcontentpool.com>), while GoPro is based on user's video sharing through its YouTube channel. Those brands and many more, invest their resources in creating and distributing content as they depend on it, content that is closely or loosely related to the product itself but is exciting and eye-catching enough to invite users in an exchange with the brand. Interestingly, on both brands' Facebook pages the presence of promotional material is very discrete and subtle,

while (or therefore) user engagement is very high. According to Smart-Insights.com (2016), the 70:20:10 can prove itself very useful for content management:

- 70% of the content created by a brand should target brand reputation, therefore be compatible with the users' preferences and shareable;
- 20% of the content created should be more premier content –and more costly, designed to attract new audiences, like viral videos or infographics;
- 10% of the content should be promotional, technical or more “risky”.

One could ask: “Why don't we just skip the 90% of the content and publish only what is really useful, and sales related, for our brand”? The answer is: Because of the nature of the Internet, the search engines and the social media algorithms, to start with. Google, Facebook and other social media platforms select their organic (meaning not paid) results based on some signals of relevance and significance. For the search engines, the reputation and authority of the source and the structure and keywords of the content indicate how high in the ranking page a result should appear. By the same token, Facebook selects what to present on a users' timeline based on their interests, previous interaction with the type of posts and signs of engagement with the page, and Instagram just adopted a similar rationale. Therefore, to build authority and reputation and to trigger engagement, a brand has to maintain a consistent online presence by frequently producing large volumes of content (Ashley and Tuten, 2014). In this aspect, the 70% of this content should be easy to be liked and shared, in order to serve as the signal of engagement that will fuel organic reach. Paramount in this context, however, is to build a relationship between the user and the brand, nurture a bond of trust based on common interests and ultimately communicate the brand personality and values. Given that promotions and offers represent a 10% of the optimal content distribution, the main objective of content strategy is related to the building of the brand and the development of a like-minded community. The brand characteristics and values congruent with those of the online consumer are the compass while crafting the content strategy, and different types of media, tone of voice and themes are selected to highlight what the brand stands for. From this perspective, a fashion retailer that maintains a friendly, human and/or animal loving profile will find the impact of kitten videos very useful; the car dealer that builds a professional, authoritative image will benefit a lot

from posting cleaning tips about car seats and a consulting firm posing as inspirational, innovative and forward thinking has a lot to win from quotes on Instagram.

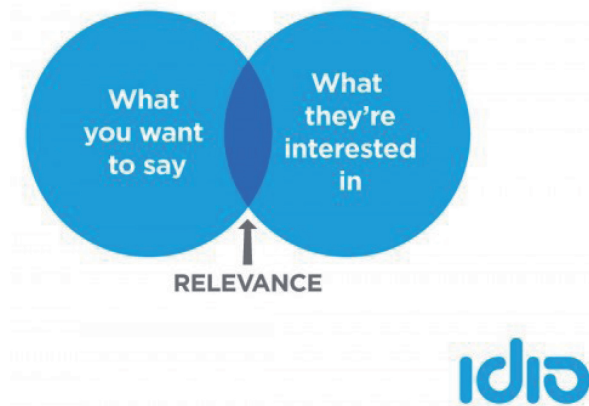
As a separate strategic field, content management has targets and objectives on its own, measured in terms of conversions, engagement, repeated visits on the website and relevant metrics to quantify whether the users approved the content or not. The aforementioned disconnection of content from the product itself opens new horizons of creativity and allows marketers to craft new strategies that will truly appeal to and connect with the users, at a more intimate and, therefore, sustainable level. As an example from professional practice, in the case of a designer of exclusive handmade knitwear, a content strategy is built around a novel, the story of a woman that personified all the values and beliefs of the brand, posted on a weekly basis on the website and shared on the social media. As time went by, users tended to return to the website looking for the new chapter of this story, while new ones entered the community, trying to catch up and from a point on the content “ignited” and start producing a stable stream of loyal visitors, and social media engagement. This tactic, exclusively based on content with no use of any other marketing tool, boosted both, the website traffic and social media reach and engagement drastically and, most importantly, planted the seed to create a strong emotional bond between the brand and the women that saw themselves in the story of the brand persona. When the final chapter was published, the content was re-purposed as an e-book with an option for customization with readers having been called to shoot short videos with their favorite parts of the book and share them online under a specific hash tag and new, potent writers were invited to share their own novels, as a follow up. This whole effort was very visibly successful not only in terms of website traffic and engagement, but also in awareness that led to new retail partnerships and ultimately to better sales for the collections, although not a single photo of clothes was used in the entire campaign.

From Target Groups to Audiences

At this point, it becomes clear that self-referential, promotional, “me-formational” content, when published from brands, will not be appreciated much in the online arena. But in an over-crowded, saturated online

environment, the question then arises as to what content is good and relevant enough to make it to the strategy? The answer is out there, in the mind of the existing and potential consumers, in the preferences, habits, needs and fears of our personas. Exactly as in traditional marketing, identifying market segments and target groups is the cornerstone of every strategy, including online marketing and content management. In the digital context, personas are built in terms of content they consume, types of media they prefer, social media behavior and themes they engage with. As Figure 1 illustrates, understanding what consumers are interested in and where their interests converge with the brand messages is the starting point for crafting a relevant and effective content strategy.

Figure 1. Creating relevant content



Source: <http://contentmarketinginstitute.com/2015/04/data-engagement-conundrum/>.

In his book *Content Inc.*, Pulizzi supports that “the absolute best way to start a business today is not by launching a product, but by creating a system to attract and build an audience. Once a loyal audience is built, one that loves you and the information you send, you can most likely, sell your audience anything you want” (Pulizzi, 2015, p. 18). In this revolutionary approach, an important truth about content marketing is revealed: audiences are valuable assets and sources of competitive advantage with multiple benefits, expanding from the building of a strong brand to the higher ranking in search engines. The keyword in this relationship is trust, referring to honest content creators that respect their

audience and commit in creating high quality content. Beyond the single transactional objective of selling, however, an authentic approach must be pursued in every interaction with the audience that gradually turns into a brand community. When achieving a level of active engagement with this community and a desire to participate, these audiences start to actively protect the brand's authenticity, behave as advocates and accept the brand as a part of their social identity (Kaufmann, Loureiro, Basile and Vrontis, 2012). In this virtuous circle of trust, authenticity and mutuality, members/users become more familiar with the brand, more receptive to product suggestions. According to Google's report (2014), people who engage with a brand on social media daily were likely to make twice as many purchases from that brand than someone who engages only monthly.

Consumers and Communities

The idea of an audience in the social media/online context implies the existence of a community and a joint action of sharing and exchanging, among the members and the brand. Sharing in particular is an inherited trait of the social media and a subject of research and extensive analysis. Research findings show that there is a significant difference between the psychologies of liking a piece of content and sharing it, meaning, for example, to re-tweet it, repost it etc. While liking is a typical, low-involvement sign of approval, sharing means to endorse and adopt the content. People who share content are motivated by personal, intimate needs, like expressing themselves, identify with something, and support whatever matches their existing or desired identity. Each share is a message to the user's network of friends and acquaintances and to the entire community, a confession about personal beliefs and values. What we choose to share and even what we choose not to signifies our identity (Schaefer, 2015).

Regarding sharing as a psychological statement makes it easier to understand why users do not engage with brand-promotion and sales related content and why financial rewards are a probably necessary but not sufficient condition to support an evergreen brand community (Ind et al., 2013) nor to produce clearly measurable benefits (Schulze et al., 2015). Community members are seeking for meaning, a feeling of belonging to a group that is distinctive reflecting the strive for a social

identity backed up by trust and commitment (Casalo et al., 2008). They are looking for those intrinsic rewards that will keep them involved in the co-creation process for a long time (Cherif et al., 2016; Ind et al., 2013). In the context of an online community, members have a great tendency to go beyond their personal character identity (i.e. identity related to a person's individual sense of self) and to develop a social identity, that is, an individual's self-concept that derives from the knowledge of being part of a social group (Facebook brand fans). Findings show that social identity also includes the emotional significance involved in that membership relating, for example, to the attachment to the group and feelings of belongingness (Vernuccio et al., 2015) to enable stronger emotional ties with the brand itself.

Interestingly, a review on recent literature in the field of online communities reveals that latter behave in the same manner as offline communities (Dessart et al., 2015). A brand community is essentially constructed on a set of relationships that community members develop with the brand, the product, the company (marketers) and other customers. As opposed to initial models of brand communities which assumed only relationships between consumers, the customer centric model considers the relationships among all elements involved in the brand community. Members of the community can play the role of the support service department of their companies, essentially by helping each other and fixing each other's problems with the brand. They can also be the brand's advocates in defending the borders of the brand as well as evangelists trying to make desirable impression on outsiders. Members of a brand community can be an excellent source for innovation and product improvement because they are highly attached to the community and the future prospects of the brand matters to them (Habibi et al., 2014).

Thanks to the intrinsic, participatory benefits of belonging to a community, engagement is equally induced by utilitarian or hedonic brands (Vivek et al., 2014) and it can be translated into increased loyalty to the brand (eg. Cova et al., 2007; Casalo et al., 2008; Dessart et al., 2015; Kaufmann, Loureiro, Basile and Vrontis, 2012), the holy grail of every marketing effort. Therefore, if online brand communities are related to brand loyalty, strong emotional brand relationships and positive word of mouth, they become a most desirable asset for the brand and an important target to pursue. This is the reason why new marketing roles, like that of a community manager, have lately emerged as an answer to this new challenge imposed to marketers by the new digital world.

The Emotional Factor

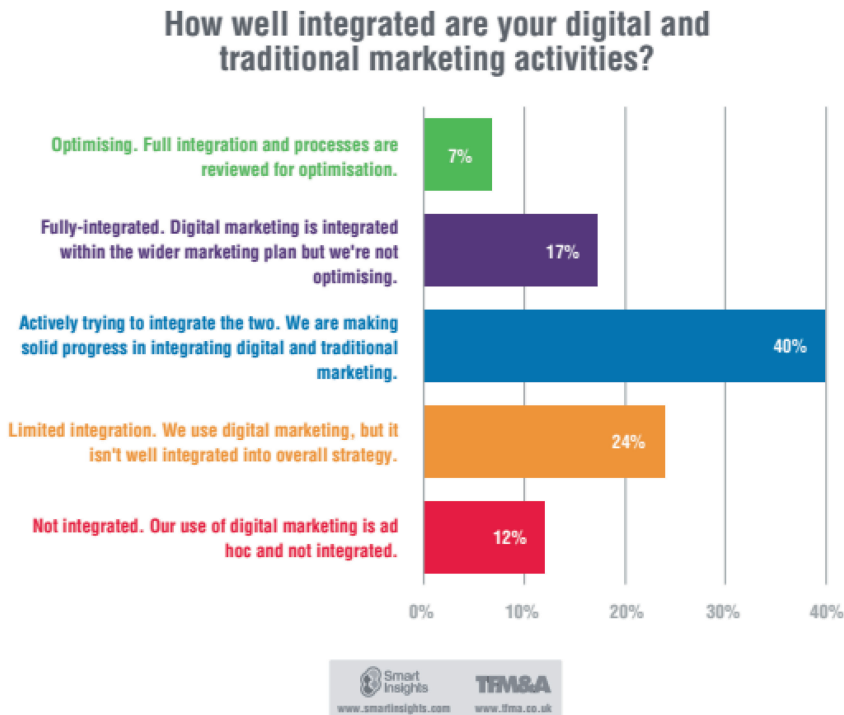
In this context of sharing as a social act and a personal statement, valuable, shareable content is self-expressive and unique. Content has to be so incredible/sad/awesome/beautiful/intelligent etc. (Schaefer, 2015), it has to have an emotional impact on the reader, and consequently to its network, otherwise it will perish. On the other hand, well established traditional practices, like coupons and sales promotion, even if they briefly boost the reach, cannot add value in the long term, in fact, they are not considered to be good practices in the online world, challenging some strong beliefs of old school marketers (Ind et al., 2013; Schaefer, 2015). Similarly, publishing leaflets, product information and store images might seem like a good tactic for the ego of the brand manager, but it will have minimum impact on the online brand strength. Here lies the essence of the discussed paradigm shift, as mentioned earlier: the focus is on the users and their emotions and triggering their engagement. If they will be somehow moved, so will be the content.

“It sounds too theoretical”, a skeptic might say. On the contrary, sharing content is very closely related to brand performance- in terms of higher awareness and reputation, and finally sales. As every marketing practitioner knows, consumers are cautious and sometimes suspicious to messages broadcasted by the marketing departments preferring instead to trust peer recommendations. To put this in numbers, following eMarketer’s report, 70% of consumers state that they are more likely to make a purchase based on a friend’s social media updates (eMarketer.com, 2014). In other words, the more the content of a brand is shared, the higher the possibilities for the brand to be selected by the peers of the sharer.

In the context of a holistic marketing approach and an integrated marketing strategy with synergies between online and traditional practices, the emotional factor derives from the brand personality and values being congruent with those of the consumers. To return to the Red Bull example, the brand personality is communicated as active and fearless, so the emotions triggered by the content are awe and excitement. On the other hand, Pandora Jewels is a more intimate brand; consequently their content is sentimental and romantic. In this manner, the brand perceptions are strengthened through content management and a coherent, more comprehensive brand image is communicated. Tactics used in online and traditional marketing differ significantly in terms of ap-

proach, objectives and execution. But, like the different instruments in an orchestra work together and give a contribution to the outcome, traditional and online marketing practices should be combined in a joint brand building effort. It has been reported that traditional branding approaches focused on unique selling propositions have become outdated (Gobe, 2001, in Schmitt, 2012) and, although very effective as to brand awareness (Schmitt, 2012), they cannot produce the desired results when it comes to building strong brand relationships (Burmann and Zeplin, 2005). For this to achieve, the participative nature of the Internet and social media encourage ongoing interaction between the consumer and the brand story throughout the day, which can deepen consumer–brand relationships, help marketers uncover common themes in consumer feedback, and persuade consumers to engage with online content (Murdoch, 2009). Integration of traditional and online marketing in a com-

Figure 2. Online and offline marketing integration



Source: <http://www.smartinsights.com/managing-digital-marketing/marketing-innovation/marketing-trends-2016/>.

mon strategy is, therefore, the key for seamless communication of the brand messages that will award the organization with full benefits occurring from the synergy among the different channels (Jucaitytė and Mašpinskienė, 2014).

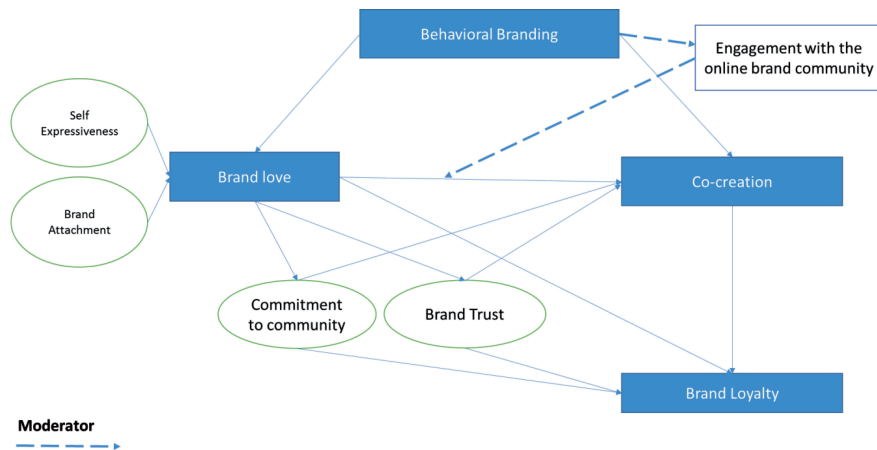
However, according to a recent survey conducted by SmartInsights.com (2016) only 24% of the participating companies claim to really integrate traditional and online marketing. The majority is actively trying to, but the main barrier to integration is a lack of communication among the responsible teams and the lack of a common strategy.

From this perspective, integration goes beyond marketing and becomes a leadership challenge, an issue of company culture, structure and inter-departmental communication. From the findings of this survey and many more, it seems safe to assume that corporations haven't yet initiated the transition from traditional structural forms to new organizational schemes in order to adapt to the new challenges. Although the literature is compelling and content management is expected to be major marketing trend for 2016 (SmartInsights.com, 2016) the shift in management mindset is not yet attempted, creating a gap between what needs to be done and what can really be done. The role of the brand representatives as active members of a brand community puts their behavior and the extent to which it enhances the brand experience in the spotlight and calls for a transformational approach on leadership, that will motivate them to "live the brand" (Kaufmann, Vrontis, Czinkota and Hadiono, 2012). From this perspective, further research is needed to explore and explain how different leadership styles affect the quality of the participation of the employees in the online brand communities.

Additionally to the role of the employees in the consumer brand relationship, there are indications that active participation in the brand value creation process is related to the emotional bond with the brand (Baldus et al., 2015) and how self-expressive the brand is perceived (France et al., 2015). Starting from an existing model that captures the relationships between the brand love and co-creating behaviour (Kaufmann et al., in press), the authors of this paper propose that the level of engagement with the online brand community positively affects the strength of the relationship between brand love and co-creation (P1). When a strong emotional relationship with the brand pre-exists, and they are engaged with the online brand community in an active manner, consumers are more willing to co-create. In other words, consumers that follow their favorite brands on the social media are more prone to engage

in a co-creating process than those who don't. Also, drawing from the role of the employees as members of the online brand community charged with the responsibility to reciprocate (Gambetti and Graffigna, 2015) it is proposed that the brand building behavior of brand representatives positively influences the level of engagement with the online community (P2). The discussed interrelationships are synthesized in the following initial conceptual framework.

Figure 3. Proposed model



Source: Kaufmann et al., in print.

In this nascent field of online and social media marketing, further research is called for to explore the motives and behavior of consumers in the context of a brand relationship in the digital world, both for online and brick-and-mortar brands. Given the strong psychological aspect and idiosyncratic nature of social media sharing decisions, we propose a phenomenological research philosophy, applying an inductive grounded theory approach that will allow the researchers to build comprehensive conceptual constructs.

As a final note, we posit that content management is significant in the success of any online marketing effort, as it determines the level of engagement with and of the community and especially since it calls for a shift in the marketers' perception of communication. In the context of online and social media marketing, brands have to adjust their messages to the consumers' appetite and move beyond the strict product category boundaries in order to create engaging content. Engagement

depends on the self-expressiveness of the published content and its emotional implications, as sharing is an intimate decision and a statement related to the user's perceived social identity. From this point of view, using the social media as another channel to broadcast product and promotional messages would mean a misuse of the channel and a sign of poor understanding of online behavior. Companies today are looking beyond simply establishing a social presence but are seeking to "get social media marketing right" (Schulze et al., 2015). This, in turn, represents a radical change in structure, leadership and consumer brand relationships on the 'same eye level' to support this paradigm shift.

The digital world is less a marketing hype or a technical achievement. Rather it is a new era that influences all marketing and management aspects to the core and calls for immediate and drastic change on every level, including the perception of the consumer roles as active co-creators rather than passive consumers. In the time of "me-formation", where users float the Internet with personal stories, brands need to be authentic, altruistic, extrovert. Beyond airing self-referential messages, they have to stop talking to customers and start talking with partners. For this step to be made, marketing practitioners also have to move beyond "me", to more collaborative, participative mindset of creating value for everyone and embrace the "we".

References

- Ashley, C. and Tuten, T. (2015). Creative strategies in social media marketing: An exploratory study of branded social content and consumer engagement. *Psychology & Marketing*, 32(1).
- Baldus, B.J., Voorhees, C. and Calantone, R. (2015). Online brand community engagement: Scale development and validation. *Journal of Business Research*, 68(5), 978–985.
- Benmiled-Cherif, H., Kaufmann, H.R. and Manarioti, A. (2016). The influence of brand community on co-creation: A cross national study of the brand AXE in France and Tunisia. *World Review of Entrepreneurship, Management and Sustainable Development*, 12(2–3), 285–299.
- Brand Engagement in the participation age (2014). https://think.storage.googleapis.com/docs/brand-engagement-in-participation-age_research-studies.pdf.
- Burmann, C. and Zeplin, S. (2005). Building brand commitment: A behavioural approach to internal brand management. *Journal of Brand Management*, 12(4), 279–300.

- Casaló, L.V., Flavián, C. and Guinalíu, M. (2008). Promoting consumer's participation in virtual brand communities: A new paradigm in branding strategy. *Journal of Marketing Communications*, 14(1), 19–36.
- Cova, B., Pace, S. and Park, D.J. (2007), Global brand communities across borders: The Warhammer case. *International Marketing Review*, 24(3), 313–329.
- Dessart, L., Veloutsou, C. and Morgan-Thomas, A. (2015). Consumer engagement in online brand communities: A social media perspective. *Journal of Product & Brand Management*, 24(1), 28–42.
- France, C., Merrilees, B. and Miller, D. (2015). Customer brand co-creation: A conceptual model. *Marketing Intelligence & Planning*, 33(6), 848–864.
- Gambetti, R.C. and Graffigna, G. (2015). Value co-creation between the 'inside' and the 'outside' of a company insights from a brand community failure. *Marketing Theory*, 15(2), 155–178.
- Habibi, M.R., Laroche, M. and Richard, M. (2014). The roles of brand community and community engagement in building brand trust on social media. *Computers in Human Behavior*, 37(0), 152–161.
- How to use the power of the 70:20:10 model work to prioritise your digital marketing (2016). <http://www.smartinsights.com/marketing-planning/marketing-models/using-the-702010-rule-in-marketing/>.
- Ind, N., Iglesias, O. and Schultz, M. (2013). Building brands together: Emergence and Outcomes of Co-Creation. *California Management Review*, 55(3), 5–26.
- Jucaitytė, I. and Maščinskienė, J. (2014). Peculiarities of Social Media Integration into Marketing Communication. *Procedia-Social and Behavioral Sciences*, 156, 490–495.
- Kaufmann, H.R., Loureiro, S.M.C., Manarioti, A. (in press). Exploring Consumer-Brand Relationships: a synthesized model exploring the relationship among behavioural branding, brand love and brand co-creation. *Journal of Product and Brand Management*.
- Kaufmann, H.R., Loureiro, S.M.C., Basile, G. and Vrontis, D. (2012). The increasing dynamics between consumers, social groups and brands. *Qualitative Market Research: An International Journal*, 15(4), 404–419.
- Kaufmann, H.R., Vrontis, D., Czinkota, M. and Hadiono, A. (2012). Corporate Branding and Transformational Leadership in Turbulent Times. *The Journal of Product Brand Management*, 21(3), 192–204.
- Marketing Trends for 2016 – will we be in a post-digital era? (2016). <http://www.smartinsights.com/managing-digital-marketing/marketing-innovation/marketing-trends-2016/>.
- Murdough, C. (2009). Social media measurement: It's not impossible. *Journal of Interactive Advertising*, 10, 94–99.
- Naaman, M., Boase, J. and Lai, C.H. (2010). Is it really about me?: message content in social awareness streams. The 2010 ACM conference on Com-

- puter Supported Cooperative Work, 6–10 February (pp. 189–192). Savannah: ACM.
- Pulizzi, J. (2016). *Content Inc: How entrepreneurs use content to build massive audiences and create radically successful businesses*. McGraw-Hill Education.
- Schaefer, M. (2015). *The Content Code: Six essential strategies to ignite your content, your marketing and your business*. Library of Congress Cataloging-in-Publication Data.
- Schmitt, B. (2012). The consumer psychology of brands. *Journal of Consumer Psychology*, 22(1), 7–17.
- Schulze, C., Schöler, L. and Skiera, B. (2015). Customizing social media marketing. *MIT Sloan Management Review*, 56(2), 8–10.
- Social commerce roundup (2014). http://www.emarketer.com/public_media/docs/emarketer_social_commerce_roundup.pdf.
- Use Data to Help Your Engagement Conundrum (2015). <http://contentmarketinginstitute.com/2015/04/data-engagement-conundrum/>.
- Vargo, S.L. and Lusch, R.F. (2008). Service-dominant logic: continuing the evolution. *Journal of the Academy of marketing Science*, 36(1), 1–10.
- Vernuccio, M., Pagani, M., Barbarossa, C. and Pastore, A. (2015). Antecedents of brand love in online network-based communities. A social identity perspective. *Journal of Product & Brand Management*, 24(7), 706–719.
- Vivek, S.D., Beatty, S.E., Dalela, V. and Morgan, R.M. (2014). A generalized scale for measuring consumer engagement. *Journal of Marketing Theory and Practice*, 20(2).
- Zhu, Y. and Chen, H. (2015). Social media and human need satisfaction: Implications for social media marketing. *Business Horizons*, 58(3), 335–345.



Wiktoria Przybylska

Creating Food Brands in the Digital Era

Abstract

Creating a food brand in an information society requires adapting the brand communication to the needs of the potential customers and the channels where such customers may be, which is why on-line brand communication is so important. In order to teach a customer “who” a given brand is and “what” it does, it is reasonable to refer to brand resonance pyramid and focus first on shaping the brand identity by means of obligatory instruments (brand name, graphic mark) and optional instruments (symbol, colour, slogan). Then, it is important to impart meaning to the brand using semiotics that may take advantage of innovative on-line brand communication tools and help develop certain connotations, making the brand a culturally significant creation. The last two steps involve shaping reactions and relationships of the brand with its consumers, which is now usually based on such forms of marketing communication as social media.

Keywords: brand creating, food brand, Internet, e-marketing, marketing communication

In the light of the development of today’s information society, a significant change has affected not only the market, but also the way brands communicate with customers. It’s not enough to create a good product and put it on a shop shelf – in order to create a good food brand, reach potential consumers, and stay in their memory, it is essential – and surely reasonable – to follow a well thought out on-line brand communication.

Introduction

Familiarity with consumer behaviour is a crucial to creating a strong brand – according to de Chernatony (2003), consumers decide to buy from brands that satisfy their needs as much as possible. However, these needs tend to change quite dynamically. Over the last 10 years, the nutritional awareness of consumers has increased to a considerable extent; however, it doesn't mean that food products considered less healthy are not bought, but rather that the need a given product satisfies or the stimuli determining purchase decisions change, and high-calorie and unhealthy food is still bought – yet, not for rational reasons, but under the influence of emotions (Proszowska, 2014). Emotions, invoked by clever branding strategies, make customers reach for Coca-Cola thinking of it not as a “brown fizzy liquid”, but “the most friendly and ubiquitous drink in the world” (Rubinstein and Griffiths, 2001, p. 395); this way, brands become collections of meanings and associations, making the process of purchase-related decision-making easier. But in order for this concept to work, it is extremely important to work out a coherent brand strategy – one that is well-adjusted to certain target audiences (diversified in terms of preferences, sentiment, needs, and desires) (Kotler and Keller, 2012).

'Designing' a Food Brand

People involved in designing brands need to teach their potential customers who their brand is and what it does (in other words, how a product of a given brand can help them), and what are the benefits to be gained if they choose a given product (Kotler and Keller, 2012). “A strong brand is first born in the consumer's mind” (Tkaczyk, 2011, p. 9) and in order to implant it there, it is necessary to take appropriate steps. According to the model and the brand resonance pyramid presented by Keller (2001), these steps should cover four stages: the first is to build a brand identity that will answer the question of 1) “who the brand is?”; the next stage should involve generating a brand meaning to answer the question of 2) “what the brand is?”; this will, in turn, make it possible to build relationships and answer the question of 3) “what consumers feels when they think about the brand?”; the last step covers customer-brand relationships, i.e. 4) “what about you and me?” (Keller, 2001, p. 5).

Brand identity

Shaping the identity of a food brand should start from its essence. There are three instruments of significance to shaping the essence of a food brand. They are: 1) obligatory identifiers (brand name, graphic mark), 2) optional identifiers (brand symbol, colour, slogan) (Górska-Warsewicz, 2008, p. 9), and 3) elements of brand support, related to direct or indirect support for the brand (Kall, 2005, after: Górska-Warsewicz, Świątkowska and Krajewski, 2013, p. 207).

One of the most important obligatory identifiers is brand name, making it possible to identify a given product. Brand name should be formulated in a way to reach the right target audience. A good example is Nestlé Fitness cereals, whose name refers to physical activity (fitness) and being slim (fit), addressing the target group consisting of young women who want to lose weight or keep fit. This kind of name (semantic/descriptive) alludes to product qualities and attributes, and carries a direct motivation through the meaning of words (Górska-Warsewicz et al., 2013). Other types of names are: suggestive (including meaning-related connotations, e.g. Łaciate meaning ‘spotted’ – like a cow), symbolic (communicating through symbols, e.g. Haribo), associative (evoking positive associations, e.g. Bakuś), arbitrary (coming from the name of the founder), and artificial (associations that result only and exclusively from marketing activities, e.g. Zielona Budka) (Górska-Warsewicz et al., 2009).

An equally important feature is brand graphic mark and elements of brand visual identity, which constitute the foundation of on-line marketing communication as a collection of visible or symbolic features that determine brand value as seen by buyers – which is why they should be coherent with the essence of a given brand, and constitute its visual reflection. From the perspective of on-line tools and food brand building, a clear and understandable graphic mark that would let customers identify the brand and associate its on-line activities with its physical product is especially significant. A logo on the food market is usually a combination of the graphic mark and the name, which makes it an easy-memorable textual-visual composition (Górska-Warsewicz et al., 2013). A logo is most of all an element of an obligatory identifier of food brands, being a graphic mark, a systemic element, which – according to Tkaczyk – is referred to as an icon in the context of brand building, i.e. a visual representation of a given brand (2014b). The founder of

a given brand may also be an icon, but in the case of food brands, the founder is rather an element of optional identification, being a brand symbol.

A slogan, another optional identifier, is yet another important element shaping a food brand. The aim of a slogan – a short sentence in a present tense – is to convey information that will enhance the brand's position and highlight the benefits gained from using this brand's product (Górska-Warsewicz et al., 2013; Kall, Kłęczek and Sagan, 2006). A slogan should refer to associations with product category, target image, type of user, or functional benefits, which makes it helpful to potential customers in understanding a given brand better, i.e. what a given brand is and what makes it different from its competitors (Górska-Warsewicz et al., 2013; Kall, Kłęczek and Sagan, 2006). Food brand slogans may communicate e.g. quality (“Podaj to, co najlepsze” (“*Serve what's best*”) by Tchibo), functional aspects (“Naszym sekretem jest ciasto” (“*Our secret is in the dough*”) by Telepizza), needs (“Aż pić się chce” (“*Feeling thirsty?*”) by Nałęczowianka), or refer to the target group (“Nie tylko dla dzieci” (“*Not only for kids*”) by Kinder Bueno) (Górska-Warsewicz et al., 2013, p. 211).

Colours, elements of optional identification, are just as important instrument of brand creation as brand slogans or symbols. According to Wheeler, the decision to purchase a branded product is made based on colour in as many as 60% of cases (2010, 128), and once selected colours will constitute a vital element of on-line marketing communication strategy – therefore the adopted colourway should be well thought out and coherent with the package of a given product to make it better identifiable. By assigning a colourway to a brand, we also assign a certain meaning to this brand and to its products; if this meaning is misconceived, it may work to the disadvantage of the brand (Tarczydło, 2014). Not only colours, but actually all components of the visual identification of a brand should be analysed and adapted according to the values and associations the brand wants to be associated with; most of all, however, they should be founded on an idea, and ‘icons’ should act only as manifestations of this idea (Tkaczyk, 2014b).

The success of a food brand depends not only on matching its market offer to the needs of buyers, but also on matching PODs (optimal points-of-difference) with POPs (points-of-parity), which is possible after learning of the qualities and profits that may appear attractive and unique for potential customers; this is why a constant monitoring

and following of trends in nutrition is so important. Such trends largely determine the main messages companies 'send' to their target audience, and the way a given product is positioned. An example of a mismatch between marketing communication and its target audience's needs is Lean Cuisine; the brand appeared on the market in 1981 and in the following 30 years has become a global leader in the category of healthy food, basing its message on such key notions as "low-fat" and "low-calorie". However, in the last 5 years, there has been a 25% drop in the sales of the brand's products. The drop in sales affected also other brands that advertised their products as "dietetic" and "light"; in 2013, such brands suffered a 11% decrease in sales (Kowitt, 2015, p. 69). Consumers have simply ceased to view calorific value as a determinant of a healthy lifestyle. A new discourse has come to light, where the most common connotations of health have become words like "natural", "organic", or "GMO-free".

Another step in creating a strong brand is to endow it with personality, preferably characterized by permanence and attractive to customers, keeping them interested, and functioning as an essential element in building relationships with customers (Kall, 2001; Kozłowska, 2005). No wonder that this strategy is often used in food brands' marketing activities aiming to develop a brand personality through anthropomorphisation (endowing objects with human traits – like in the case of Berlinki brand), personification (presenting phenomena, objects, or abstract ideas in a human form), and creation of image of the target audience of certain communication, which makes personality traits ascribed to a brand more lasting and unique. Endowing a brand with human qualities is possible through a feature of the so-called brand heroes, who help increase the emotional engagement and enhance the bond with the brand, and will also ensure the brand the so-called 'brand depth' (Tkaczyk, 2014a). This is proven by the reactions to the end of Tesco's campaign featuring two characters named Henio and Krysia; the comments were clearly dominated by disappointment, the people following the brand on Facebook and in other social media used to write that they would "miss the two", which only shows how strong the bond between these brand heroes and brand customers was (Tkaczyk, 2014a). Brand heroes can be both real or animated people (like in the case of Henio from Tesco's campaign) and more abstract characters such as Yellow and Red (M&M's), or even ideas (Mały Głód (Small Hunger) created by Danio brand) (Tkaczyk, 2014a).

Designing brand meaning

A brand at its initial stage is free from any connotations, devoid of sense, and builds its identity gradually over time, and the promotional activities and symbols “tacked” to it impart meaning thereto.

According to Polak (2015), a product becomes a brand by way of semiotics – the study of meaning-making, sign processes, and meaningful communication. A product, together with its physical attributes and visual elements, is semantically empty, so it is only a denotation – a direct meaning, while a brand has a culturally imparted meaning, which makes it a connotation. As Polak argues, connotations are a ‘superstructure’ that encompasses meanings associated with a given brand. In order for a brand to become an encoded sign, it needs to relate to social meaning systems that determine the values and lifestyle common among potential buyers (Polak, 2015).

There are eight strategies of creating a connotative system; their aim is to shape a system of meaning of a brand on the basis of socially understandable systems of meanings. These include: use of cultural dissonance (e.g. a conflict between the consumption style and the expectations common to a given culture – an example is Żubr with its “*nic nie musisz*” (“you don’t have to do anything”) catchphrase based on the ‘rat race’ culture and on the rejected who failed to keep up with the ideology), reference to mythology (a belief preserved in a cultural group), cultural paradox (e.g. Frugo and “*owoc kultury*” (“fruit of culture”), breaking the stereotype of a typical ‘chav’), association with a ritual (e.g. “*Merci*” as a way to say ‘thank you’, or Knoppers – *elewenses* eaten “half past nine in Poland”), reference to cultural opposition (use of cultural opposition, i.e. combination of opposing elements such as beauty and ugliness in a series of videos presenting the romance of *Mały Głód*), transfer of attributes to cultural level (i.e. transfer of a physical attribute to cultural level, like in the case of Milka and its connection of sweetness (physical attribute) with tenderness), identification with the character of a nation (basing the system of meaning of the brand on typical qualities of a given nation – like in the case of the series of *Malma* videos based on ‘Italianness’), and intertextuality (Danesi, 2008; Polak, 2015, 40) (i.e. use of other texts, memes, or advertising conventions – like in the case of Tesco and its viral video parodying priest *Natanek*).

The strategy of creation of a connotative system – and of brand meaning at the same time – is effected by means of marketing communication.

According to gemiusAdMonitor, the most often used tools of on-line marketing communication are adverts – almost 40% of the on-line market in Poland belongs to food companies (Gemius Polska, 2014). But we can also see other innovative forms of communication appearing more and more often; these include mobile marketing tools, advergaming, or QR codes.

QR codes are used increasingly frequently in the food industry – mainly to provide information. And this is not surprising; QR codes offer quick and convenient access to information, which is especially important when shopping for food. A notable example of a brand using this tool is Frosta who placed QR codes on their frozen products. Customers can use their mobile phone (with connection to the Internet and equipped with a photo camera) to be redirected within seconds to a website with recipes based on Frosta products, which makes customers able to complete all the ingredients necessary to create a dish to be served with a given Frosta product (Wirtualnemedi.pl, 2011). Advergaming, in turn, places a given product in a game setting to showcase the product's advantages, to present its application and other information about it, and since the exposure to and interaction with identification elements of a given brand is longer than that offered by traditional advertising, the identifiability of and familiarity with the brand is also better. This method has been used quite often by brands like McDonald's, Chupa Chups, and Nesquik.

The stage of brand meaning building may also benefit from application of viral marketing activities. One of the most effective forms of viral marketing is video format, whose popularity is to increase in the nearest years to come – as shown by data published by Cisco (2015), video clips will constitute 69% of the total on-line traffic in 2017. When taking advantage of this form of communication, it is necessary to remember that even 95% of Internet users who share some content do it because they view such content as inspiring to others, something that may increase their knowledge or awareness of a given subject (SocialPress, 2015). Moreover, in order to boost the chances for viral spread of some message, it's important to bear in mind the basic principles that will increase the willingness of Internet users to share our content. A content likely to be shared should: 1) stir up emotions, 2) present a fascinating story, 3) be common, i.e. refer to the society and make it possible for the recipients to identify with the brand's message, 4) be useful – practical (SocialPress, 2015), 5) be positive, and 6) feature a catchy title (Mediarun, 2015).

An example of excellent use of video in viral marketing is that of Burger King, who used its former brand hero – subservient chicken – in a series of viral videos promoting their sandwich (Chicken Big King) (Burger King, 2014). The idea of the campaign was to use the image of chicken from the past (a man wearing a chicken costume), who was used in another campaign of the brand some 10 years earlier. In 2004, the chicken was ‘enslaved’; there was even a dedicated website with a video stream (webcam-styled) presenting the chicken carrying out various orders of Internet users (simple commands like ‘sit’, ‘squat’, ‘dance’, and so on). In 2014, the chicken became the master of its fate – a strong and rebellious chicken, who didn’t want to be kicked around anymore, and went on to tell others what they should do. The campaign started with a series of posts on Instagram and Twitter, encouraging to visit the 2004 campaign’s website; visitors to the site were welcomed with an “error” and a note saying that the chicken went missing. Internet users were wondering where the chicken could go, and a few days later a video was published on YouTube, showing the chicken’s transformation; in the first week, the video was viewed 8 million times and had 965 million mentions across the media (both traditional and on-line), which translates into a free reach of 17 million dollar worth (Champley, 2014). Burger King’s campaign required considerable financial outlays to create an engaging, fascinating message that would be noticed, stir emotions, and grant response – not always positive, though.

Shaping reactions and relationships between a brand and consumers

It is possible to establish and maintain relationships with customers through marketing communication based on social media. Social media not only offers a space for dialogue between a food brand and its consumers, but also makes it possible to create an emotional bond between a brand and its customers.

One of the types of social media used often by food brands are blogs. Active or passive membership in culinary communities is not only fashionable, but also practical and beneficial to consumers. Blogs offer quick access to various recipes and help their visitors ‘think outside the box’ in their kitchen. From brands’ perspective, blogs are most of all interesting means of advertising, an element of marketing product communication (Sońta, 2014). Using blogs in marketing communication can make

communication more 'spontaneous', lets creating content of a high social sharing potential, grants benefits from the high on-line 'visibility' of the content shared by bloggers (Sońta, 2014), and makes it possible to build a narration through visual appetite that makes the recipients of this narration pay less attention to the ingredients of a given product (Korsmeyer, 1999).

The use of blogging in marketing communication so far has been mostly based on descriptions and reviews of products, sponsored competitions, purchase of advertising space (banner-based campaigns), brand product placement in photographs, patronage, co-delivery of workshops, expert articles, and unique campaigns matched to a given blogger (Kaczorowska-Spychalska, 2015, 56; Sońta, 2014, p. 100). Every form of cooperation is different, which is why in order for such cooperation with bloggers to be successful and lead to a positive brand image, it is highly important to analyse all the potential benefits to be gained from such cooperation and set them against the objectives of marketing activities of the brand (Kaczorowska-Spychalska, 2015). For instance, if some product is featured as an ingredient in a recipe, there is a potential to make a creative product context; on the other hand, however, there is a risk that readers might suspect forced advertising and become sceptical. A better solution is to place a given branded product in photos, but this might be problematic with respect to the issue of evaluation and measurement of involvement from the brand's perspective (Sońta, 2014). When using blogs as channels of communication with customers, it is important to remember about their personal nature – for many bloggers, including those into culinary art, blogging is a very self-reflective and personal form of expression, and this brings them closer to their readers as they go through the authors' ups and downs together, and share their passions and interests; this, in turn, may be used by companies to build relationships with potential customers.

Still, the tool with the greatest potential of building a community around a food brand is Facebook. Facebook offers an option to create a brand's public profile (the so-called fanpage). These profiles let brands pursue different on-line activities necessary to establish communities around them. Using a fanpage, a brand may communicate with its fans by sharing content, taking part in discussions, responding to comments and opinions, but also by 'stimulating' them through various competitions and promotional campaigns (Jasiulewicz, 2014, p. 475). This way, companies build loyalty of customers and brand awareness, and the

activity of an engaged community performs the function of word of mouth marketing since interaction of fans with the brand is also seen by these fans' friends (Jasiulewicz, 2014).

It is important to point out that every activity pursued in social media should be 'matched' to the discourse of the target audience. Every message should be understandable and suited to the target audience's needs, and the possibility to receive instant feedback makes it easy to determine the level of acceptability of the shared content (Kaznowski, 2014). A well-matched content and a good understanding of the needs and motivation of the brand's target group is crucial to becoming highly interactive. The strategy of on-line brand building may also include taking advantage of other social media platforms. Apart from Facebook, other notable social media services are Twitter, Google+, LinkedIn, and Pinterest. Apart from granting access to information to people following our brand profile, it is also necessary to bear in mind that the content shared should not be too 'heavy', but rather simple and containing eye-catching visual elements (Woźniak, 2014). An interesting and well thought out marketing communication may affect the emotions of social media users, and make a brand remembered and 'stay' (together with the right connotations) in consumers' minds – influencing thus their purchase decisions (Woźniak, 2014).

Relationship building requires constant monitoring of the Internet to identify all sources of comments and opinions about the brand. Over 50% of Internet users follow brands' activity in social media, and 36% of them share their opinions and thoughts on brands on-line among their friends (but also on brand fanpages) (Sadowski, 2013). Monitoring of the Internet lets brands: a) find out of the location of their consumers (and adjust their marketing communication and the applied tools to their audience in a better way), b) react quickly to any negative comments, thus avoiding 'social media crises', c) react quickly to comments concerning a given brand, which will make the brand viewed as involved in building relationships with its customers (Sadowski, 2013).

To conclude, in order for companies to be able to communicate effectively with the buyers of their products or services, they need to remain vigilant and analyse market changes and trends regularly (Proctor and Kitchen, 2002), but also adapt their marketing communication strategies on an on-going basis to reach potential buyers in the right place and at the right time. Moreover, it is crucial to follow a well thought out communication strategy, i.e. the way "a brand speaks with its po-

tential buyer” (Tkaczyk, 2011, p. 14), which aims to form a certain relationship between a product and its potential buyer; this relationship should be developed and should evolve to adapt to the product lifecycle (research & development, introduction, growth, maturity, and decline or stabilization (Górska-Warsewicz et al., 2013, p. 128). The brand message will be different at the stage of introduction, when the brand tries to reach people interested in novelty, and different at the stage of maturity, when the offered product is known by the majority of the target audience (Tkaczyk, 2011). Yet, the most important stages are introduction and growth – when a brand needs to make a good first impression, and maturity – when the brand message involves reminding that the brand is still ‘fresh’ and its products are still perfect (Tkaczyk, 2011). This is the stage when a brand builds customer capital that should bear fruit in the form of customers’ positive reaction to the brand’s marketing; this capital – if nurtured in the right way – can then turn into a relationship with the brand over time.

References

- Burger King (2014). *Chicken Redemption*, <http://www.subservientchicken.com> (2015-08-20).
- Champley, C. (2014). *Burger King | Subservient Chicken Redemption*, <https://vimeo.com/94668310> (2016-05-02).
- Cisco (2015). *Cisco Visual Networking Index: Forecast and Methodology, 2014–2019 White Paper*, http://www.cisco.com/c/en/us/solutions/collateral/service-provider/ip-ngn-ip-next-generation-network/white_paper_c11-481360.html (2016-05-02).
- Danesi, M. (2008). *Why it sells: Decoding the Meanings of Brand Names, Logos, Ads, and Other Marketing and Advertising Ploys*. Plymouth: Rowman & Littlefield Publishers, Inc.
- de Chernatony, L. (2003). *Marka. Wizja i tworzenie marki*. Gdańsk: Gdańskie Wydawnictwo Psychologiczne.
- Gemius Polska (2014). *Spożywka rządzi reklamą w sieci*, <https://www.gemius.pl/agencje-aktualnosci/spozywka-rzadzi-reklama-w-sieci.html> (2016-05-02).
- Górska-Warsewicz, H. (2008). *Perspektywy rozwoju marek w sektorze żywnościowym w Polsce*, http://yadda.icm.edu.pl/yadda/element/bwmeta1.element.dl-catalog-f6135255-cdd3-4cb9-8144-f37dbe3a7144/c/Gorska-Warsewicz_5_2008.pdf (2016-05-02).
- Górska-Warsewicz, H., Świątkowska, M. and Krajewski, K. (2013). *Marketing żywności*. Warszawa: Wolters Kluwer.

- Jasiulewicz, A. (2014). Marketing społecznościowy na portalu Facebook jako forma komunikowania się firmy z rynkiem. *Marketing i Rynek*, 8, 474–479.
- Kaczorowska-Spychalska, D. (2015). Co daje marce bloger. *Marketing w Praktyce*, 2, 56–59.
- Kall, J. (2001). *Silna marka*. Warszawa: PWE.
- Kall, J., Kłeczek, R. and Sagan, A. (2013). *Zarządzanie marką*. Warszawa: Wolters Kluwer Polska.
- Kaznowski, D. (2014). Social media – społeczny wymiar Internetu. In: J. Królewski, P. Sala (Eds.), *E-Marketing. Współczesne trendy. Pakiet startowy*. Warszawa: WN PWN.
- Keller, K.L. (2001). *Building Customer-Based Brand Equity: A Blueprint for Creating Strong Brands*. Cambridge: Marketing Science Institute, 1–107.
- Kirkpatrick, D. (2011). *Efekt Facebooka*. Warszawa: Wolters Kluwer.
- Korsmeyer, C. (2012). *Making sense of taste: Food and philosophys*. New York: Ithaca.
- Kotler, P., Keller, K.L. (2012). *Marketing*. Poznań: Dom Wydawniczy Rebis.
- Kowitt, B. (2015). Special Report: The War on Big Food. The Food Issue: Big Food. *Fortune*, 61–70.
- Kozłowska, A. (2005). *Reklama. Od osobowości marki do osobowości konsumenta. Instrumenty kształtowania wizerunku marki*, http://wsp.pl/file/737_512466172.pdf (2016-05-03).
- Mediarun (2015). *Najsłynniejsze kampanie viralowe*, <http://mediarun.com/pl/trendy/najsłynniejsze-kampanie-viralowe-wideo.html> (2016-05-02).
- Mikowska, M. (2014). Marketing mobilny. In: J. Królewski and P. Sala (Eds.), *E-Marketing. Współczesne trendy. Pakiet startowy* (pp. 11–31). Warszawa: WN PWN.
- Polak, K. (2015). Kiedy produkt staje się marką. *Marketing w praktyce*, 2, 39–41.
- Proszowska, A. (2014). Zachowania konsumenckie towarzyszące nabywaniu przez młodych ludzi wybranych artykułów spożywczych. *Marketing i Rynek*, 8, 1223–1228.
- Proctor, T. and Kitchen, P.J. (2002). Communication in postmodern integrated marketing. *Corporate Communications: An International Journal*, 7(3), 144–154.
- Rubinstein, H., Griffiths, C. (2001). Branding matters more on the Internet. *Brand Management*, 8(6), 394–404.
- Sadowski, M. (2013). *Rewolucja social media*. Gliwice: Helion.
- SocialPress (2015). *Tak możesz zachęcić czytelników do udostępniania Twoich treści*, <http://socialpress.pl/2015/07/tak-mozesz-zachecic-czytelnikow-do-udostepniania-twoich-tresci/> (2016-05-02).
- Sońta, M. (2014). *Marki spożywcze w nowych mediach. Przegląd form współpracy biznesowej producentów żywności z autorami blogów kulinarnych*, <http://>

- apcz.pl/czasopisma/index.php/Nowe_Media/article/view/NM.2014.004/5695 (2016-05-02).
- Tarczydło, B. (2014). Rola kolorów w kreowaniu wizerunku marki – wybrane przykłady. *Marketing i Rynek*, 8, 741–746.
- Tkaczyk, P. (2011). *Zakamarki Marki*. Gliwice: One Press.
- Tkaczyk, P. (2014a). *Brand Hero – bohater lub maskotka marki*, <http://paweltkaczyk.com/pl/brand-hero-bohater-maskotka-marki/> (2016-05-01).
- Tkaczyk, P. (2014b). *Szkielet marki: Ikony*, <http://paweltkaczyk.com/pl/szkielet-marki-ikony/> (2016-05-01).
- Wirtualnedia.pl (2011). *QR kody na opakowaniach nowych warzyw marki Frosta*, <http://www.wirtualnedia.pl/centrum-prasowe/arttykul/qr-kody-na-opakowaniach-nowych-warzyw-marki-frosta> (2016-04-30).
- Wheeler A. (2010). *Kreowanie marki*. Warszawa: WN PWN.
- Woźniak, J.J. (2014). *10 cech dobrej strony firmowej – cz. 1.2.*, <http://www.jakub-wozniak.pl/10-cech-dobrej-firmowej-strony-internetowej-cz1/> (2016-05-03).





Jessica Kowalczyk

Differences in Trust, Convenience and Risk Perceptions Towards Online Shopping Between Poland and Germany: A Comparative Study

Abstract

With the rise of the Internet, particularly the rise of the e-commerce sector, the demand for certain goods and services converged globally, leaving cultural differences in consumer shopping behaviour disregarded. Adopting Hofstede's Cultural Dimensions Model this research examines the influencing role of culture in online consumer behaviour by comparing two different nations, Poland and Germany. The objective of this study is to provide empirical evidence that a consumer's culture differentiates with respect to one's perception towards online shopping. Poland and Germany, two differing cultures were chosen due to their dissimilarity concerning Hofstede's uncertainty avoidance dimension. According to Hofstede's Cultural Dimension Model, Poland with 93 points ranks extremely high on this dimension, while Germany scores moderately with 63 points. Uncertainty avoidance is believed to have a moderating effect on perception and thus, intention to adopt e-commerce shopping and on consumers' online behaviour in general.

Keywords: e-commerce, perceived risk, online consumer behaviour, Poland, Germany

Introduction

As e-commerce activity is steadily growing, not only did buying activity increase but also did consumers' purchasing behaviour evolve in the last years. In other words, online consumers' shopping behaviour became more sophisticated in both markets, Germany and Poland. Sophistication can be mostly explained by improved online shopping conditions such as easier, more trustworthy payment methods, better website usability and faster delivery times. Next to this, it can be assumed that consumers are now better educated with respect to online shopping, particularly generation Y who has grown up with the Internet and thus, being more technology savvy and confident with respect to online shopping than all other generations before. Last but not least, it is the cultural dimensions that determine consumers' risk, trust and convenience perception towards online shopping and how online shopping is executed in the end. Therefore, the purpose of this study is to examine whether there are differences in risk, trust and convenience perceptions towards online shopping between consumers in Poland and Germany.

Review of literature

Polish & German E-commerce Market

In 2014, online sales in Poland amounted € 5.12bn, equalling a growth rate of 21.0%, and thus, being above European growth average. Hence, Poland is categorised as an immature e-commerce market, making up only 3.3% of the European e-commerce market. In contrast, Germany with € 52.79bn of online retail sales represents not only a mature e-commerce market, but also ranks second after the UK with a growth rate of 23.0%. As a result, the difference in the e-commerce maturity stage could also reveal differences in online consumer behaviour (Centre for Retail Research, 2014). Differences in online consumer behaviour arise not only from the maturity level of the e-commerce market but also from demographic differences, such as culture, age, income and educational level. Despite the Internet's huge influence on consumer behaviour, particularly how consumers gather information on products, evaluate alternatives and finally pursue a purchase, it is still an under-studied area (Brynjolfsson, Dick and Smith, 2010). Thus, enhancing the theoretical knowledge in this area by comparing and

assessing online consumer behaviour between Poles and Germans enhances the current understanding of online consumer behaviour in an immature and a mature e-commerce market.

Online Consumer Behaviour Introduction

In the following, the research problem will be put into perspective by discussing the current understanding of online consumers and their respective online purchasing behaviour. Thereby, consumer behaviour, online consumer behaviour, and factors influencing that behaviour will be reviewed. With respect to online consumer behaviour special attention will be drawn to the perceptions of risk, trust and convenience as antecedents for purchase decision-making for differing product categories. Since the online shopper is nowadays also considered to be a computer or technology user, consumer behaviour theories are not only drawn from the field of Marketing and Psychology but also Information Systems. Finally, factors influencing online consumer behaviour will be discussed, particularly cultural differences impacting the perceptions of risk, trust and convenience towards online shopping. In this way, the current knowledge of online consumer behaviour will be presented to extend its understanding. As a result the underlying question can be put forward: Does the perception towards online shopping and online shops differ among Polish and German consumers?

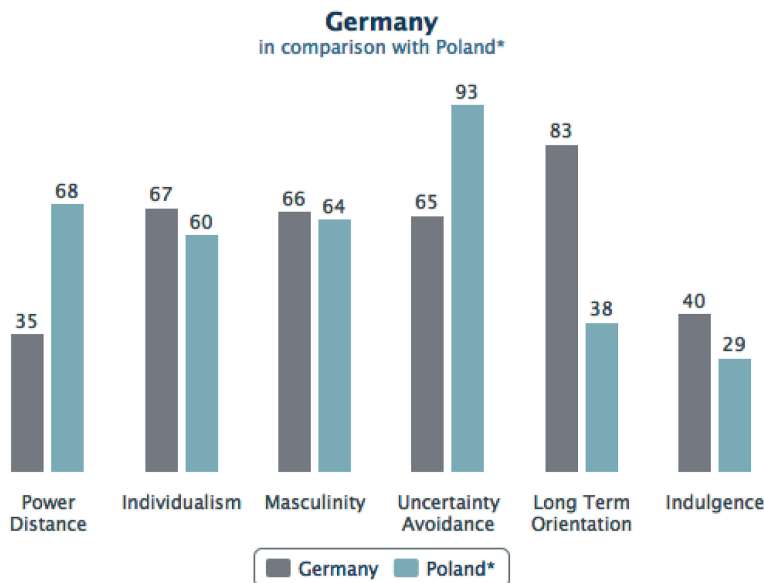
Demographics

Demographics taken together with other personal factors such as social, cultural, economic and psychological factors fall largely beyond the influence of retailers and thus, form the uncontrollable factors. However, with respect to how they influence the consumer's buying behaviour they are highly relevant (Boyd et al., 2002). It is important to recognise the fact that people with different demographic traits also differ with respect to their online behaviour. Nevertheless, it is a common believe that with the global rise of e-commerce transactions, also the demand for global products and brands rose and thus, online consumer behaviour converged globally (Smith et al., 2013). Since the mere process of online shopping is often very standardised, it also does not give a lot of room to adapt to cultural differences or certain customer preferences.

Hofstede's Dimension: Uncertainty Avoidance

Culture as a demographic factor can usually explain differences in online consumer behaviour and is also of central interest for this research. During the 1970's and 1980's Hofstede developed his Cultural Dimensions Theory to explain the effects of a nation's culture and value system on one's individual behaviour. For the purpose of this research, Hofstede's the uncertainty avoidance dimension is elaborated on respectively. Uncertainty avoidance describes how people in a society or culture deal with uncertainty and ambiguity as well as the uncertainty of the future (Hofstede, 1980). In essence, it describes the need for well-defined rules for prescribed behaviour, the higher the uncertainty avoidance score index the less people want to be confronted with ambiguous or uncertain situations (Soares, Farhangmehr and Shoham, 2007).

Figure 1. Hofstede's Matrix of Poland and Germany



Source: Hofstede Centre, 2015.

Hence, as can be seen from the Figure 1, Germany with an uncertainty avoidance score of 65 ranks moderately, which is reflected in the common attitudes to think, plan and present things out and thus, relying on expertise to attain certainty. In contrast, Poland with an index score of 93 has a very high preference for uncertainty avoidance. Typical

for that are rigid codes of belief, the emotional need for rules, as well as resistance for innovation (Hofstede, 1980). Particularly, resistance for innovation plays further into the effect for not employing online purchases, as the electronic retail environment still imposes uncertainty. Furthermore, uncertainty avoidance attaches even more importance for Poland than for Germany, as Poland still finds itself in an immature e-commerce market stage. By taking the uncertainty avoidance factor and the resistance for innovation and linking them to Davis' earlier explained Technology Acceptance Model (TAM), it can be assumed that culture has an impact on adopting new technology or online shopping behaviour.

Trust, Convenience & Risk

Research by Bhatnagar, Misra and Rao suggests that risk aversion varies across users also due to uncontrollable personal characteristics, such as demographic, cultural or social factors (2000). Clearly, Hofstede's uncertainty avoidance dimension comes into play here, with Poland being far ahead of Germany with an uncertainty avoidance factor of 93 points. As a consequence, different risk attitudes cause a variance in expected utility or convenience from online shopping. Despite the differences among the online consumer population it can be assumed that trust, convenience and perceived risk influence purchasing decisions and the choice of the purchase channel after all (Kim, Ferrin and Rao, 2008).

As pointed out by Bhatnagar, Misra and Rao, there are two types or sources of risks the online consumer is exposed to. Those are product related risks as well as financial risks (2000). Product related risk refers to the possibility of receiving no or the wrong product, while financial risk relates to security issues such falling prey to credit card fraud. In contrast, financial risk is not related to the possibility of poor prices at an online shop. Thus, with those two types of risk adding to perceived risk within the online shopping environment the consumer is induced to postpone the purchase decision. Already the low cost of visiting an online shop contributes to the likelihood of postponing the purchase decision, which is further added by the perceived risk (Moe and Fader, 2002). However, with the growing number of Internet-savvy users also a less-risk-averse attitude towards online shopping comes into being. This is due to the growth of individuals' information capital, which is the knowledge accumulated on computer usage or the degree of Internet savvy-ness of an individual. This increased information capital also

increases the likelihood of online shopping. On the contrary, human capital knowledge is know-how with respect to a product and ones individual preferences. With time and experience an individual's human capital knowledge increases automatically. Thus, with higher human capital knowledge also the need to experience a product before buying it decreases (Bhatnagar, Misra and Rao, 2000). Hence, the higher the human capital knowledge as well as information capital knowledge, one will be more prone to make an online purchase.

With respect to the convenience factor, online shopping highly improved in favour of the online shopper. More and more e-commerce shops guarantee free and fast deliveries, while the shopping experience became easier with improved web interfaces. According to the Merriam-Webster Dictionary convenience is defined as "a quality or situation that makes something easy or useful for someone by reducing the amount of work or time required to do something". Hence, the definition gives way that convenience can be considered from a product-attribute perspective or a service-attribute perspective. When it comes to service convenience, timesaving and effort minimisation are the broad categories of perceived convenience (Jiang et al., 2013). Nonetheless, the convenience factor is perceived differently by users, as highly utilitarian and advanced web shoppers might value online shopping to a greater extent than consumers who are less advanced in their Internet skills and rather enjoy the actual activity of offline shopping. Moreover, convenience is clearly interrelated with perceived risk. The higher the perceived risk, which is moderated by individual demographic factors, also the expected utility or convenience level differs across users. Thus, the lower a consumer perceives risk towards online shopping the higher the perceived convenience (Bhatnagar, Misra and Rao, 2000).

In addition to the interrelation between risk and convenience, also the trust factor is related to risk. Same as with convenience, trust perceptions vary when exposed to risk or uncertainty, influencing ultimately if to engage in an online purchase or not. Scholars have interpreted and explained trust in numerous ways. According to Park et al. trust with respect to online shopping is a multi-dimensional construct consisting of competence, benevolence and integrity (2012). Thereby, competence relates to the online shop retailers "ability to supply the expected goods/services in an agreed-upon quantity, price, time, and condition". The term benevolence "refers to the e-retailer's willingness to act on the consumers behalf", while integrity "includes honesty,

fairness, and responsibility, as reflected in e-retailers' willingness to commit to a transaction agreement" (Park et al., 2002, p. 305). What is particularly interesting is that the authors base their trust definition on trust formation towards the specific e-commerce environment but also on the assumption that trust's antecedents are of demographic nature, particularly culture, which is also relevant for this study. As all three elaborated factors make up one's perception towards online shopping, it has to be kept in mind that those factors are formed by a person's Internet savvy-ness as well as their cultural background. As a result, this study takes culture as the main antecedent for differences in perceptions towards online shopping and online consumer behaviour among Poles and Germans.

Research Gap & Main Hypothesis

As e-commerce shops are constantly widening their product range, payment methods getting increasingly safe and delivery times got very short, the overall conditions for online shopping changed in favour for the e-commerce sector. Next to this, consumers are more and more educated in and forced into online shopping and related transactions such as flight booking or online banking. Hence, perceived trust, convenience and risk towards online shopping have evolved for the today's online consumer. Despite all that, consumers still widely differ from each other with respect to their online behaviour and their perception towards online shopping. The question at hand is to what extent decides risk, trust and convenience perception over a consumer's a retail channel choice once the need to purchase a product is identified?

It is undeniable that different groups of consumers perceive online shopping differently and also behave differently while shopping online. These differences do not only stem from different levels of Internet savvy-ness but also to a great extent from differing demographics variables, particularly culture. Past studies proved that certain socio-demographic and economic population groups are more prone to online shopping than others. According to Donthu and Garcia (1999), Farag et al. (2006) as well as Sorce et al. (2005) have found that online shopping tends to be pursued by higher educated and higher income groups. However, by only targeting people from similar income and educational backgrounds this demographic factor is not valid for this study.

As perceptions have an impact on a consumer's shopping behaviour also the maturity stage of an e-commerce market influences a consumer's perceptions and behaviour towards online shopping. Taking Poland as a yet immature e-commerce market, the previously elaborated trust factor becomes notably interesting. As the e-commerce market is not as established as in Germany yet, also online shopping is embraced to a lesser extent. With the immaturity of the market also slightly less favourable online shopping conditions come along and thus, trust and convenience perceptions towards online shopping also rank lower. This could further contribute to differing perceptions among the studied populations. Taking Hofstede's Dimensions, cultural differences can be used to explain possible differences in online shopping perceptions, and consequently, online shopping behaviours. Hofstede's uncertainty avoidance factor differentiates both nations, as a higher uncertainty avoidance rank translates often into refusal of innovation and technology acceptance.

Therefore, this study intends to investigate the consumers' perceptions of risk, trust and conveniences of online shopping. Hence, Polish and German online consumers will be compared and contrasted, whereby the differing cultural factor serves as basis for explaining the differences in perception. In other words, this paper aims to study whether there are differences in perceptions towards online shopping and online shops. In this way, the understanding of new evolving online consumer behaviour should be enhanced and give way to further research. Being aware of the on-going changes in online consumer behaviour as well as cultural differences international online shop operators can better assess how to approach their target customers.

Hypothesis: To what extent do perception towards online shopping vary across Poland and Germany?

In order to corroborate the research question in quantitative terms, the following 3 hypotheses have been defined. The following hypotheses have been developed based on the elaborated reasoning of the research gap section.

H1: There is a significant relationship between trust perceptions towards online shopping and nationality.

H2: There is a significant relationship between convenience perceptions towards online shopping and nationality.

H3: There is a significant relationship between risk perceptions towards online shopping and nationality.

Sampling and Data Collection

A student and a recently graduated young worker population were considered appropriate for several reasons. Despite that student samples have been challenged for its representativeness to the whole population, risk perception has been found to be generalizable in noticeable studies (Kim, Qu and Kim, 2009; Mitra, Reiss and Capella, 1999; Pope, Brown and Forrest, 1999). Secondly, due to the student population's Internet-savyness, as having grown up with computers are considered to be the most experienced Internet users with respect to their online shopping experience and perceptions (Lee and Allaway, 2002), and thus making them an appropriate sample for conducting online shopping behaviour research (Yoo and Donthu, 2001). While students have lower incomes, they still tend to have a higher percentage of personal discretionary income than other age groups, due to part-time jobs while pursuing their studies. In this way, they should be considered as consumers with considerable buying power (Gardyn, 2002; Lee and Allaway, 2002). As a result, respondents were gathered from two major universities, located in the capital of Poland (n=68), and in a major big city in the mid west of Germany (n=71).

Instrument

A survey was designed to sample the selected respondents in Poland and Germany. The survey was designed in simple English, distributed to both, the Polish and the German population. Risk, convenience and trust perceptions towards online shopping were assessed with construct questions measured using a 7-point Likert-type scale (1 = strongly agree to 7 = strongly disagree) in order to examine the research constructs.

Analysis

Due to the ordinal nature of the data (7-point Likert scale questions) only non-parametric tests were undertaken, such as Spearman, Mann-Whitney U and Chi-Square. Furthermore, the independent variables were tested for correlation to ensure that unwanted causalities are eliminated. Thereafter, a mean analysis followed dealing with the entirety of the sample giving an overview of the population's perception with respect to trust, convenience and risk perception towards online shopping.

Results

Demographics

In total, there were 129 respondents, 68 Polish and 71 Germans. As expected the population sample was young with an age average of 25. From the sampled population 52% were male respondents, while the other 48% respondents were female.

Trust, Convenience & Risk

Differences in results with respect to the three perception constructs were found (trust, convenience and risk perception towards online shopping). This means that for Polish consumers online shopping is perceived riskier, while there is less perceived trust and convenience towards online shopping.

Table 1. Mann-Whitney U Test Nationality vs. Trust

Ranks				
	Nationality	N	Mean Rank	Sum of Ranks
"I trust in online shops"	German	71	36.36	2581.50
	Polish	58	100.06	5803.50
	Total	129		
"I trust in online shopping"	German	71	42.16	2993.50
	Polish	58	92.96	5391.50
	Total	129		

Source: own elaboration.

The research hypotheses were examined using comparative analysis (Mann-Whitney U test) to compare perceived trust, risk and convenience perception factors towards online shopping among the two sub samples, or nationalities. Hypotheses **H1–H3** predicted that there is a significant relationship between trust, convenience and risk perceptions among Poles and Germans. In other words, these perception factors differ between the two nationalities.

Table 2. Mann-Whitney U Test Nationality vs. Convenience

Ranks				
	Nationality	N	Mean Rank	Sum of Ranks
[Greater product choice]	German	71	53.51	3799.50
	Polish	58	79.06	4585.50
	Total	129		
[Greater range of shops]	German	71	54.80	3891.00
	Polish	58	77.48	4494.00
	Total	129		
[Better prices]	German	71	53.71	3813.50
	Polish	58	78.82	4571.50
	Total	129		
[Time savings]	German	71	50.13	3559.00
	Polish	58	83.21	4826.00
	Total	129		
[Shopping hours (24h)]	German	71	55.60	3947.50
	Polish	58	76.51	4437.50
	Total	129		
[Payment methods]	German	71	44.38	3151.00
	Polish	58	90.24	5234.00
	Total	129		
[[Free] delivery]	German	71	36.47	2589.50
	Polish	58	99.92	5795.50
	Total	129		
[Product return policies]	German	71	37.38	2654.00
	Polish	58	98.81	5731.00
	Total	129		

Source: own elaboration.

Results of the Mann-Whitney U test indicate that the central tendencies of Germans and Poles differ significantly for trust perceptions towards online shopping, indicating that German mean ranks are lower than for Poles. Hence, Poles have a lower trust perception towards online shopping than Germans. ($U(71,58) = 129, z = -10.022; -8,398, p = 0.000$).

With respect to the convenience factor, the results for the Mann-Whitney U test indicate that the central tendencies of Germans and Poles differ significantly for convenience perceptions towards online shopping, indicating that German mean ranks are lower than for Poles. Hence, Poles have a lower convenience perception towards online shop-

ping than Germans. ($U(71,58) = 129, z = -5.286; -4.757; 4.954; -5.886; -4.583; -7.696; -10.162; -10.022, p = 0.000$).

The Mann-Whitney U test indicates that central tendencies of Germans and Poles differ significantly for risk perceptions towards online shopping. The German mean rank for risk perception is higher than for Poles. However, both nations consider data security as risky, while the perception for payment security and secure delivery diverges the most between Poles and Germans. This test provides statistical support for **H3**, proving that Poles degree of risk perception with respect to online shopping is higher (equalling a lower mean rank value) than for Germans.

($U(71,58) = 129, z = -7.415; -9.634; -8,377; -8,732; p = 0.000$).

Table 3. Mann-Whitney U Test Nationality vs. Risk

Ranks				
	Nationality	N	Mean Rank	Sum of Ranks
[Data security]	German	71	85.95	6102.50
	Polish	58	39.35	2282.50
	Total	129		
[Payment security]	German	71	91.36	6486.50
	Polish	58	32.73	1898.50
	Total	129		
[Fraud [fakes]]	German	71	87.73	6229.00
	Polish	58	37.17	2156.00
	Total	129		
[Secure delivery]	German	71	88.93	6314.00
	Polish	58	35.71	2071.00
	Total	129		

Source: own elaboration.

Thus, **H1**, **H2** and **H3** were all supported.

Discussion

The study showed significant differences in perceived trust, convenience and risk towards online shopping between respondents from the two countries. Results might be explained by the differing cultural aspect as well as the different e-commerce maturity stage of the countries. For the

cultural aspect, Hofstede's uncertainty avoidance has been notably interesting for this research as it is also related to the willingness to adopt innovations and new technologies, such as online purchasing behaviour, as well as engaging in risky or uncertain situations (Hofstede, Hofstede and Minkov, 2010).

Details of Results

Convenience and risk perception proved to be significantly different between the two cultures, whereby Poles perceived convenience factors less strongly than Germans, while risk towards online shopping was perceived to be greater for Poles. Interestingly, the sub factors of each perception showed a similar tendency. For instance, both sub populations showed that they were mostly concerned about 'privacy' when it comes to the risk factor, while '24h shopping' and 'greater range of shops' were perceived to be the most convenient factors. In contrast, Poles and Germans perceived 'free delivery' and 'product return policy' in different ways. Germans considered those factors as valuable, while Poles as least convenient. This result cannot only be explained by Hofstede's uncertainty avoidance factor but also by the general e-commerce situation of both countries. While Germany finds itself at maturity, Poland is catching up towards the same situation. Hence, as free delivery is not given for all e-commerce shops yet, it has also not been rated to be as convenient as the other factors by Poles.

This overall finding (on perception factors), which formed the main focus of this study, leads to the conclusion that German and Polish perception towards online shopping differs. Finally, it should be said that this study depicts only a snapshot of the current e-commerce market situation in Poland and Germany. Peculiarly in Poland, the e-commerce market is moving forward from its immature market position to a mature stage in a very fast manner. This is reflected by more and more secure payment possibilities, the entrance of global e-commerce retailers into the Polish market, improved customer usability and improved customer service, faster and free delivery catching up to the stage of the German e-commerce market. Hence, the findings of this research suggest that the perception factors might change in the favour of online shopping. This notion can be supported by the results, as Polish online consumer behaviour depicts similar tendencies as the German one. This gives way to assume that Poles will sooner or later

catch up and adopt similar online shopping behaviours as can be currently seen in Germany.

Managerial Implications

Based on the findings of this research global marketing and e-commerce manager do not necessarily require to take into consideration cultural differences when running an e-commerce business as this would involve high costs. Nevertheless, it is certainly beneficial to know that differences in online shopping perception and its consecutive effect on online shopping behaviour can help to increase sales just by introducing little means to increase trust and convenience while lowering risk perception. Particularly, for the Polish consumer guaranteed free deliveries, security seals and certifications could help with that. E-commerce managers need to clearly communicate that they act in the best interest of the consumer and that the consumer is not running into risks while shopping at their e-commerce shop, especially in case of a service failure.

References

- Bhatnagar, A., Misra, S. and Rao, H.R. (2000). On Risk, Convenience, and Internet Shopping Behaviour. *Communications of the ACM*, 43(11), 98–105.
- Boyd, H.W., Walker, O.C., Mullins, J. and Larréché, J.-C. (2002). *Marketing Management, A Strategic Decision-Making Approach*. Columbus, Oh: McGraw-Hill/Irwin.
- Brynjolfsson, E., Dick, A.A. and Smith, M.D. (2010). A Nearly Perfect Market? *Quantitative Marketing and Economics*, 8(1), 245–258.
- Centre for Retailing Research (2014). *Online Retailing: Britain, Europe, US and Canada 2015*, <http://www.retailresearch.org/onlineretailing.php> (17.01.2015).
- Constantinides, E. (2004). Influencing the Online Consumer's Behaviour: The Web Experience. *Internet Research*, 14(2), 111–126.
- Donthu, N. and Garcia, A. (1999). The Internet Shopper. *Journal of Advertising Research*, 39, 52–58.
- Farag, S., Schwanen, T., Dijst, T. and Faber, J. (2007). Shopping Online and/or In-Store? A Structural Equation Model of the Relationships Between E-Shopping and In-Store Shopping. *Transportation Research Part, A*(41), 125–141.
- Ecommerce News (2014). *Ecommerce in Poland*, <http://ecommercenews.eu/ecommerce-per-country/ecommerce-poland/> (30.01.2015).

- Ecommerce News (2014). *Ecommerce in Germany*, <http://ecommercenews.eu/ecommerce-per-country/ecommerce-germany/> (30.01.2015).
- Gross, O. (2013). Offline beraten, online kaufen: Online-Handel profitiert vom umgekehrten ROPO Effekt. *Shophbetreiber Blog*, 5 February, <http://www.shophbetreiber-blog.de/2013/02/05/offline-beraten-online-kaufen-online-handel-profitiert-vom-umgekehrten-ropo-effekt/> (17.01.2015).
- Hofstede, G. (1980). *Culture's Consequences*. Beverly Hills, Ca: Sage.
- Hofstede, G., Hofstede, G.J. and Minkov, M. (2010). *Cultures and organizations: software of the mind: intercultural cooperation and its importance for survival*. New York: McGraw-Hill.
- Kim, D.J., Ferrin, D.L. and Rao, H.R. (2008). A Trust-Based Consumer Decision-Making Model in Electronic Commerce: The Role of Trust, Perceived Risk, and Their Antecedents. *Decision Support Systems*, 44(2), 544–564.
- Kim, L.H., Qu, H. and Kim, D.J. (2009). A study of perceived risk and risk reduction of purchasing air-tickets online. *Journal of Travel and Tourism Marketing*, 26, 203–224.
- Lee, J.L. and Allaway, A. (2002). Effects on personal control adoption of self-service technology innovations. *The Journal of Service Marketing*, 16(6), 553–572.
- Merriam-Webster Dictionary (2015). *Convenience*, <http://merriam-webster.com/dictionary/convenience> (02.01.2015).
- Mitra, K., Reiss, M. and Capella, L.M. (1999). An examination of perceived risk, information search and behavioural intentions in search, experience and credence services. *The Journal of Services Marketing*, 13(3), 208–228.
- Moe, W. and Fader, P.S. (2002). Fast-Track: Article Using Advance Purchase Orders to Forecast New Product Sales. *Marketing Science*, 21(3), 347–364.
- Park, J., Gunn, F. and Han, S.L. (2012). Multi-dimensional Trust Building in E-Retailing: Cross-Cultural Differences in Trust Formation and Implications for Perceived Risk. *Journal of Retailing and Consumer Services*, 19, 304–312.
- Pope, N., Brown, M. and Forrest, E. (1999). Risk, innovations, gender, and involvement factors affecting the intention to purchase sport products online. *Sport Marketing Quarterly*, 8(2), 25–34.
- Smith, R. et al. (2013). Cross-Cultural Examination of Online Shopping Behaviour: A Comparison of Norway, Germany, and the United States. *Journal of Business Research*, 66(6), 283–462.
- Sorce, P., Perotti, V. and Widrick, S. (2005). Attitude and Age Differences in Online Buying. *International Journal of Retail and Distribution Management*, 33, 122–132.
- Wang, A. (2001). Individual/organizational characteristics and intention to adopt E-Commerce: A study based on innovation adoption theory. *Dissertation Abstracts International*, 62(9), 3111.
- Yooh, B. and Donthu, N. (2001). Developing a scale to measure the perceived quality of an Internet shopping site. *Quarterly Journal of Electronic Commerce*, 2(1), 31–46.



Michał Kucia

Exploration of Consumer Attitudes Towards E-commerce: A Model Approach

Abstract

Studies of consumer attitudes towards e-commerce have been conducted since the end of the previous century, making it possible to monitor the changes taking place as a result of the development of e-commerce. Even so, investigating consumer attitudes towards e-commerce leads to a more accurate determination of their buying behaviour, which may in turn contribute to an improvement of the strategies of development of e-commerce adopted by both enterprises and government institutions.

The research model has been developed as a combination of exploratory factor analysis (EFA) and confirmatory factor analysis (CFA), on the basis of findings of a survey of 450 consumers. The process of modelling has led to a conclusion that consumer attitudes towards e-commerce manifest themselves in the form of three components: emotional, cognitive, and behavioural. The presented findings may become an inspiration to further, more in-depth studies, and act as a point in the discussion concerned with consumer attitudes towards e-commerce and towards the broadly-understood e-business.

Keywords: e-consumer, attitudes, factor analysis, confirmatory factor analysis, on-line shopping

Introduction

The progressing virtualization of social-economic life brings about certain changes in consumer attitudes towards commerce, and especially towards e-commerce. Surely, familiarity with these attitudes makes it possible to determine the future behaviour of consumers in the market environment.

Studies of consumer attitudes towards e-commerce have been conducted since the end of the previous century, making it possible to monitor the changes taking place as a result of the development of e-commerce. Knowledge of consumer attitudes towards e-commerce lets one determine their future buying behaviour, which contributes to an improvement of enterprises' ability to forecast consumers' reaction to certain products, to choose the time and place of selling in a better way, to take certain risks, as well as to act quicker and more flexibly in interaction with consumers (Kucia, 2015, p. 1267).

This research article proposes a concept of utilization of exploratory factor analysis supplemented with confirmatory factor analysis applied to analyse consumer attitudes towards e-commerce from a model perspective. The adopted research strategy has been based on on-line surveys conducted in the period of January-March 2015 in a group of 450 respondents from the Śląskie province.

The presented research approach and the attempt to view consumer attitudes in a model approach may serve an inspiration to further, more in-depth studies, and act as a point in the discussion concerned with consumer attitudes towards e-commerce.

Consumer Attitudes in the Era of ICT

In literature devoted to economics, the notion of attitude has been based on sociological concepts, pointing to a man's approach to certain matters, where attitude is defined, among others, as ideas, fears, threats, and convictions about any specific topic (Thurstone, 1928, p. 529–554), as well as on psychological considerations, treating attitude as behaviour or emotional reaction to a certain object/issue, and the cognitive matters related thereto (Allport, 1935, p. 798–844).

Consumer attitudes in economics refer to permanently favourable or unfavourable judgments, emotional impressions, and fondness of certain

products (Kędzior and Karcz, 1998, p. 11; Kotler, 1994, p. 191). Attitudes can be considered relatively fixed, which makes them seem extremely important in the context of activities undertaken by companies, which is illustrated in the view that it's easier to modify certain features of a given product rather than the attitude towards it (product is understood here also as a service) (Armstrong and Kotler, 2012, p. 233).

Attitudes are manifested as three components (Trojanowski, 2013, p. 138):

- emotional component, which is consumer's reaction to a certain product, manifested as liking and preferences. Consumer attitude is based on emotions, and their approach to the object of the attitude is a result of the feelings it evokes, and not of an objective comparison of the object's (product/service) advantages and disadvantages. An example is the situation where consumers perceive e-commerce as the best form of shopping, or assigning on-line shopping a social status;
- cognitive component, reflecting a given consumer's opinion about some product, resulting from their knowledge, awareness, and idea of that product. Assessment is rational in the context of the consumer's interest, and involves a comparison of any recalled assets or drawbacks of the assessed product;
- behavioural component manifested in consumers' activity and in their observable behaviour towards a given product, in their opinions of this product (voiced e.g. across social media), and in the expressed intentions towards it.

Synchronization of these components characterizes consumer attitudes that determine consumer choices and define the meaning assigned to products and services, as well as consumer relationships. These relationships can change and enhance these attitudes. A consumer excluded from participation in various forms of consumer relationships loses the chance to adopt and accept innovative products, as well as the chance to take part in the process of assigning and deciphering meanings (Kramer, 2015, p. 295).

At present, consumer attitudes tend to result from virtualization of the social-economic life to an increasingly larger extent. Virtual space offers consumers an opportunity to take advantage of virtually unlimited resources of knowledge and information, and to make on-line shopping in a more rational way thanks to the available search engines and comparison websites (Mróz, 2014, p. 207).

The unquestionably progressing virtualization of consumers' life changes their current attitudes, but it seems unfounded to use a dichotomous term like "e-consumer" in opposition to a consumer not taking advantage of information and communications technology (Maćik, 2013, p. 9). For this reason, it has been assumed that an e-consumer is a natural person displaying and fulfilling their consumption needs with goods and services purchased through the Internet, but also displaying purchasing attitudes and behaviour in the traditional environment, or moving freely between shopping in virtual and physical channels.

In 2015, there were 28 941 thousand consumers aged 16–74 in Poland, including 21 102 thousand (72.9%) of them using the Internet. From among the people using the Internet, 13 773 thousand e-consumers purchased goods and services on-line, which made up for 47.6% of all consumers. The findings for Śląskie province seem to be close to the overall all-Poland findings, where 72% of consumers use the Internet, and 48.1% of them shop on-line (CSOP, 2015). The nearly 12% increase in the number of e-consumers in the time frame of 2010 to 2015 was possible to a large extent thanks to the improvement of the technical infrastructure of households, which made it possible to shop on-line, and thanks to the quantitative and qualitative growth of the organizational forms of e-commerce, including 10 thousand of on-line shops, or over 55 million of on-line auctions, with 45 million of such auctions on Allegro alone.

The Model of Research into Consumer Attitudes Towards E-commerce

The attempt to model consumer attitudes towards e-commerce has been based on findings of direct studies conducted on a sample of 450 e-consumers from Śląskie province, involving an on-line survey filled from January to March 2015. The main objective of the research was to show the variables determining the frequency of on-line shopping, as well as to identify the on-line sources of information used by the respondents.

The study sample consisted of the same number of men and women, and almost 46% of the respondents were persons aged 16–24. Over a half of the respondents (53%) were people with completed secondary and tertiary education; the respondents were mostly inhabitants of cities with a population of over 100 000 (49%) and up to 100 000 (39%). Over

a half of the respondents said that their material situation was good or very good, and only 2.9% of them admitted that their material situation was bad or very bad.

The model was formed on the basis of the 5-point Likert scale and 19 statements (Cronbach's alpha was 0.715):

1. When you shop on-line, you feel that it's the best form of shopping;
2. On-line shopping is more dangerous than traditional shopping;
3. Marketing activities and promotion campaigns have had or may have an impact on the decision to shop on-line;
4. Lower prices in on-line shops encourage to shopping on-line;
5. Family members' opinion is important when shopping on-line;
6. Frequent on-line shopping proves the social status and tells much of the lifestyle of a given Internet user;
7. Media and advertising influence the way on-line shopping is perceived;
8. The broad product offer of on-line shops has made on-line shopping attractive to everybody;
9. Friends' opinion is important when shopping on-line;
10. A broad product offer of on-line shops makes shopping on-line easier and more pleasant;
11. Price comparison websites have improved and revolutionized the process of purchase-related decision-making;
12. The big price-based competition on the Internet makes product prices significantly lower than in brick-and-mortar shops;
13. The future technological development of e-commerce will make on-line shopping increasingly faster and safer;
14. Thanks to group purchasing websites, Internet users buy products they wouldn't be able to afford if they decided to buy them at their regular price;
15. On-line shopping doesn't require any particular computer literacy;
16. The high level of advancement of applications used in e-commerce raises doubts as to the whether the shopping process progresses as it should;
17. The common accessibility to consumer credit services on-line makes it easier to make a decision to purchase goods/services on-line in instalments;
18. Websites with reviews of on-line shops are the best source of information;
19. Internet forums are the best source of information.

In order to categorize the aforesaid statements related to consumer attitudes exhaustively, an exploratory factor analysis has been applied by means of distinguishing the principal components. The aim of the factor analysis is to identify a set of variables that is smaller than the set of the original variables, and which expresses the relationship between the observed variables (Gatnar and Walesiak, 2004, p. 186).

The adequacy of selection of the model of factor analysis as the method of analysis of the collected data has been determined using the Kaiser-Meyer-Olkin index, which amounted to 0.779 for 19 variables. This was followed by calculations of adequacy of selection of each individual variable, using the index of MSA_{ii} . On the basis of this index, 11 variables were subject to a further analysis, where the KMO index amounted to 0.820.

In order to determine the final number of factors that needed to be adopted for further analysis, the eigenvalue and the percentage of variance explaining particular components was calculated. As a result, the criterion of eigenvalue larger than unity showed that it was necessary to conduct the further part of analysis by adopting three factors that would explain 50.74% of the common variation for all variables. Application of the method of principal components with VARIMAX rotation has made it possible to determine the factors loadings for particular variables (Table 1).

Table 1. Factor loadings (obtained as a result of application of the method of principal components analysis after Varimax rotation)*

Variable		Component		
		1	2	3
1	A broad product offer of on-line shops makes shopping on-line easier and more pleasant	0.740		
2	The future technological development of e-commerce will make on-line shopping increasingly faster and safer	0.712		
3	The broad product offer of on-line shops has made on-line shopping attractive to everybody	0.664		
4	Lower prices in on-line shops encourage to shopping on-line	0.621		
5	The big price-based competition on the Internet makes product prices significantly lower than in brick-and-mortar shops	0.564		
6	On-line shopping doesn't require any particular computer literacy	0.547		

7	Price comparison websites have improved and revolutionized the process of purchase-related decision-making		0.776	
8	Websites with reviews of on-line shops are the best source of information		0.752	
9	Thanks to group purchasing websites, Internet users buy products they wouldn't be able to afford if they decided to buy them at their regular price		0.516	
10	Frequent on-line shopping proves the social status and tells much of the lifestyle of a given Internet user			0.710
11	When you shop on-line, you feel that it's the best form of shopping			0.595

* In order to improve the quality of findings, the value of factor loadings lower than 0.46 has been omitted.

Source: own work developed using IBM SPSS 21.

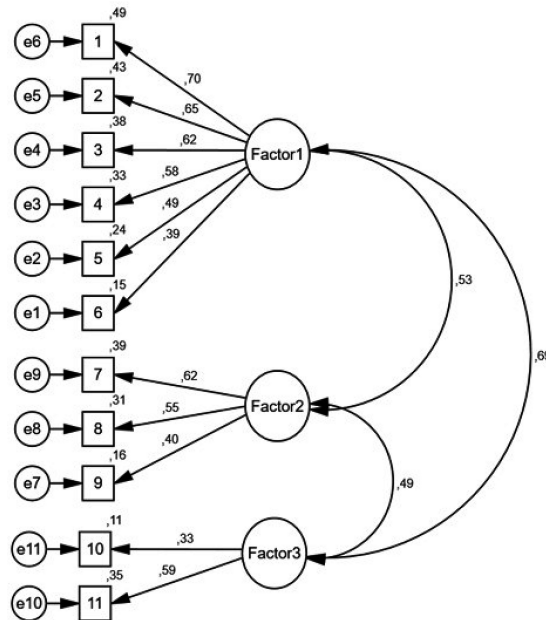
Eventually, a set of coherent groups of factors describing consumer attitudes towards e-commerce has been obtained.

1. The first factor is described by the following variables: (1) a broad product offer of on-line shops makes shopping on-line easier and more pleasant, (2) the future technological development of e-commerce will make on-line shopping increasingly faster and safer, (3) the broad product offer of on-line shops has made on-line shopping attractive to everybody, (4) lower prices in on-line shops encourage to shopping on-line, (5) the big price-based competition on the Internet makes product prices significantly lower than in brick-and-mortar shops, and (6) on-line shopping doesn't require any particular computer literacy. These factors are referred to as factors favourable to the development of on-line shopping.
2. The second factor is characterized by variables related to services supporting consumers in on-line shopping; these are: (7) Price comparison websites have improved and revolutionized the process of purchase-related decision-making, (8) websites with reviews of on-line shops are the best source of information, and (9) thanks to group purchasing websites, Internet users buy products they wouldn't be able to afford if they decided to buy them at their regular price. These factors are referred to as websites supporting online shopping.
3. The third factor is described by the following variables: (10) frequent on-line shopping proves the social status and tells much of the lifestyle of a given Internet user, and (11) when you shop on-line, you feel that it's the best form of shopping. These factors are referred to as consumers' emotional characteristics.

Given the presented findings, it seems reasonable to claim that consumer attitudes towards e-commerce are shaped by three factors: factors favourable to the development of on-line shopping, websites supporting on-line shopping, and consumers' emotional characteristics.

This leads to a question of whether the proposed model assuming the existence of the obtained factors affecting consumer attitudes towards e-commerce represents the actual relationships between the observable and latent variables. Therefore, in order to provide a comprehensive view of the tri-factor model, a confirmatory factor analysis (CFA) has been conducted, which makes it possible to check the fit of the obtained factor model with the data (Szttemberg, 2000, p. 92). Figure 1 shows a path diagram of the CFA of the model of consumer attitudes towards e-commerce. The standardized values of regression coefficients have been calculated by means of the maximum likelihood method using AMOS 21 software.

Figure 1. The structure of dependence in the model of consumer attitudes towards e-commerce (standardized coefficients)



$\chi^2=88.428$; $df=41$; significance level $\alpha=0.000$; $\chi^2/df=2.157$; GFI=0.967; AGFI=0.946, NFI=0.893; CFI=0.938, RMSEA=0.051, Hoelter 0.05=290

Source: own work developed using AMOS 21 software.

A correct model should be empirically verifiable. Therefore, the last stage of construction of a model should involve its verification, where in practice, it may require only a verification of the laws and theories constituting the structural basis of the model.

The results of the conducted CFA showed that the value of χ^2 is significant at the level of $\alpha=0.000$, which means that the zero hypothesis of empirical and replacement equality by covariance model needs to be rejected (the standardized remainders do not equal zero, hence the model is not consistent with the data). It needs to be noted that the usefulness of this test, especially in the case of larger samples, is limited because it leads to a hasty rejection of valid models, therefore one should not limit oneself to evaluation of consistency only on the basis of the value of χ^2 as this may lead too often to a rejection of correct models (Smyczek, 2007, p. 285).

Table 2. Confirmatory factor analysis of factors determining consumer attitudes towards e-commerce

Relation	Score	Critical error	Critical ratio	P
5 < Factor1	1.081	.172	6.278	0.000
4 < Factor1	1.371	.204	6.711	0.000
3 < Factor1	1.441	.210	6.871	0.000
2 < Factor1	1.384	.198	7.002	0.000
1 < Factor1	1.327	.186	7.124	0.000
9 < Factor2	1.000			
8 < Factor2	1.527	.281	5.429	0.000
7 < Factor2	1.621	.297	5.455	0.000
11 < Factor3	1.000			
10 < Factor3	.625	.148	4.224	0.000
6 < Factor1	1.000			
Factor1<-> Factor2	.060	.014	4.236	0.000
Factor1 <-> Factor3	.135	.025	5.357	0.000
Factor2 <-> Factor3	.086	.022	3.890	0.000

Source: own work developed using AMOS 21 software.

Table 2 presents non-standard regression coefficients and covariance values between the factors obtained as a result of model calculations performed on the basis of the maximum likelihood method using AMOS 21 software. Interpretation of values of coefficients is more convenient thanks to the establishment of factor variance at level 1. The value of

the coefficient informs about the degree of change in the expected index at the change of factor value by one standard deviation (Smyczek and Matysiewicz, 2013, p. 22). In the case of the analysed model, all factors can be considered statistically significant, and the accompanying variables should remain within the model.

The obtained value of χ^2/df was 2.157, which is close to the conservative level of 2; therefore it needs to be assumed that the model is well-fit.

GFI (goodness of fit index) and AGFI (adjusted goodness of fit index) are inspired by analogy to the coefficient of determination (R^2), and measure the proportion of variance in the empirical covariance matrix that has been explained by the model. The values of the indices should be in the range of 0 to 1. If they are close to 0, it means that they are completely unfit; if they are close to 1, it indicates a very good fit. A value of at least 0.9 is the lower limit for a model's approval (Konarski, 2014, p. 346). The proposed model explains 96.7% of covariance matrix variability. The Jöreskog and Sorbom's (1984) AGFI (*adjusted goodness-of-fit index*) was 0.946, so it can be considered adequate (Mulaik et al., 1989, p. 439).

Another significant index of model fitness is the NFI (*normed fit index*), measuring the relative drop in the value of the fitness function as caused by the transition from a zero model to a more complex model; the value of this index ranges from 0 to 1 (Cheung and Rensvold, 2008, p. 55). In the case of the model subject to analysis, the value of this index was 0.893, so it should be also considered as very good. The value of CFI (*comparative fit index*), ranging from 0 to 1 (Bentler, 1990, p. 238), amounted to 0.938, which is also a very good result.

In the case of other measures of model fitness, experts tend to name the RMSEA (*root mean square error of approximation*) as significant. It measures how badly a given model is 'fitted', taking the number of its parameters that need to be estimated into consideration. Hence, if its value is closer to 0, it means that the model fits better. In the model under analysis, the value of RMSEA was 0.051, which makes the model's fit satisfactory (Bedyńska and Książek, 2012, p. 186).

Lastly, in order to determine the critical value of the sample size, Hoelter's "critical N" test was used; its result shows that the analysed model wouldn't be rejected at the conventional level of 0.05 if the sample size was 290 or lower (Smyczek, 2007, p. 286).

To summarize, the conducted confirmatory factor analysis has proven (except for the test of χ^2) that the analysed model of consumer attitudes

towards e-commerce is correct and valid. All of the coefficients included in the analysis have appeared to be significantly related to the factors they measure. It seems therefore justified to state that consumer attitudes towards e-commerce are shaped by the following factors: factors favourable to the development of on-line shopping, websites supporting on-line shopping, and consumers' emotional characteristics.

It is also worth noting that according to the findings of the exploratory factor analysis, the first factor is of particular significance. This is because of the fact that consumer attitudes towards e-commerce are generally shaped by attractiveness of the assortment range and of the prices of products offered on-line.

Conclusion

The increasingly expanding penetration of the virtual space and its impact on consumer attitudes and behaviour have become unquestionable. The discussed findings of exploratory factor analysis – supplemented with confirmatory factor analysis seem to be fully in line with the aspect of manifestation of the said attitudes in the form of the following three components: emotional component, cognitive component, and behavioural component.

The proposed model approach to consumer attitudes towards e-commerce is also useful in the context of the strategies of development of e-commerce as adopted by both enterprises and government institutions.

This model approach to consumer attitudes towards e-commerce finds practical application in corporate activities undertaken in the aspect of e-commerce to target consumers' emotional, cognitive, and behavioural sphere. This is managed through e.g. ensuring availability of a complete range of the offered products and maintaining the prices on a competitive level in comparison to the traditional offer, further development of price comparison services and opinion/recommendation websites, as well as positioning e-commerce as a new lifestyle in the era of a widespread use of ICT.

Furthermore, the developed model gives rise to a further discussion and research on consumer attitudes towards e-commerce or towards the broadly-understood e-business.

References

- Allport, G.W. (1935). *A Handbook of Social Psychology*. Worcester, Ma: Clark University Press.
- Amstrong, G. and Kotler Ph. (2012). *Marketing. Wprowadzenie*. Warszawa: WKP.
- Bentler, P.M. (1990). Comparative fit INDEXes in Structural Models. *Psychological Bulletin*, 107(2).
- Bedyńska, S. and Książek, M. (2012). *Statystyczny drogowskaz 3. Praktyczny przewodnik wykorzystania modeli regresji oraz równań strukturalnych*. Warszawa: SWPS.
- Cheung, G.W. and Rensvold, R.B. (2002). Evaluating goodness-of-fit indexes for testing measurement invariance. *Structural Equation Modeling*, 9(2).
- CSOP (2015). *Wykorzystanie technologii informacyjno-(tele)komunikacyjnych w przedsiębiorstwach i gospodarstwach domowych w 2015 roku*. Warszawa: CSOP.
- Gatnar, G. and Walesiak, M. (Eds). (2004). *Metody statystycznej analizy wielowymiarowej w badaniach marketingowych*. Wrocław: UoE.
- Kędzior, Z. and Karcz, K. (1998). *Modele zachowań gospodarstw domowych i przedsiębiorstw (2000–2010)*. Katowice: RO UoE.
- Kramer, J. (2015). Możliwe postawy konsumentów wobec nowych trendów rozwoju konsumpcji. *Marketing i Rynek*, 8 (CD).
- Kucia, M. (2015). Innowacje w kanałach dystrybucji jako konsekwencja wirtualizacji handlu. *Logistyka*, 2.
- Matysiewicz, J. and Smyczek, S. (2013). Relations between Healthcare Organizations and their Patients: Three-factors models in the e-healthcare market. *Review of Business*, 33(2).
- Mącik, R. (2013). *Technologie informacyjne i telekomunikacyjne jako moderator procesów podejmowania decyzji zakupowych przez konsumentów*. Lublin: UMCS.
- Mróz, B. (2014). Konsument w sieci – wyzwania i zagrożenia. *Handel Wewnętrzny*, 4(351).
- Mulaik, S.A. et al. (1989). Evaluation of goodness-of-fit indices for structural equation models. *Psychological Bulletin*, 105(3).
- Smyczek, S. (2007). *Modele zachowań konsumentów na rynku usług finansowych*. Katowice: University of Economics in Katowice.
- Sztemberg, M. (2000). Konfirmacyjna analiza czynnikowa jako weryfikacja eksploracyjnej analizy czynnikowej. In: M. Walesiak (Ed.), *Pomiar w badaniach rynkowych i marketingowych*. Wrocław: Akademia Ekonomiczna.
- Thurstone, L.L. (1928). Attitudes can be measured. *American Journal of Sociology*.
- Trojanowski, M. (2013). *Postawy konsumentów wobec sprzedaży wysyłkowej w Polsce – ujęcie dynamiczne*. Warsaw: Publishing House of the Faculty of Management of the University of Warsaw.

Radosław Maćik

Changes in Consumer Decision-Making Process Influenced by ICT Usage

Abstract

The aim of this chapter is to present and discuss the areas of consumer decision-making process that have been – and still are – subject to transformation under the influence of permanent use of ICT. The point of departure is a modified model of consumer decision-making, based on the structure of the EKB model, where in order to include the range of multichannel processes, the stage of evaluation of alternatives has been split into 4 independent sub-decisions concerning: product choice, sales channel selection, possible selection of the purchasing platform and the sales format, and seller selection. The reference literature and the empirical research (both quantitative and qualitative) conducted by the author since 2006 has made it possible to analyse the changes in the whole purchasing process, with a special consideration of its multichannel nature, followed by changes taking place at particular stages of consumer decision-making process, referring to market trends and examples of real-life consumer behaviour.

Keywords: consumer, buyer decision process, ICT, multichannel sales processes, virtual channel, physical channel, mobile devices, social media

Introduction

Even a brief look at the contemporary consumer behaviour leads to a conclusion that a common use of Internet technology influences today's buyer decision processes. As a result, a contemporary consumer – if they're not digitally excluded (usually at their own request), shops in a much different way than their ancestors, or than they did 20–30 years ago. This is true not only for consumers living in Poland or any other country from Central and Eastern Europe, but also for inhabitants of highly-developed countries with a long history of market economy. Popularization of information and communications technologies (ICT) has led to treating Internet technologies as game-changers of the general conditions of utilization of the so-called general purpose technologies (GPT), which trigger transformations of business models (Mazurek, 2012, p. 28–77) and acceleration of economic growth (Basu and Fernald, 2007, p. 146–171; Bresnahan and Trajtenberg, 1995, p. 83–108; Kauffman and Walden, 2001, p. 1–112).

Studies of consumer behaviour in the context of changes induced by ICT began in the mid-1990s, at the time of appearance of the main models of e-commerce and simple on-line shopping assistance solutions. The decision-making process related to purchasing on-line tended to be treated as an exact reflection of the buyer decision process taking place in traditional brick-and-mortar shops (Maćik, 2008, p. 87–92). A number of studies compared shopping off-line and on-line in the context of mutually substitutive sale channels (Kaufman-Scarborough and Lindquist, 2002, p. 333–350), accompanied by explorations of further factors influencing the approval and adoption of virtual channels among consumers (Chang, Cheung and Lai, 2005, p. 543–559). It was quickly noticed, however, that while the general pattern of the purchasing processes changed very little (Darley, Blankson and Luethge, 2010, p. 94–116), the actions taken and the decisions made within particular stages of the said process were much different than in the case of shopping where shoppers did not use the Internet (Maćik et al., 2011, p. 180–183). The later development of mobile technologies brought an additional ease of using the Internet and on-line applications anywhere thanks to devices like smartphones or tablets, offering a new channel within the virtual setting – mobile channel, as an opposition to – or an offshoot of – the traditional virtual channel that could be accessed through PCs. This led to the majority of purchase processes becoming multichannel

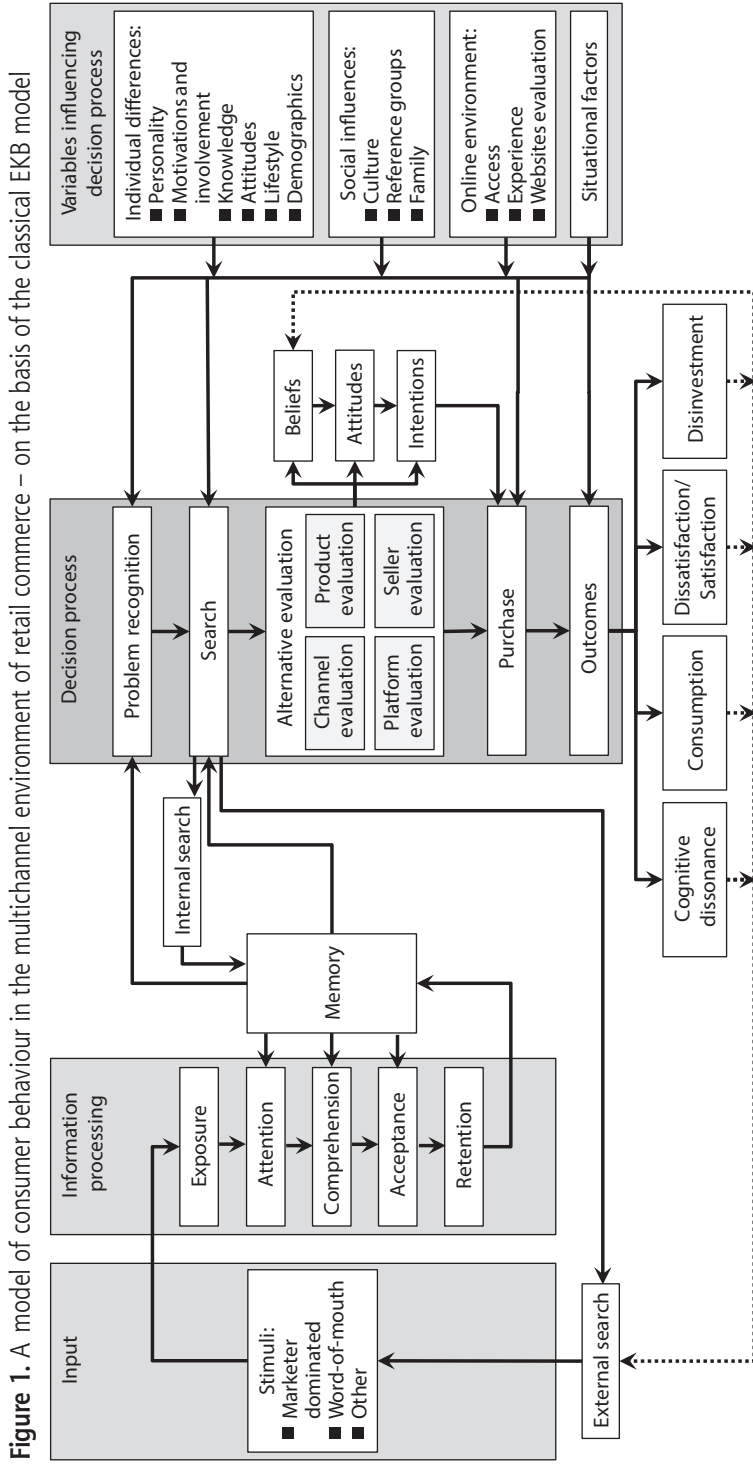
processes which consumers could take part in using many different channels at the same time (for example, using a mobile price comparison apps during a visit in a physical shop, or browsing social media in search of opinions about some product). The multichannel consumer decision-making processes have become reflected in multichannel sales strategies (multi-channelling), and in the increasingly popular integration of all channels into one coherent whole (omnichannel strategy) (Lazaris and Vrechopoulos, 2014; Brynjolfsson, Hu and Rahman, 2013).

The goal of this chapter is to present consumer decision-making process areas that have been – and still are – transformed under the impact of permanent usage of ICT, with references to literature devoted to the subject and the author’s empirical (both quantitative and qualitative) research conducted since 2006. The aim is to show not what consumers buy, but how they buy, and what factors may influence their decisions.

Buyer Decision Process: A Classical Model and a Model Modified by Utilization of ICT

A contemporary consumer, well-familiar with Internet technologies, increasingly surrounded with objects functioning within an ecosystem known as the Internet of Things (IoT), expects to have a freedom of the place and time to become acquainted of a given offer, doesn’t let their decisions be taken control of, is critical of the information they receive, confronting it with the experience and opinions of others on the one hand, but they are also more and more keen on sharing their own experience with a given product/brand (mainly through social media). On the other hand, however, such consumer values convenience and ease of making purchase-related decisions, which is easiest achieved by sacrificing a bit of one’s consumer sovereignty.

Therefore, using the Internet potentially transforms the whole purchasing process as typically viewed in the EKB model (Engel, Blackwell and Miniard, 1995): from the stage of recognition of need, through information search, evaluation of alternatives in the scope of selection of product and place of purchase, ending with closing a deal (actual purchasing) and post-purchase behaviour (Solomon, 2006, p. 311). While the stages of this process remain generally the same, both the factors influencing consumers at particular stages and the beha-



Source: own work on the basis of: Blackwell et al., 1978, p. 556; Darley et al., 2010, p. 96 and the author's own research findings.

viour at each of these stages change, if only because of the multichannel nature of contemporary consumer behaviour. It is important to point out that the impact of ICT is minor only when all of the main stages of the decision-making process take place in a physical channel. Figure 1 shows a diagram based on the EKB model of a modified model of buyer decision process in an on-line environment (Darley et al., 2010, p. 96), taking further changes suggested by the author on the basis of a series of own studies into consideration. Compared to the original EKB model (Blackwell, Kollat and Engel, 1978, p. 556) and its later variations, the diagram presented below includes the moderating effects of a given on-line setting (understood as issues related to access, user experience, and evaluation of on-line points of sale) on the buyer decision process, mainly at the stage of alternative evaluation split into product evaluation, channel evaluation, platform evaluation, and seller evaluation). The stage of purchase decision does not feature elements of selection of the form of payment and the method of delivery of the purchased product.

In essence, the main area subject to analysis in this chapter is the very process of consumer decision-making and its main stages, leaving out other solutions.

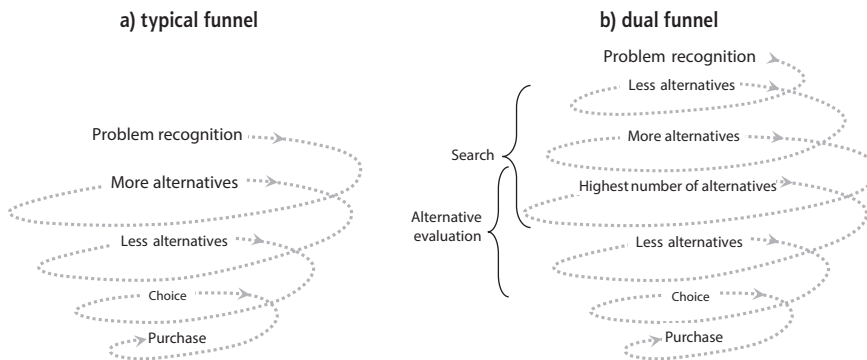
As part of a more detailed division of the stage of alternative evaluation, four sub-stages have been proposed; they may come in different sequence with respect to one another, and are as follows:

- evaluation of product alternatives taking the adopted criteria into account, made often with the support of on-line shopping aids (e.g. price comparison sites, systems of recommendation, or customer review and opinion sites – which are often integrated with each other),
- evaluation of particular channels with respect to the perceived assets and flaws, including those related directly or indirectly with ICT in the context of a given purchase situation,
- evaluation of the purchase platform (a common behaviour for both forms of on-line channels, e.g. considering purchasing only on Allegro, AliExpress, eBay, etc.) and the format of sales (in the case of both physical channel – shop format, and virtual channel – e.g. on-line shop, auction, mobile application, etc.),
- evaluation of the seller – where the main criteria include the level of the offered prices, product availability, and – most of all – the perceived credibility and trustworthiness of the seller as based on opinions and reviews.

The said sub-stages are partially independent of one another – especially in terms of autonomic decisions related to the selection of product and seller. Product selection may be still affected by the selection of the channel and the platform or the format of sales, particularly when it comes to the matter of availability of certain brands and products.

It's also important to note that a decision to purchase may become separated from the act of purchase itself. A decision to buy a certain product from a certain seller through a certain channel will result from choices made in the process of evaluation of alternatives whereas the act of purchase itself may be postponed by the consumer themselves or because of other factors beyond their control (e.g. a temporary lack of a given product on the market).

Figure 2. Shopping process as a funnel narrowing the field of selection of the considered alternatives



Source: Maćik, 2013, p. 174, 183.

A typical consumer purchase process may be presented in the form of a funnel (Figure 2a) where the number of alternatives to be taken into consideration decreases as the consumer moves down the stages. However, given the common access to Internet technologies, including a number of shopping aids, it is possible that if a consumer gains new information, the number of alternatives taken into consideration will initially grow only to fall in the process of evaluation made by way of elimination, until the final decision to purchase is made (Figure 2b – dual funnel). The diagram leaves out post-purchase behaviour as it is difficult to present it in the chosen graphic form.

For several years now, the process of shopping for elective goods has been largely determined by the scope and intensity of utilization of ICT among contemporary consumers (Maçik, 2013, p. 127–170). In the case of FMCG, the impact of ICT on the change of shopping habits is much smaller, which is proven by qualitative research and everyday observation, although the segment of sales of food and other FMCG products is growing rapidly, especially in larger urbanized areas – currently, such products are bought by 21% of on-line shoppers, aged usually 35–49, better educated and rather better-off (Gemius, 2015, p. 94–99).

It should be pointed out that the only group in the case of which ICT have changed their shopping habits very little are persons not using the Internet (mostly people of advanced age). In their case, however, there occurs a phenomenon of the so-called ‘shopping as a favour’, made for them by others (usually their children) (Maçik, 2015a, p. 211–229). Of course, in this group there are still people well able to take advantage of ICT in a broad scope, including e.g. for the purpose to use social media. These are mostly people who are professionally active even after they reach the age of retirement, and people whose work used to – or still does – involve utilization of various IT solutions. In their case, it is possible to notice a selective approval and adoption of ICT, which in turn affects their current consumer behaviour.

Multichannel Nature of Consumer Purchase Processes

As already mentioned, it is more than certain that contemporary consumer decision-making processes are multichannelled. Young consumers are especially keen on shopping via many different channels.

Table 1 presents findings of a qualitative research in the form of a self-report of a process involving making a decision in the scope of a recent purchase of a durable-use good, conducted twice – in 2011 and in 2016, in samples of young consumers using mobile technologies. The received self-reports have been categorized in terms of the contained information according to 6 stages of purchase-related decision (modified process – subdivision into product selection and seller selection stages) and 3 channels: standard channel (brick-and-mortar shop and in-person communication) and virtual channel in two options: conventional on-line channel and mobile channel (including SMS/MMS communication). Since the study included only young people (aged 28 and below),

it is reasonable to expect lower rates of use of particular channels and probably a smaller number of various channels used in groups of people of a more advanced age).

Table 1. Multichannel nature of purchase processes among young consumers – a comparison of changes over time

Year of study	Stage of shopping process	% of participants of the study declaring having used:				In total ^b
		Physical channel (traditional)	Virtual channel (computer)	Virtual channel (mobile device) ^a	No information	
2011 (n=63)	Problem recognition	73.0	25.4	1.6	7.9	107.9
	Search for information	44.4	96.8	6.3	1.6	149.2
	Product selection	42.9	74.6	12.7	9.5	139.7
	Seller selection	41.3	66.7	7.9	4.8	120.6
	Purchase	49.2	54.0	1.6	0.0	104.8 ^c
	Post-purchase behaviour	52.4	28.6	1.6	23.8	106.3
2016 (n=36)	Problem recognition	94.4	27.8	5.6	0.0	127.8
	Search for information	83.3	72.2	38.9	0.0	194.4
	Product selection	77.8	55.6	33.3	0.0	166.7
	Seller selection	83.3	55.6	27.8	0.0	166.7
	Purchase	77.8	16.7	5.6	0.0	100.0
	Post-purchase behaviour	88.9	50.0	33.3	11.1	183.3

a the study conducted in 2011 took also the usage of SMS/MMS mobile channel into account.

b the value can be interpreted as an indicator of the ‘multichannelness’ of purchase processes.

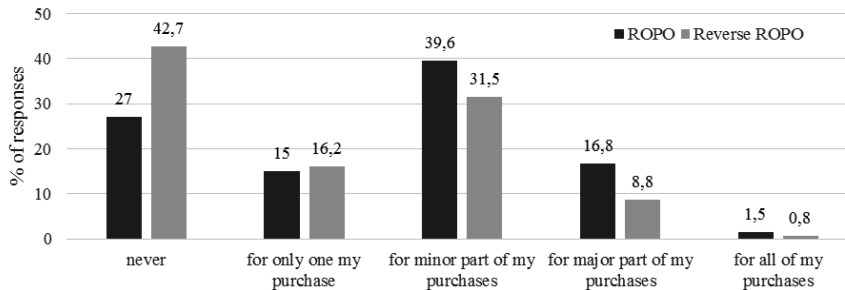
c the value exceeds 100% because of a reported inability to complete the transaction in the preferred channel for technical reasons; these transactions have been completed successfully mainly via obligatory channel.

Source: own studies, encryption based on self-reports of purchase processes.

The presented data shows that application of Internet solutions occurs most often at the stage of information search, becoming lower at the stage of selection of product and seller. The preliminary studies of 2016 highlighted a tendency to a very intense usage of physical channels with a considerable increase in the extent of ‘multichannelness’ of the whole process; this trend was also identified before, as part of qualitative re-

search conducted earlier. The effect of ‘attachment’ to physical channels should be also expected in the case of groups of people of more advanced age, which was proven during FGI studies organized in 2013 (Maçık, 2013, p. 201–206).

Figure 3. Declared frequency of ROPO and reversed ROPO behaviour – own studies (2012)



Answers to the following questions:

- (1) How often have you looked for information about products on the Internet to make a purchase in a conventional brick-and-mortar shop in the recent year? (ROPO effect)
- (2) How often have you looked for information about products in brick-and-mortar shops to make a purchase on-line in the recent year? (reversed ROPO)

Source: Maçık, 2013, p. 166.

A more common, although somewhat simplified way to illustrate the multichannelness of consumer purchase process is to present it in the context of switching from physical channels to virtual (including mobile) channels and the other way round at the stage of information search (including an overall evaluation of alternatives) and purchase, i.e. the so-called ROPO (Research Online – Purchase Offline) and reversed ROPO (Research Offline – Purchase Online) effects. ROPO effect is about searching for interesting goods and services, comparing prices, and looking for points on-line to finalize the purchase off-line (usually in brick-and-mortar shops). Opposite situations, where information gained off-line is used to make a purchase on-line, are defined as the reversed ROPO effect. It is important to note that a typical view of physical and virtual channels produces an instant assumption that they compete with each other, which is actually true at the stage of purchase (which is why multichannel retailers have theoretically larger chances

for success), but they are, in fact, complementary to one another at least at the stage of information search; consumers can use both of them to gain different information and find each of them more or less trustworthy (Maćcik, 2015d, p. 99–111), and when they combine information from both, e.g. opinions and product specifications found on-line and the sensory experience with a given product seen in a physical shop, accompanied by a talk with a salesperson, they achieve the effect of synergy.

Figure 3 presents a declared frequency (in the sense of the proportion of purchases) of application of strategies based on ROPO effect or reversed ROPO effect on the basis of own studies conducted in 2012 (Maćcik, 2013, p. 165–168). The majority of the respondents (73%) admitted having more recourse to ROPO (declared more often than the opposite strategy) than to reversed ROPO (approx. 57% of the respondents).

The declared frequency of behaviour typical of the ROPO effect does not depend on the respondents' gender, but still decreases as they become older (Pearson's $r = -0.29$, $p=0.000$), mainly because elder people tend to use the Internet to gain information about products rather less often. Like in the case of the reversed ROPO effect, the declared frequency of such behaviour did not depend on the gender, but did depend largely on the age of the respondents, showing a negative correlation therewith (smaller than in the previous case, i.e.: $r = -0.21$, $p=0.000$) (Maćcik, 2013, p. 166–167).

The publicly available research findings for making purchases in line with the model of ROPO or reversed ROPO do not point to any specific reasons for such consumer activity. Own studies, however, produced results identifying the deficiencies consumers ascribed to each of the channels. And so, the most common cause for the occurrence of the ROPO effect is the desire to 'experience' a given product, i.e. to see it, try it on (clothes, shoes, etc.), and the possibility to use the purchased product as soon as possible; these reasons were given by at least 40% of the respondents. Among the less frequently named reasons were situations where the price of a given product was lower in the off-line channel (in absolute terms or including the costs of shipping), as well as the fear that it might be more difficult to take advantage of the warranty in the case of on-line purchases, that the product purchased on-line might be fake, or that the product purchased on-line might become damaged during transportation (Maćcik, 2013, p. 168). The main reasons for

switching from a physical to a virtual channel after gaining information about the product (reversed ROPO) were: lower product price on-line – declared by 46% of the respondents; availability of a given product option/variant only upon additional request – 25% of answers (these are transactions lost by brick-and-mortar points of sale because of a possibly too strict assortment management); around 18% of answers concerned the possibility to purchase a product unavailable in physical channels (e.g. individually imported goods, hand-made products). Among other reasons the dominant one was the keenness on taking advantage of free or inexpensive home delivery, which gave an additional benefit in the form of saved time or effort (Maçik, 2013, p. 169).

The current studies into the categories of products sensitive to the effect of ROPO include products classified as “experiential goods” – requiring personal interaction, especially consumer electronics (household and audio/video appliances, computer equipment, mobile devices, and automobiles). The less common opposite effect concerns most often household and audio/video appliances (which speaks for different preferences of shoppers), shoes, cosmetics, and children’s products (Gemius, 2015, p. 110–111).

The Impact of ICT on the Stage of Problem Recognition

This stage opens the whole buyer decision process, and occurs when a consumer sees a significant difference between the current and the perfect state of affairs, either by way of a negative assessment of the current circumstances compared to the ideal state (becoming aware of a certain need), or because of an increased standard of the ideal state (spotting an opportunity) (Solomon, 2006, p. 315). It is important to point out that the on-line environment makes it easier not only to gain information, but also to make one’s status known, especially in the case of social media. A permanent exposure to content showcasing other people’s lifestyles and consumption standards, e.g. photos uploaded to Instagram, or posts published on Facebook and Twitter, increases the number of situations where consumers see a certain products used or owned by others, which then becomes a stimulus changing their perception and assessment of their current possessions. In the case of consumers of a bit more advanced age, buyer decision process is ‘activated’ by a need defined as a sense of shortage (resulting from either physical

damage or wear of the owned goods), or by gaining an additional income, which brings to light some long-suppressed needs whose fulfilment has been postponed due to the necessity to cover more immediate expenses (Maćik, 2013, p. 177–181).

The Impact of ICT on the Stage of Information Search

The stage of search for information differs greatly among all contemporary consumers, mainly because of the large number of available sources of information. Searching for information is, in fact, a process of searching for the value of the purchased goods and for the factors shaping this value. Information search is often a two-stage process and includes both internal and external sources (Figure 1), that consumers tend to view differently in terms of their credibility and trustworthiness. Sources that are not controlled by producers and sellers of goods consumers intend to purchase are regarded as more credible and trustworthy (Maćik, 2013, p. 181).

External sources of information are becoming sources accessed increasingly often via ICT, especially via the Internet and mobile technologies. Internet resources and social media offer consumers a quick access to a vast body of shopping information; the problem is thus not the access to such information, but rather the aggregation and selection of – or the ability to filter – such information because as there are more and more alternatives, the decision-making process becomes increasingly difficult, which can lead to information overload. Fortunately, the development of ICT has led to the emergence of services called on-line or interactive shopping aids (ISA). Consumers use them quite often, and have different opinions about them, leaning towards solutions that are not limited to one seller or industry, e.g. popular price comparison sites, sites with consumer reviews and opinions, although these tools are utilized to process information, i.e. to evaluate alternatives, rather than to aggregate it (Maćik, 2015b, p. 418–428). In the past, it was common to use message boards, but they have given way to social media, mainly to Facebook and to video-reviews and tutorials found on YouTube.

It is also important to point out that in many situations, not only in the case of purchase processes moderated by ICT, the stages of information search and alternative evaluation alternate – when a consumer evaluates alternatives, they may gain additional information (e.g. to

learn of a product they haven't been familiar with before), which can lead to information search anew. New alternatives and information will then need to be evaluated.

In the case of young shoppers, the information found on-line is usually confronted with the opinions of their friends and family members. Some people from among one's friends and acquaintances tend to be treated as experts; they constitute a specific category of 'shopping aids' as they may help others and influence their purchase decisions thanks to their knowledge and experience. In the case of advice from family members, the usual practice is to follow a limited confidence principle. Respondents aged 26–35 relied on the opinion of salespersons and information gained at a given shop (although to a limited extent in the case of the latter). These respondents are aware of existence of the phenomenon of "amplification" of opinions found on-line, which is why they approach them with reserve. The said ISA tools are considered sources of information, but not decision-making aids.

The group of 36–50 year-olds displays a rather sceptical approach to purchase information gained otherwise than in person, and although they do use information from the Internet, they are still ready to trust it only after personal and an in-depth verification. Moreover, this is the group that points to unethical practices of sellers. When it comes to the 50+ age group, it is clear that its representatives prefer to rely on their own knowledge and experience because the common conviction is that advertisers lie (although the respondents are highly susceptible to advertising), and that sellers cheat and treat older shoppers with contempt. Opinions of friends and acquaintances, users of products considered for purchase, are of big importance. Information gained on-line tends to complement other sources, which is partially a consequence of the smaller extent of utilization of ICT.

There are therefore big similarities in the perception of utility of certain sources of information (including that gained on-line) about products/services between those aged 18–25 and 26–35 on the one hand, and those aged 36–50 and 50+ on the other (Maçik, 2013, p. 183–191).

To sum up, it is easy to identify multichannel behaviour already at the stage of information search, which often involves a simultaneous search for information in both virtual (including mobile) and physical channels to achieve synergy, i.e. to use a given channel to gain information that is not available in another channel (or gaining it otherwise is not effective).

The Stage of Alternative Evaluation

The stage of search for information forms an initial set of alternatives subject to evaluation on the basis of certain adopted criteria and priorities set by a given consumer (even if they're not specific). The diagram shown in Figure 1 proposes a distinguishment of four relatively independent sub-decisions at this stage, i.e. product selection, selection of the purchase channel, selection of the format/platform of purchase, and seller selection. A typical sequence of consumer actions starts from product selection, moving on to the selection of the channel and the place of purchase (Maćik, 2013, p. 196). The case is different with virtual channels and a high level of consumer's loyalty to a brand or seller, when the selection is made in a certain place (or places) of purchase (it can be associated with pre-selection of the shopping platform like e.g. Allegro, conditioned habitually). A situation when the seller is chosen first and the product second occurs usually with food products (resulting from a limited area of delivery in the case of on-line shopping) and cosmetics (brands available selectively or in a non-shop sales channel).

The criteria of product evaluation applied by customers concern either the product's properties (functional features) or subjective factors – brand image, product design, or emotions that accompany the possession and use of a given product. The Internet supports smart shopping behaviour involving searching for functionally-similar products sold at a most attractive price, which points to a decreasing significance of brands (a good example is the popularity of AliExpress.com, which lets consumers buy directly from China; at the end of 2015, it had around 2 m. users from Poland alone – PBI, 2015). The initial set of alternatives is usually narrowed down progressively, although it may occur that a consumer extends their range of choices, or even changes it substantially as they gain new information (Figure 2). The set of alternatives may be narrowed by way of exclusion of brands and/or product features not compliant with one's functional and/or emotional or financial criteria. Therefore, the consumer decision-making process rarely starts from determining one specific brand, but rather from compiling a set of brands taken into consideration, with this set narrowed down over time by way of taking other product features into account (Maćik, 2013, p. 191–196). At this stage, ISAs are particularly useful because they make processing large amounts of information during product comparison much easier. But many consumers view them almost only as sources of information,

treating suggestions and comparisons with doubt. It might be argued that such aids are not taken advantage of by consumers who would benefit most from it – people of little knowledge about a given product category.

Consumers clearly stress the benefit in the form of time saved thanks to product comparison on-line tools. Women, however, declared that they preferred to entrusting the sole act of comparing offers, especially when it came to consumer electronics, to their husbands/partners as they considered it to be boring, but also because this let them transfer the risk of a wrong choice onto someone else; such approach is also seen among men, who attempt to limit the list of alternatives in such situations, so that the purchase is made faster (Maçik, 2013, p. 193–194).

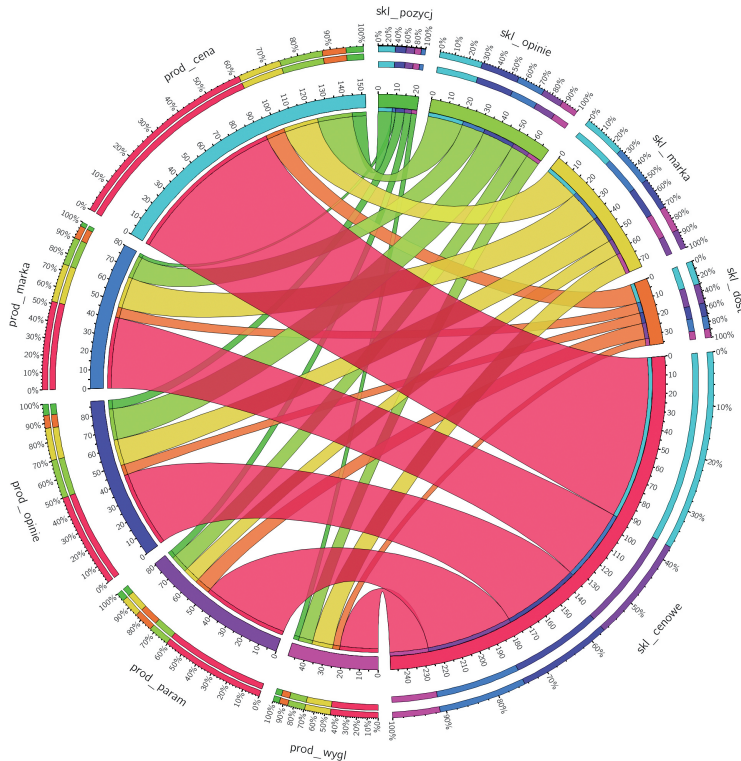
On the other hand, alternative evaluation often involves turning to a physical channel because it gives a chance to see, touch, and feel a given product so that its more specific features can be actually assessed, regardless of whether the purchase is made eventually on-line or off-line. In this aspect, both virtual and physical channel are complementary to one another: each of them lets consumers evaluate the product qualities that are in line with each channel's features and used, in principle, jointly, leading to multichannel behaviour as a result (Maçik, 2015d, p. 99–111). For most of the respondents, comparing pre-selected products in a brick-and-mortar shop, knowing that the purchase will be made on-line, is commonly acceptable; it raises ethical doubts among women only in the case of clothes and related products (Maçik, 2013, p. 194–195).

Seller selection, in turn, is a search for the right terms of sales, including an attractive price, shopping experience with a given seller, or e.g. the policy of returns (e.g. within extended deadlines in the case of on-line shopping). While the decision on where to make the purchase in the case of physical channels depends mostly on the vicinity of the point of sale, but also on the atmosphere thereof, on time, and on loyalty to the seller, with price being of lesser importance, the situation with virtual channels is different because here, selection is made usually based on the level of prices and product availability (important in the case of shopping overseas), but also on the opinion about the seller; the respondents tend to look for any negative comments, which helps them make a decision whether to buy from a given seller or not.

A quasi-experiment in a setting of a price comparison site has been conducted to study the independence of the factors of product and seller selection (Maçik, 2015c, p. 129–140). The questions about the reasons

for a given selection were asked in an open form, and the answers were divided into 5 groups for each variable on the basis of declarations of the key factor and partially of the next most important factor. After cross-tabulation, the mutual relationships between the declared product and seller selection factors were visualized in the form of a chord diagram – see Figure 4.

Figure 4. Contingency of the main factors of product selection (left side of the diagram) and shop selection (right side of the diagram)



Categories – legend:

Product selection: prod_cena – attractive/low price, prod_marka – known/good product brand, prod_opinie – opinions on and reviews of the product, prod_param – product functions and parameters, prod_wygl – product appearance/design.

Shop selection: skl_cenowe – price factors: lowest/most attractive price, free delivery, skl_dost – availability, quick delivery, skl_marka – known shop brand, trust for the shop, backed with experience, skl_opinie – opinions on and reviews of the shop, skl_pozycj – offer positioning and utility of the shop's website.

Source: own studies, visualization: Circos Table Viewer.

Looking at Figure 4, it appears clear that the applied criterion of product selection is not associated with the criterion of shop selection, which is further proven by the results of the chi-squared test for independence ($\chi^2=14.155$; $df=16$, $p=0.597$). In 50–60% of cases, respondents declare that they select products taking any of the said factors into consideration and select shops driven by the criterion of price: they tend to choose those shops that offer the lowest prices and/or free delivery (which is illustrated by the broadest “strings” in Figure 4). This is similar for all other solutions. The independence of the criterion of product selection from the criterion of shop selection proves the findings of the author’s current research, which implies a need for inclusion of a stage of seller/supplier selection coming after the stage of product selection made on the basis of certain adopted criteria into the traditionally-viewed buyer decision process, taking individual qualities and circumstances into account (Maçik, 2013, p. 173).

The Stage of Purchase, Payment, and Delivery

According to the classical model, the purchase decision is made when the product and the seller have been selected, the intention to purchase is not abandoned, and the act of purchase is not postponed. In the adopted approach, the stage of purchase covers conclusion of a transaction, including arranging any additional services (e.g. home delivery) in physical channels and choosing the method of delivery, as well as selecting the method of payment (virtual channel). While in the case of physical channels these choices are not so difficult to make, the method of payment and delivery to be selected in virtual channels have a big impact on purchase satisfaction and on the risk accompanying the purchase, including mainly financial risk and identity theft risk.

Findings of a qualitative research conducted in the form of FGIs, projective methods, and mini-IDIs (Maçik, 2013, p. 197–200) show that consumer preferences at this stage are highly diversified and there is no linear relationships between the age and the inclination towards finalising the purchase in virtual channels. In addition to that, despite the fact that over 1/3 of the respondents used smartphones and tablets when shopping on-line in 2015, transactions were finalised in mobile channels quite rarely (Gemius, 2015, p. 130–137).

In the case of the youngest study group (aged 18–25), there is a strong preference to buy off-line, which is an attitude common also in the 50+ age group (but the motivation behind this preference is different: the physical commercial space stimulates younger shoppers, and in the case of 50+ shoppers, off-line shopping is less risky). Young shoppers tend to buy on the Internet when a given product is unavailable ‘on the spot’, when it is cheaper to buy it on-line, when something needs to be imported, or when they buy “neutral products” (a term used by one of the study participants), such as books. Representatives of this group prefer to pay by means of an on-line transfer because they consider this method to be simple, quick, and inexpensive; they also like instant on-line payment methods. Although they use credit/debit cards commonly to pay in physical channels, they don’t use them to pay on-line (in spite of the fact that the majority of such cards makes it possible); they don’t use PayPal either – they’re rather traditionalists in this respect. Card payments are chosen more often by older shoppers, mainly when it comes to shopping from abroad; however, the respondents admitted they preferred standard on-line transfers, and even blocked the feature of virtual card payment.

The preferred form of delivery of goods purchased on-line is courier service; the respondents had a lot of reservations about the services provided by Poczta Polska, although some said the quality of their service tended to improve. In terms of risk related to product becoming damage during transportation, the respondents – regardless of age – choose to pay by cash on delivery, or to collect the goods in person and pay on the spot. New forms of delivery – especially parcel stations – tended to be considered inconvenient by older respondents; only the group of the most professionally active respondents spoke very highly of such solutions. Still, it is important to mention the limited capacity of parcel stations; in a research conducted in 2015, respondents pointed to situations when there was not enough space in parcel stations for their packages to wait for a longer time, which forced to collect their orders quicker.

To summarize, the on-going explosion of technology gives consumers a wider range of possibilities with respect to the forms of payment and delivery, but paying to unknown sellers is still considered a risk; what’s more, consumers tend to regard advance payments made via a bank transfer less risky than payments made using credit/debit cards (the main concern is related to identity theft). Paying by cash on delivery or

personal collection of ordered goods lets consumers detect any abnormalities, or identify any instances of fraud attempted by the seller or the company delivering the goods.

Post-purchase Behaviour

After the purchase, consumers collate the product with their expectations, which results in satisfaction or a lack thereof; the latter may cause a post-purchase dissonance (Figure 1). Satisfaction or dissatisfaction with the product affects the perception of the value obtained and on communication of the consumer with their environment (actions taken with the intention to display the outcome of consumption, or to warn others), as well as their willingness to trust a given brand and/or seller again, translating into loyalty and an increased likelihood of future purchase. If the consumer does not have any personal experience with the purchased product before (e.g. seeing it in a brick-and-mortar shop), the moment of verification of expectations leads more often to dissatisfaction than to joy. Multichannel behaviour makes it possible to avoid such situations.

In the case of both self-reports of shopping processes and group discussions, post-purchase behaviour becomes quite typical: personal or phone communication with friends and members of family to share one's shopping experience, or – which is rather common to younger shoppers – sharing one's opinion across social media (mostly on Facebook and Instagram). A bad purchase becomes a trigger to warn others against the bad quality of a product or against a dishonest seller; interestingly enough, dissatisfaction is expressed most often on-line and in a more public way, while satisfaction is communicated mostly among friends, acquaintances, and family members (usually within smaller communities or by way of personal contact). The conducted series of FGIs show that such opinions are most often expressed and shared through own profiles on SM, and less often in direct contact with sellers or brands – a word of praise on a brand's FB fanpage implies a higher level of satisfaction (Maçik, 2013, p. 200–201). Analysing post-purchase behaviour using cyber-ethnography methods, we can see that the willingness to share one's opinion on social media grows over time and can be treated as an element of building one's self-image.

Conclusion

As proven by the examples discussed in the paper, almost 20 years of existence of virtual channels has had a significant impact on the behaviour of consumers, transforming many of its aspects. Popularization of mobile technologies has not only accelerated this transformation, but also made multichannel behaviour much more common and ‘practicable’. According to models of technology acceptance, it is easier to accept and adopt IT solutions when the perceived gains and costs are obvious to users, and the technology itself is user-friendly (Klopping and McKinney, 2004, p. 35–48), which is the case with both forms of virtual channel shopping. This is why younger consumers are quicker to adopt new technological solutions and employ them in their decision-making processes, which doesn’t need to imply a high inclination towards on-line shopping, but rather making one’s decisions more informed thanks to the support of the Internet and mobile technologies. A further observation and explanation of the occurring changes appears to be an interesting research task, especially when it comes to the behaviour of today’s adolescents, brought up surrounded by ICT since their infancy, and of the elderly, who may find it difficult to dispose of their financial resources due to digital exclusion.

References

- Basu, S. and Fernald, J. (2007). Information and Communications Technology as a General-Purpose Technology: Evidence from US Industry Data. *German Economic Review*, 8(2), 146–173.
- Blackwell, R.D., Kollat, D.T. and Engel, J.F. (1978). *Consumer behavior*. Hinsdale, Ill: Dryden Press.
- Bresnahan, T.F. and Trajtenberg, M. (1995). General Purpose Technologies “Engines of Growth?”. *Journal of Econometrics*, 65, 83–108.
- Brynjolfsson, E., Hu, Y.J. and Rahman, M.S. (2013). Competing in the age of omnichannel retailing. *MIT Sloan Management Review*, 54(4), 23.
- Chang, M.K., Cheung, W. and Lai, V.S. (2005). Literature derived reference models for the adoption of online shopping. *Information and Management*, 42(4), 543–559.
- Darley, W.K., Blankson, C. and Luethge, D.J. (2010). Toward an integrated framework for online consumer behavior and decision making process: A review. *Psychology & Marketing*, 27(2), 94–116.

- Engel, J.F., Blackwell, R.D. and Miniard, P.W. (1995). *Consumer behavior*. New York: The Dryden Press.
- Gemius (2015). *E-commerce w Polsce 2015. Gemius dla e-Commerce Polska*. Warszawa: Gemius, <http://www.gemius.pl/files/reports/E-commerce-w-Polsce-2015.pdf> (04.05.2016).
- Kauffman, R.J. and Walden, E.A. (2001). Economics and Electronic Commerce: Survey and Directions for Research. *International Journal of Electronic Commerce*, 5(4), 1–112.
- Kaufman-Scarborough, C. and Lindquist, J.D. (2002). E-shopping in a multiple channel environment. *Journal of Consumer Marketing*, 19(4), 333–350.
- Klopping, I.M. and McKinney, E. (2004). Extending the technology acceptance model and the task-technology fit model to consumer e-commerce. *Information Technology Learning and Performance Journal*, 22, 35–48.
- Lazaris, C. and Vrechopoulos, A. (2014). *From multi-channel to “omnichannel” retailing: review of the literature and calls for research*. 2nd International Conference on Contemporary Marketing Issues, June 18-20, 2014. Athens, Greece: Alexander Technological Educational Institute of Thessaloniki, Greece – Manchester Metropolitan University, U.K., https://www.researchgate.net/profile/Chris_Lazaris/publication/267269215_From_Multichannel_to_Omnichannel_Retailing_Review_of_the_Literature_and_Calls_for_Research/links/54493880cf2f63880810aaa.pdf (01.05.2016).
- Mazurek, G. (2012). *Znaczenie wirtualizacji marketingu w sieciowym kreowaniu wartości*. Warszawa: Poltext.
- Mącik, R. (2008). Wybrane aspekty zachowań konsumentów w kontekście rozwoju technologii informacyjnych i komunikacyjnych. In: Z. Kędzior and G. Maciejewski (Eds.), *Zachowania konsumentów – stagnacja czy zmianna?* (p. 87–92). Katowice: University of Economics in Katowice, Research Office.
- Mącik, R. (2013). *Technologie informacyjne i komunikacyjne jako moderator procesów podejmowania decyzji zakupowych przez konsumentów*. Lublin: Wydawnictwo UMCS.
- Mącik, R. (2015a). Courtesy shopping online-between digital exclusion and rational behaviour. *Economic and Environmental Studies*, 15(2), 211–229.
- Mącik, R. (2015b). Korzystanie z internetowych pomocy zakupowych przez młodych konsumentów. *Marketing i Rynek*, 8(CD), 418–428.
- Mącik, R. (2015c). Kryteria wyboru produktu i miejsca zakupu przy korzystaniu z porównywarki cenowej. *Zeszyty Naukowe Uniwersytetu Szczecińskiego. Problemy zarządzania, finansów i marketingu*, 41(2), 129–140.
- Mącik, R. (2015d). Substytucyjność i komplementarność fizycznego i wirtualnego kanału zakupu. *Annales Universitatis Mariae Curie-Skłodowska. Sectio H. Oeconomia*, 49, 99–111.
- Mącik, R. et al. (Ed.), (2011). *Wpływ technologii informacyjnych i komunikacyjnych na zachowania konsumentów – studium empiryczne*. Lublin: Wydawnictwo UMCS.

- PBI (2015, December). *Polskie Badania Internetu, Megapanel. Kategorie tematyczne*, http://www.pbi.org.pl/kategorie-tematyczne?utf8=%E2%9C%93&date=2015%2F12&category=3&last_sort=type_1_asc (07.05.2016).
- Solomon, M.R. (2006). *Zachowania i zwyczaje konsumentów*. Gliwice: Helion.

Jolanta Tkaczyk

Digital Consumer: Trends and Challenges

Abstract

In a narrow sense, a digital consumer may be defined as someone using mobile devices, and in a broad sense, as e-consumer, looking for and purchasing products on the Internet, taking advantage of the content published on-line, aware of themselves and of their needs, and keen on simplifying the decisions they need to make. The aim of this paper is to present the essence of the idea of digital consumer, to highlight the considerations related to the behaviour of digital consumers, and to describe the trends in their behaviour that may pose a challenge to contemporary businesses. The conclusion lists the main factors enterprises should take into account when developing business models to target digital consumers.

Keywords: digital consumer, trend, e-commerce, s-commerce, Internet

Introduction

A typical consumer of the digital era of today has access to many sources of information, functioning in an environment which offers many possibilities unknown in the pre-Internet age on the one hand, but also which is characteristic of chaos and an increasingly difficult decision-making because of information overload. A consumer 'inhabiting' a virtual environment becomes more demanding and transfers their expect-

tations to the real world, which forces enterprises to adapt to the emerging trends and challenges – even if the on-line world isn't their main domain of operation. The aim of this paper is to present the essence of the idea of digital consumer, to highlight the considerations related to the behaviour of digital consumers, and to describe the trends in their behaviour that may pose a challenge to contemporary businesses.

The Concept of Digital Consumer

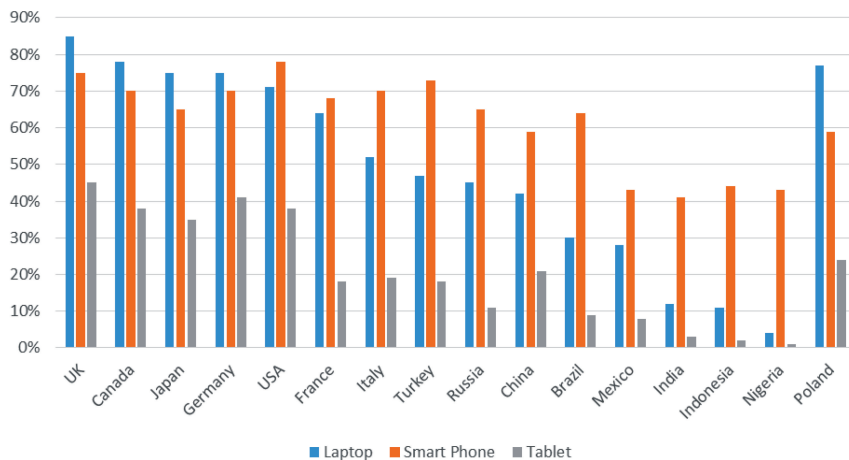
Consumers who are more demanding, conscious, and active are defined as prosumers (Domańska, 2009; Wolny, 2013). Not every consumer using mobile devices or consuming on-line content is a prosumer. This is why the term of e-consumer is used in the context of a virtual environment; it refers to a physical person manifesting and fulfilling their needs with products (goods and services) bought on-line (Wolny, 2012). An e-consumer who fulfils their consumption needs on the Internet without necessarily purchasing anything, e.g. by using certain services free of charge in exchange for their personal details, taking advantage of digital content (audio/video streaming, games), or who just searches for information about certain products on-line tends to be defined as digital consumer. Therefore, the notion of digital consumer is broader than that of e-consumer because it encompasses both passive (visiting websites) and active (commenting, blogging) e-behaviour.

The term of digital consumer may be thus understood in a narrow sense, referring to a consumer using mobile devices (smartphones, tablets, laptops, etc.) (Persaud and Azhar, 2012, p. 420, after Tarczydło, 2016) or in a broad sense, denoting an e-consumer searching for and purchasing products on the Internet, taking advantage of the content published on-line, aware of themselves and of their needs, and keen on simplifying the decisions they need to make (Tarczydło, 2016).

Today, even the most innovative companies wonder how to make contact with consumers who are becoming better informed and more dispersed than ever before. In developed countries, technology is present in almost every aspect of people's lives, starting from weather applications, through on-line shopping, and ending with e-books and wearables. In the case of developing markets, access to the Internet and to smartphones grows exponentially year by year, and on-line retail sales reaches volumes achievable so far only on highly-developed markets. As for

mobile technologies in developed countries such as the UK, Germany, Canada, laptop is still the most popular type of device, while in the case of developing countries like China, Russia, or Brazil, the main link with the on-line world is smartphone. In 2015, 77.9% of households in Poland owned at least one computer. 75.8% of households had access to the Internet, including 71.0% of households with broadband connection. 59% of Polish consumers owned a smartphone, and 24% – a tablet. Looking at the structure of taking advantage of access to the Internet by means of mobile solutions, Poland seems to be similar to developed countries. The structure of usage of mobile technologies in selected countries across the world is shown in Figure 1.

Figure 1. The structure of usage of mobile technologies in selected countries across the world



Source: Euromonitor, 2016, p. 4–5.

Regardless of the means used to connect to the Internet, it is fair to say that digital consumer has become a global phenomenon. The behaviour and preferences of such consumers, shaped mainly by the intense use of technology, evolve very quickly, so it is important to investigate the trends accompanying their behaviour in order to be better prepared to satisfy the resulting needs, demands, and expectations.

The Impact of Digital Consumers On Marketing from the Perspective of Business and Science

Digital consumer is a consumer who has grown up in the world of the Internet, a consumer who is more conscious and less prone to influence. Their specific behaviour changes the approach to traditional marketing instruments. According to Tapscott (2008), in the case of the digital world, it is no longer effective to reach for a marketing mix in the form of 4 or 5 P; instead, consumers should be influenced by means of an appropriate set of tools in the form of ABCDE (anyplace, brand, communication, discovery, experience). A digital consumer may buy products anywhere and anytime, unlimited to anything but the Internet infrastructure. Such consumers want to (and do) participate in co-creation of their favourite brands and products, keen on customizing them according to their own needs and preferences. Digital consumers don't want to be merely passive recipients of communication – they want to be listened to and interacted with. They are willing to negotiate prices, and want to be able to influence them. Finally, they buy not only a given brand or product, but most of all a unique experience.

A digital consumer uses the Internet readily and a lot, taking advantage mostly of social media. They use it mainly to look for information about products, and then to purchase and consumer the selected products, sharing their experience with other consumers on-line. Marketers respond to this change in behaviour more and more gladly, using different digital marketing channels to communicate with these consumers. According to certain findings, by 2017, one third of the global expenditure on advertising will be spent on digital channels, mostly on social media and on the mobile sector (eMarketer, 2015).

The phenomenon of digital consumer is also a subject of interest among the scientific community. A. Stephen (2015) has studied articles in the most influential consumer research journals from the period of 2013–2015. According to his findings, in recent years, the world of science has shown interest in the concept of digital consumer in the following aspects:

- consumer digital culture,
- advertising,
- impacts of digital environments,
- mobile,
- on-line WOM (word-of-mouth) and reviews.

The most popular of these is the issue of WOM; almost half of the studied articles is devoted to this matter. Consumer digital culture research considers, quite deeply, the digital environments in which consumers are situated. A key aspect of this work has been understanding how consumers' identities and self-concepts extend into digital worlds (Stephen, 2015).

Digital advertising is a major topic in the marketing literature and, with respect to consumer behaviour, considers how consumers respond to various aspects of digital ads. A still-emerging theme in recent years is how social media environments impact consumer behaviour. The consequences can be thought of as environment-integral (i.e. digital environments influence behaviour in those environments) or environment-incidental (i.e. digital environments influence behaviour in other, unrelated environments). It is interesting to see how the various informational and social characteristics of digital/social environments, such as being exposed to other consumers' opinions (e.g., reviews) or choices (e.g., bids in online auctions), or even just to friends' lives through social media, can impact subsequent behaviours. The interest in the issue of consumers' usage of mobile technologies, especially in the context of shopping, has been growing as well.

The influence of digital consumers on the world of science is reflected also by the change in the applied research methods. Technological progress gives rise to more and more methods based on experimenting and on the actual consumer behaviour, e.g., eye-tracking, EEG-based or magnetic resonance based methods. Conventional research methods are being also subject to modification under the influence of technology and the geolocation and behaviour of consumers (e.g., FGI conducted in the virtual environment).

Trends Shaping Digital Consumers

H. Vejlgard (2012) defines 'trend' as a process of change that can be viewed from different perspectives: psychological, sociological, and economic. Trends usually emerge as a result of impact of a given environment in the economic, demographic, social, legal, political, and technological dimension. In the case of digital consumers, we are interested mainly in the trends that appear as outcomes of the impact of technological factors.

Among the global trends shaping the behaviour of digital consumers there are:

- Common access to the Internet,
- Mobile technology,
- ‘On-demand’ media,
- Wearable technologies.

The impact of the Internet increases with its range. On the one hand, it gives great opportunities, especially to the developing countries, but on the other hand, it leads to a growing risk of e.g. cybercrime or personal data theft.

The development of mobile technology has made mobile phones advanced telecommunications centres. Apart from the basic functions, they also feature photo cameras, computing units, and offer mobile access to the Internet. Today, a mobile phone may become a city guide (when we download and use a special application), but it can be also used to make small payments (parking fees etc.). Apart from mobile phones, there are also other mobile devices that enjoy a high level of popularity; these include tablets or e-readers, which change the way we can benefit from education and culture. Some speak of an arrival of a “screen culture”, where screens are getting bigger and bigger (compared to the size of mobile phone screens), increasingly cheaper, permanently connected to the Internet, offering access to “on-line cloud” resources, more interactive and intuitive in use, and more user-friendly (Tkaczyk, 2012).

The Internet has also made it possible for us to have access to information and entertainment virtually anytime and anywhere (Mazurek, 2011). We can now watch films and read books, newspapers, and magazines in real time using our computers, tablets, or even mobile phones. An option to rent videos with just one click is now offered by both cable companies and on-line services.

Wearable technology refers to devices such as bracelets, glasses, clothing and other wearables that track information ranging from a user’s health to their current location to social media updates (Euromonitor, 2015). Consumers look for wearables that deliver unique safety or security benefits; the possibility to make phone calls or send messages in a hands-free mode or the feature of sending a distress signal in the case of children or the elderly are ranked as the most desired functions of wearables, while entertainment-related features – including gaming or augmented reality – seem to be of much smaller importance.

According to Euromonitor's report (Euromonitor, 2015), digital consumers are often overconnected consumers, i.e. consumers who are constantly on-line, having at least one mobile device connected to the Internet on them – and going to sleep with such device, keen on mobile payments. The benefits consumers gain from the easy connection to the on-line world appear to go hand in hand with the issues that may arise from the 'overattachment' to mobile devices. Among these issues there are e.g. compulsive reaching for smartphone, which might have distracting effects and lead to a worse performance at work and at school, or to accidents resulting from parents being engrossed in their smartphones and not taking proper care over their children; there is also the case of the so-called 'vampire kids' – kids who spend their time using mobile devices instead of sleeping (Evans, 2016), which often leads to addictions involving an urge to check the notifications flooding one's device. In response to the digital overload, there appear ideas of "digital breaks", e.g. spending one's holiday without access to the Internet, leaving one's phone in a special place in cafés/restaurants in order to enjoy the time and be more present with one's friends and family, or using smartphone dummies to disaccustom oneself from the device.

Types of Digital Consumers

Digital consumers are not a homogeneous group, and although the way they use technology is common to them, the demographic variable and the lifestyles they live make them different.

Consumerbarometer.com is a website that presents findings of a study conducted by TNS at Google's request (2014/2015) on how people from 51 countries across the world use the Internet; it divides digital consumers into four groups:

- Brand advocates,
- Digital moms,
- How to-video users,
- Millennials.

Each of these groups behaves in a specific and individual way.

Brand advocates are extroverts, they are trustworthy, and fluent in using the Internet. Their strong presence and position across social media lets them shape the image of products and brands. Brand advocates

are keen on writing about brands (50% of them make comments, write posts or blog entries on an everyday basis, and 40% of them shares content or links with other users). Members of this group are often referred to as trendsetters; they are eager to get to know new products and willing to devote their time to search for information about products they wish to buy or have bought already. Two out of three brand advocates look for information about products they intend to buy, using search engines and brand websites most often to this end. Over 40% of brand advocates use a smartphone when shopping on-line, and 20% share their experience with a given product on-line. For 17% of brand advocates, the video content found on YouTube is of more significance than the content they can watch on TV; this is why YouTube seems to be the perfect channel to reach this group of digital consumers.

Digital moms are women who are very well-informed, trendy, and constantly on-line. They take advantage of the Internet to buy products necessary for their homes, and they often fulfil themselves as bloggers. About 75% of them generate own content at least once a month. They like using smartphones – also when in search for products and making shopping. They also enjoy looking for and purchasing products on-line. This is the way that lets them save time; plus, when they shop on-line, they don't to take their kids to the shop with them. Apart from household goods, they also shop on-line for products for themselves – mostly clothes, shoes, and cosmetics; they are also keen on-line video viewers. They also are willing to share their experience on-line with others.

How-to-video users are consumers of video content available mainly on YouTube, showing the way certain products are and can be used – sometimes in a very creative and original manner. Consumers and companies use such video platforms to show cooking, building, repairing, cleaning, or sewing instructions. The recipients of this type of content are people who are active on-line, creative, and fond of infotainment. It's quite a large group – at least 2/3 of Internet users watch YouTube videos at least once a week, with 10% of them viewing DIY and how-to videos. About 53% of how-to-video users watch such videos because they want to learn something new. 46% of them loves talking about brands they value and are satisfied with.

Millennials are young people, aged 13–25, whose life takes place on-line to a big extent. They take advantage mainly of social media, but they also use the Internet to look for products, shopping, and watching videos. Their everyday life is a constant interpenetration of two worlds

– the on-line and the off-line. They are the group that is the keenest on using mobile technologies. They want to be able to switch between various devices, which should be also interconnected with one another. 55% of Millennials use search engines to look for product information. Millennials love YouTube. For 20% of Millennials, YouTube content is much more credible and interesting than that found on TV. They turn to YouTube to search for entertainment, education, and interact with others. They are keen on viewing YT channels with others (friends and family members). The first thing a typical Millennial does every day is check the notifications on the social media platforms they use. They comment or like posts of their friends at least once a day. They are also willing to listen to their friends and people whom they trust; they communicate mainly through on-line channels.

Challenges for Enterprises

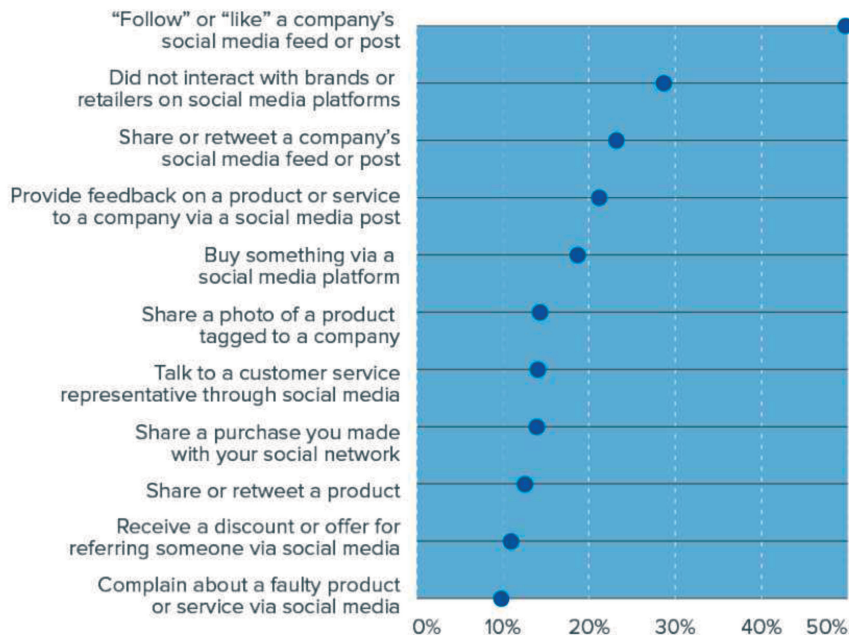
Changes in consumer behaviour and the appearance of digital consumers have made transformation of business models a today's necessity, which affects all areas of economy. A big challenge is, for instance, to adapt to the increasingly popular trend of sharing economy.

The Internet and digitalization have made the costs that producers need to bear to reach consumers directly very low (PWC, 2016). Anyone with resources or production capacity in excess of their own needs can communicate this fact to those who need such resources or capacity in an easy and quick way. It's enough to pay to have the whole system organized, and to ensure that the communication channels are efficient and that the level of transaction is sufficiently secure. This way, we're coming back to a situation from years ago, when goods were exchanged mostly as a result of direct interaction between prosumers (producers being consumers at the same time). On the other hand, the exchange of today is not subject to previous limitations because the new tools of communication and data analytics makes it possible to bring prosumers who are often geographically separated together in a flash. Sharing economy can be defined as an economy involving connecting individuals and legal entities by means of on-line platforms (sharing economy platforms) in order to make it possible for them to provide each other with services or take common advantage of assets, resources, time, abilities, or capital, quite often within a limited time span and without

the transfer of property ownership rights (PWC, 2016). A typical client of sharing economy platforms is a Millennial, a young person, a very keen smartphone user, mobile and open to people, but at the same time limited in terms of finance and looking for cost-effective solutions.

The new business models that have come to being on the basis of sharing economy are changing also the conventional way of doing business, mostly through new principles of competition. The so-called “uberization” of economy is, in fact, a dynamic change of value chains. Getting ready to compete under new conditions is at the moment one of the biggest challenges enterprises have to face.

Figure 2. Interactions with Brands and Retailers on Social Media: 2014



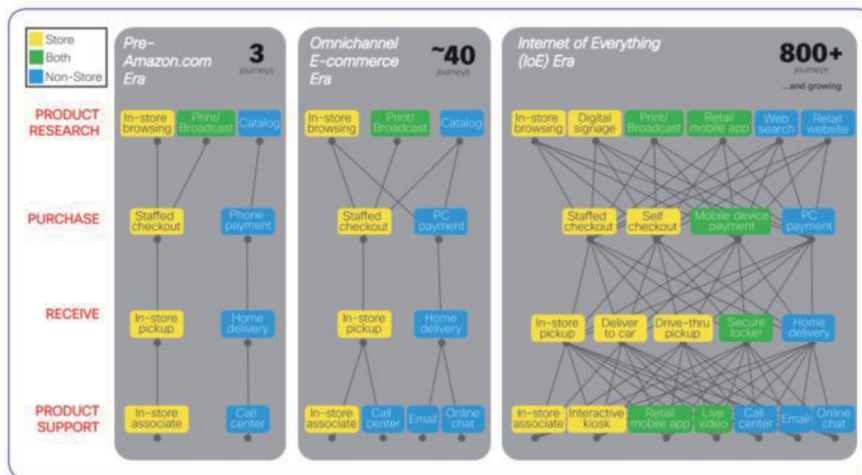
Source: Euromonitor International Hyperconnectivity Survey.

S-commerce (or social commerce) seems to be also a matter of significance. Currently there are over 2 billion social media users in the world. Social networking platforms are becoming more and more daring in their search for ways to monetise their range, but this search is not an easy one. In 2009, Facebook offered brands an option to run their shops on their fanpages, but in 2012, after a very limited response, it gave up on the idea. Twitter has not been very successful in this area

either. Digital consumers get involved in relationships with their favourite brands in different ways; they also tend to use social media to buy from such brands more and more often, although it needs to be stressed that the primary aim of use of social media is to socialize. In 2014, an average of 25% of social media users in the world made some purchase this way (Evans, 2016). Figure 2 presents various activities of social media users in their interaction with brands and retailers.

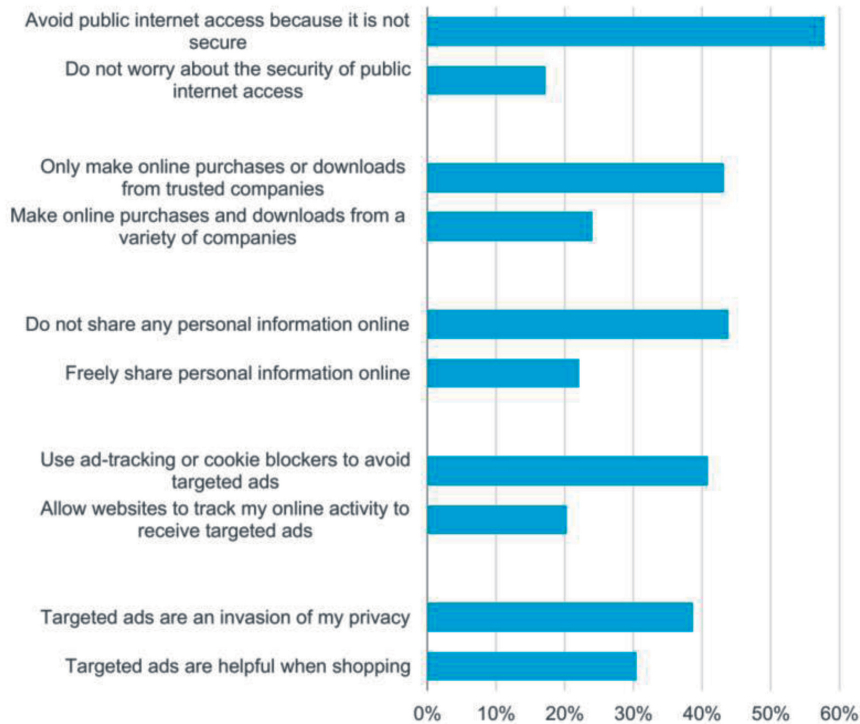
S-commerce now offers producers a possibility to showcase their offer, to use friends' recommendations to look for new groups of recipients, and to take advantage of consumers' feedback concerning their products. The development of social-commerce is a challenge not only to enterprises themselves, who can actually benefit from the option to present their product offers in a new way, but most of all to social networking platforms. Digital consumers expect enterprises to provide them with new – often hyper-customized – experience, including different purchasing channels to choose from and various ways of communication.

Figure 3. Evolution of paths-to-purchase



Source: Bradley et al., 2015.

These expectations are coupled with yet another trend that poses another significant challenge to enterprises – the so-called Internet of Everything (IoE), which can be understood as a networked connection of people, process, data, and things (Bradley et al., 2015)

Figure 4. Attitudes toward Internet privacy

Note: Showing percentage of global respondents who agreed with selected statements. Global survey results include Australia, Brazil, China, Colombia, France, Germany, India, Indonesia, Japan, Mexico, Middle East, Russia, Spain, Turkey, UK, and the US.

Source: Euromonitor International consumer survey, Hyperconnectivity Survey 2014.

The pre-e-commerce era process of making a decision in relation to a purchase was quite simple – the search for a product either took place in the shop, was induced by adverts and commercials, or was based on browsing catalogues. The stage of payment, product collection, and after-purchase support were not too complex either. The arrival of e-commerce has transformed the process of purchase-related decision-making, introducing a new channel of both information and distribution – computer-accessed Internet. The age of mobility and digital media has brought a new quality into the process of purchase-related decision-making, and over 800 possible combinations of information search, order placement, payment, product collection, and after-purchase sup-

port. Every customer may follow a different purchase path. Managing such a developed and complex system is a major challenge to enterprises. Since every customer may behave differently and change their path-to-purchase anytime, according to given circumstances or their mood, segmentation should be performed in real time, and this would be impossible without taking advantage of technology. Figure 3 illustrates different paths-to-purchase and their evolution as influenced by the Internet.

Over 58% of global digital consumers avoid public points of access to the Internet because they consider them to be not secure; only 18% of them have no concern about the security of such connection. More than 42% think that it is reasonable to make on-line purchases only from trusted companies (Figure 4).

A recent study by the Central Statistical Office of Poland (2015) shows that the Polish tend to display a very low level of trust to others (78% of 14 000 respondents do not trust others). Sociologists seek the causes of this most often in the price the Polish society had to pay to become a democratic country and to adopt a market economy.

Utilizing the full potential of sharing economy, s-commerce, or IoE will not be possible without gaining customers' trust, and this seems to be the biggest challenge enterprises need to face at present.

Conclusion

Enterprises need to change constantly in order to be able to respond to the expectations of the new type of consumers – by means of a better identification of their needs, for instance. For digital consumers taking advantage of products in a virtual environment, these products need to be user-friendly and useful, their suppliers should be reliable and trusted, and their price should be affordable.

By looking at the behaviour and demands of digital consumers, it is fair to state that the business model adapted to their needs should be based on the following three qualities: efficiency, savings, and engagement (Bradley et al., 2015). It should offer them an optimal utilization of resources (time and money), a flexible pricing policy (discounts, coupons, points awarded in loyalty programmes), and engage them through personalized adverts, adjusted to the place, time, and viewer, or through product recommendations. It should be also noted that the

behaviour influenced by technology migrates to the physical world, and digital consumers transfer their experience with on-line shops to the real world, expecting similar convenient solutions of traditional shops. These shops may be then attempt to address such expectations by offering e.g. augmented reality (facilitated search for products, additional product information). The phenomena like sharing economy, IoE, and s-commerce pose a major challenge to contemporary enterprises, regardless of whether they occur on-line or off-line, because they all change the rules of competition for the whole economy.

References

- Bradley, J., Connell, K.O. and Barbier, J. (2015). *Winning the New Digital Consumer with Hyper-Relevance*. In *Retail, Insight Is Currency and Context Is King*, Cisco. <http://www.cisco.com/c/dam/en/us/solutions/collateral/executive-perspectives/ioe-retail-whitepaper.pdf> (05.05.2016).
- Domańska, K. (2009). Kim jest prosument. *Marketing w Praktyce*, 2, 35–38, <http://bazekon.icm.edu.pl/bazekon/element/bwmeta1.element.ekon-element-000157974803> (06.05.2016).
- Główny Urząd Statystyczny (2015). *Wartości i zaufanie społeczne w Polsce w 2015 r.*, Warszawa, <http://stat.gov.pl/obszary-tematyczne/warunki-zycia/dochody-wydatki-i-warunki-zycia-ludnosci/wartosci-i-zaufanie-spoeczne-w-polsce-w-2015-r-,21,1.html> (05.05.2016).
- Euromonitor (2016). Consumers in 2016: Generation ‘swipe’.
- Euromonitor (2015). Consumers in the Digital World: Hyperconnectivity and Technology Trends.
- Evans, M. (2016). *Top 3 Trends for the Digital Consumer in 2016*, <http://blog.euromonitor.com/2016/01/top-3-trends-for-the-digital-consumer-in-2016> (05.05.2016).
- Mazurek, G. (2011). Informacja w wirtualnym środowisku a rozwój społeczeństwa informacyjnego. *Zeszyty Naukowe Uniwersytetu Szczecińskiego. Ekonomiczne Problemy Usług*, 67, *Drogi dochodzenia do społeczeństwa informacyjnego. Stan obecny, perspektywy rozwoju i ograniczenia* (1), 186–194, <http://bazekon.icm.edu.pl/bazekon/element/bwmeta1.element.ekon-element-000171328869> (05.05.2016).
- PWC (2016). *(Współ)dział i rządź! Twój nowy model biznesowy jeszcze nie istnieje*, www.pwc.pl/ekonomia-wspoldzielenia-1-raport-pwc.pdf (08.05.2016).
- Stephen, A. (2015). The role of digital and social media marketing in consumer behavior. *Current Opinion in Psychology*, 12(9), 1689–1699.

- Tapscott, D. (2008). Net Gen Transforms Marketing. *Bloomberg*, <http://www.bloomberg.com/news/articles/2008-11-17/net-gen-transforms-marketing-businessweek-business-news-stock-market-and-financial-advice> (08.05.2016).
- Tarczydło, B. (2016). Konsument digitalny i jego zachowania. Przegląd badań. *Nierówności społeczne a wzrost gospodarczy*, 45(1), 15–22, <http://repozytorium.ur.edu.pl/handle/item/1483> (05.05.2016).
- Tkaczyk, J. (2012). Trendy konsumenckie i ich implikacje marketingowe. *Handel wewnętrzny*, 5–6, 126–134.
- Vejlgaard, H. (2012). *Anatomia trendu*. Warszawa: Wolters Kluwer.
- Wolny, R. (2012). Polski e-konsument na rynku usług. *Konsumpcja i Rozwój*, 1(2), 117–129, <http://yadda.icm.edu.pl/yadda/element/bwmeta1.element.desklight-f400491f-9d37-4041-b106-8f894e5077ea> (06.05.2016).
- Wolny, R. (2013). Prosumpcja i prosument na rynku e-usług. *Konsumpcja i Rozwój*, 1(4), 152–163, <https://www.infona.pl//resource/bwmeta1.element.desklight-b8d549bb-68a5-4a1a-ad90-564670a2c3b5> (06.05.2016).



Robert Wolny

Use of ICT Among Consumers on the Cultural Market in Poland

Abstract

The dynamic development of information and communications technology finds broad application in the service sector, and its technological modernization determines the level of modernity of the whole economy. The issue has an impact also on the cultural market, where ICT is used in popularization of cultural assets and services; placement and distribution of information about cultural offers; sales of access to cultural assets and services; participation in culture. The purpose of this article is to attempt to exemplify the use of ICT among consumers participating in the cultural market in Poland. The article presents results of desk research concerning utilization of ICT on the cultural market, and of field research covering the usage of ICT among cinema goers in Poland.

Keywords: ICT, cultural market, consumer behaviour

Introduction

Nowadays it would be difficult to find a field which does not involve application of information and communications technology. From an economist's perspective, it's easy to see that the Internet, mobile devices, and applications change the behaviour of market entities in many dimensions. We can talk about an impact on the operations (not only related to marketing) of manufacturers of goods, service providers, middlemen, as well as on the market activity of consumers.

Information and communications technology, one of the pillars of the virtual environment, is defined as the entirety of devices (computers and computer networks), software, applications, and other technology used in comprehensive utilization of information (Mazurek, 2012, p. 73). Information and communications technology (commonly shortened to ICT), an extended term for information technology, covers a family of technological means to process, store, and transmit electronic information (*Spółeczeństwo informacyjne w Polsce*, 2015, p. 17; Frąckiewicz, 2010, p. 12). The dynamic development of information and communications technology finds broad application in the service sector, and its technological modernization determines the level of modernity of the whole economy. Popularization of ICT (measured on the basis of the level of: computerization of enterprises and institution; access to the Internet; type of connection; staff competence; and ownership of a website), especially in the service sector, determines the level of advancement of an information society and digital economy.

There seems to be a renaissance of the cultural market in Poland. It would be a cliché to say that this is attributable only the development of the Internet or ICT. Yet, it is reasonable to acknowledge that the development of ICT has brought about a range of new possibilities in this scope. We can thus see changes in the following areas: popularization of cultural assets and services; placement and distribution of information about cultural offers; sales of access to cultural assets and services; participation in culture. It should be therefore recognized that the development of ICT not only modifies the forms of participation in culture, but also influences the process of purchase-related decision-making, facilitates the search for and comparison of information concerning cultural assets and services, makes it easier to make one's choice and effect a purchase, and has a considerable impact on the possibilities of communication of participants of this market (Sobocińska, 2008, p. 161).

The purpose of this article is to attempt to exemplify the use of ICT among consumers participating in the cultural market in Poland.

The article contains and discusses results of both field and desk research. Secondary sources include data developed by the Central Statistical Office of Poland concerning the use of ICT on the cultural market (among demand entities). Primary sources consist of quantitative data collected in 2015 by means of a series of personal interviews. The study subjects were consumers of the cinema service market (the biggest sub-market of the Polish cultural market in terms of the overall number

of consumers). The study was conducted on a random sample of 2048 cinema-goers.¹ The sampling frame consisted of 505 cinemas in Poland, divided into arts cinemas, multiplexes, and miniplexes in 16 provinces. 101 cinemas were drawn, including 61 miniplex and multiplex type cinemas, and 40 arts cinemas. Every 5th person entering or leaving the cinema was interviewed.

Use of ICT Among Polish Consumers

The number of individual consumers using ICT in Poland has been growing for many years, and the proportion of digitally excluded persons has been decreasing systematically at the same time. At present, the problem of digital exclusion is related not only to the lack of physical access to digital technology, but (according to J.A.G.M. van Dijk), to the issue of rejection of ICT at one of the stages of sequential acceptance process (Figure 1). This process includes (Mącik, 2013, p. 56):

- motivation (external or internal – to take advantage of technology);
- physical access (owning a computer² and having access to the Internet³, or having a permission to use them);
- skills (operational, information, and strategic skills making one able to use technology);
- usage (measured through the frequency and scope of application, duration of use).

The scope of “usage” of ICT on the cultural market may be determined by the following consumer activities (Janoś-Kresło, 2010, p. 211):

- reading, downloading magazines from the Internet,
- listening to the radio, watching TV on-line,
- checking programmes on-line,
- searching for information about cultural events on the Internet,
- booking and buying tickets on-line,
- visiting on-line galleries and museums,

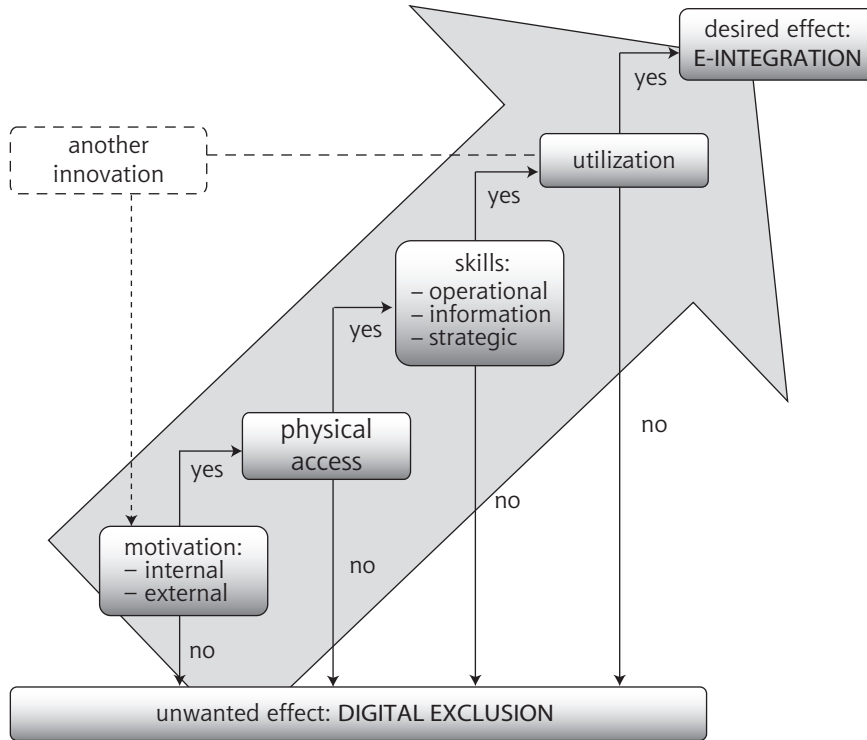
¹ The study was conducted by the Research and Knowledge Transfer Centre of the University of Economics in Katowice at the request of the Polish Film Institute in Warsaw as part of the project entitled “Widz kinowy w Polsce”.

² In 2015, 77.9% of households owned a computer (*Spółeczeństwo informacyjne w Polsce*, 2015).

³ In 2015, 75.8% of households had access to the Internet (*Spółeczeństwo informacyjne w Polsce*, 2015).

- buying films, music albums through the Internet,
- downloading video files.

Figure 1. The process of acceptance/rejection of digital technology according to van Dijk



Source: Maçik, 2013, p. 57.

Data concerning the use of ICT among consumers participating in the cultural market in Poland is limited. To illustrate the investigated issue, we can look at the publically available data concerning the use of ICT in Poland, as published by the Central Statistical Office of Poland. In the years 2006–2015, the percentage of consumers reading and downloading magazines on-line in Poland tripled (in 2006, it was 16.1%, and in 2015, it was 46.6%). This period saw also a threefold increase in the percentage of consumers who listened to the radio and/or watched TV on-line (from 9.8% in 2006 to 27.9% in 2014). Since the way data is aggregated changed in 2014, it is impossible to interpret the dynamics of the phenomenon after 2013. A smaller increase can be seen in the case of consumers' search for information about products or services (42.2%

in 2015). In this case, one should not expect that this concerns only information related to the cultural market; this also surely includes actions like checking programmes or looking for information about cultural events. Cultural market is also a place where on-line sale and purchase transactions take place. In the explored period of 2006–2015, there was also a threefold growth in the percentage of consumers buying products and services on-line. Also in this case it is reasonable to assume that this data concerns not only the core assets of the cultural market, but also various products and services related to culture, which surely constitute a large part of the total purchase volume (Table 1).

Table 1. Selected purposes for which consumers used the Internet in the period 2006–2015 (in %)

Detailed list		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Reading, downloading magazines on-line		16.1	15.0	18.8	18.0	17.4	18.0	29.7	26.8	47.2	46.6
listening to the radio, watching TV on-line		9.8	12.8	18.0	18.9	22.0	23.4	28.9	27.9	19.0*	16.7*
Searching for information about products or services		24.7	27.3	32.6	28.7	39.2	44.5	47.5	45.5	50.1	42.2
Buying products or services on-line		14.9	19.3	23.3	29.6	35.7	39.1	40.0	42.0	45.1	47.6
including	in the last 3 months	8.8	11.1	11.9	18.1	20.2	20.0	20.8	22.6	24.5	24.1
	3 to 12 months ago	3.4	4.6	6.1	5.0	8.7	9.7	9.6	9.0	9.7	12.8
	over one year ago	2.7	3.6	5.3	6.4	6.8	9.4	9.6	10.4	10.9	10.7
Sending and receiving e-mail messages		27.2	32.0	38.0	45.0	47.8	50.4	51.1	51.5	52.9	54.0
Using social networking services		–	–	–	–	28.0	35.7	35.7	35.3	36.8	41.4
On-line publishing of own texts, photos, videos etc.		–	–	7.1	10.8	11.3	12.8	14.7	12.9	12.5	12.5
Chatting, participation in on-line discussions groups/forums		–	–	15.8	14.6	10.1	17.9	16.6	16.0	13.8	12.7

* Radio only.

Source: Use of ICT in enterprises and households in the period 2005–2015, Central Statistical Office of Poland; www.stat.gov.pl.

Consumer behaviour on the cultural market is indirectly defined also by other activities these consumers pursue using the Internet. In 2015, over a half of consumers sent and received e-mail messages (almost a twofold increase compared to 2006). In the same year, over 41% of consumers used social networking services, and one out of eight of belonged to some discussion forum, or published own content on-line.

CSO has also published data concerning purchasing selected products and services related to culture. In the period of 2006–2015 there was a significant increase in the percentage of consumers buying tickets for sports or cultural events on-line (from 1.2% in 2006 to 6.1% in 2015). Compared to 2006, in 2015 there was an increase in the percentage of people buying books and magazines on-line (from 5.0% to 7.4%), with the biggest volume of books and magazines bought on-line seen in 2010. It is necessary to point out that the publishing market has been experience a general drop in the volume of sales of books and magazines in recent years (*Kultura w 2014 r.*, 2015). The percentage of consumers buying films and music on-line in the years 2006–2015 ranged from 4.1% (initial value) to 3.1% (end value), with the highest value (5.7%) seen in 2010 (Table 2).

Table 2. People buying products or services for private use in the last 12 months in the period of 2006–2015 (in %)

Detailed list	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Tickets for sports or cultural events	1.2	1.5	1.8	3.5	4.8	4.3	4.5	5.2	5.6	6.1
Books and magazines	5.0	5.3	5.5	7.0	8.9	8.7	8.3	8.7	7.8	7.4
Films, music	4.1	3.4	2.7	4.4	5.7	4.7	5.1	5.0	4.0	3.1

Source: *Spółeczeństwo informacyjne w Polsce*, 2010, p. 100; *Spółeczeństwo informacyjne w Polsce*, 2015, p. 153.

Scope of Use of ICT Among Consumers of Cinema Services in Poland

The market of cinema services is the largest sub-market of the cultural market in Poland. This is proven by the rates of activity of consumers

across particular sub-markets. In 2014, in a sample of 1000 persons there were (*Kultura w 2014 r.*, 2015):

- 78 participants of stage events,
- 162 active members of public libraries,
- 319 theatre spectators and attendants of events held in music institutions,
- 795 museum visitors,
- 1066 cinema goers.

The actual demand on the market of cinema services is measured by the number of cinema goers and the expenses on cinema services. The number of cinema goers in Poland in 2014 was 41 220 099, and the average amount of money spent on participation in cultural events in theatres, music institutions, and cinemas amounted to PLN 24.60 per person (CSO does not have data concerning expenses on cinema services only).⁴

The primary source of demand for cinema services are the needs expressing consumers' desire to experience the art of cinematography, and the Internet may play a vital part in spreading awareness in this scope (e.g. an on-line advert of a film, an e-mail with a newsletter of a cinema chain). In the context of making consumer decisions on the market of cinema services, ICT plays also a significant part at the stage of search for information (cinema websites, news sites, search engines, mobile apps), making a purchase (booking/purchasing tickets through the Internet, using a mobile phone, or a mobile app), as well as at the stage of post-purchase behaviour (expressing opinions about a cinema/film on Internet forums (Jaciow, Wolny and Stolecka-Makowska, 2013; Kos-Łabędowicz, 2015).

Direct survey concerning consumer behaviour on the market of cinema services focused, among others, on the sources of information about the cinema programme and on the process of purchasing tickets to the cinema (*Widz kinowy w Polsce*, 2015).

⁴ The amount of expenses on cinema services is different in the case of regular cinema goers. The average amount of expenses per a single trip to the cinema is PLN 52.16, including PLN 24.55 spent on the ticket and PLN 27.61 spent on other products (snacks and drinks) and services (transportation, food, entertainment). More on the topic: *Widz kinowy w Polsce*, 2015, p. 304–305.

Consumers get information about what's currently played in cinemas mainly from cinema websites.⁵ This is true for almost half of the surveyed. Every fourth of the surveyed persons uses search engines, and every seventh of them – news sites. Almost every one out of ten consumers uses a mobile app as the source of information about what's currently shown in cinemas (Table 3).

Table 3. Sources of information about what's shown in cinemas based on ICT and the age of respondents (in %)

Detailed list	Overall	Respondents according to age					
		19 and below	20–24	25–29	30–39	40–49	50 and above
cinema websites	57.7	68.3	61.3	61.2	61.2	49.0	28.4
search engine	25.4	27.8	27.4	26.5	25.5	22.4	18.9
on-line news sites	13.7	12.7	16.8	15.2	14.8	10.0	7.1
mobile app	9.1	6.6	7.9	10.5	11.3	9.3	5.9

Source: own studies.

On-line sources of information are used mostly by persons aged 39 and below (the percentage of the respondents using cinema websites in this age group is over 60%). Search engines are used by at least 1/4 of respondents aged 39 and below, whereas news sites are most popular among 20–29-year-olds. Mobile apps are used as sources of cinema offer information by every tenth respondent aged 25–39 (Table 3).

Residents of rural areas use cinema websites as sources of information about the current 'now showing' offer more often than city dwellers. Inhabitants of large cities are more frequent users of search engines, news sites, and mobile apps than other respondents of the survey (Table 4).

⁵ Among other sources of information there were also: friends (32.2%), TV commercials (30.7%), posters/billboards (27.6%), commercials presented in cinemas before showings (17.2%), press adverts (5.9%), cinema staff (4.4%), and adverts on the radio (3.4%) (*Widz kinowy w Polsce*, 2015).

Table 4. Sources of information about what's shown in cinemas based on ICT and the place of residence of the respondents (in %)

Detailed list	Respondents according to place of residence					
	country-side	city (in thousands of inhabitants)				
		20 and below	21-50	51-100	101-500	above 501
cinema websites	61.1	60.6	54.7	60.7	57.9	51.0
search engine	22.3	30.3	25.1	27.0	20.6	31.2
on-line news sites	8.8	11.7	16.1	12.0	15.7	16.1
mobile app	6.0	7.8	10.6	9.7	9.1	11.1

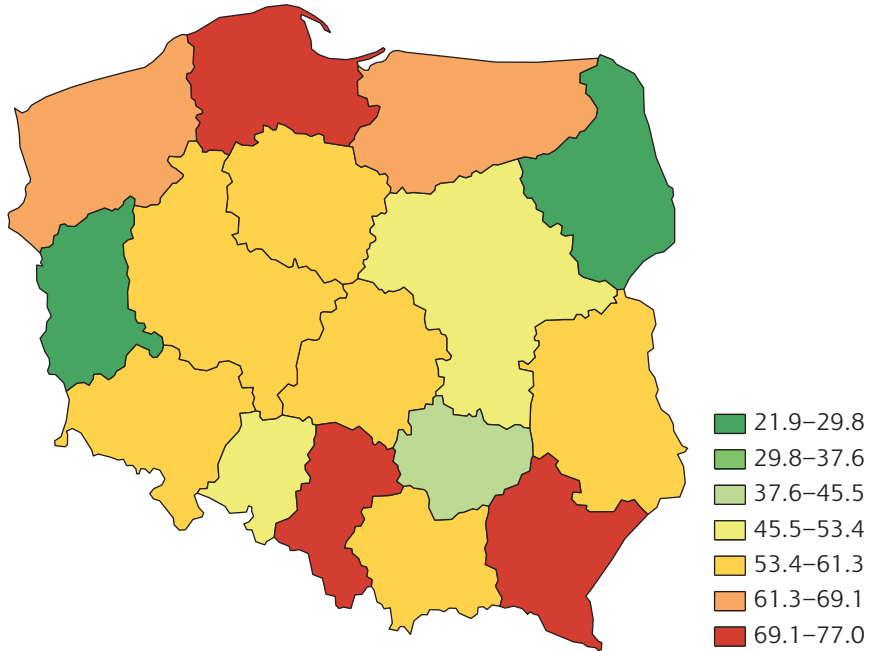
Source: own studies.

The conducted direct survey has made it possible to divide answers by provinces because of the sample size and the applied sampling method. Cinema websites are used as the source of information about the current cinema screening offer by three out of four respondents from Subcarpathian, Pomeranian, and Silesian provinces, and almost by two out of three respondents from West Pomeranian and Warmian-Masurian provinces. Only every fifth respondent from Lubusz and Podlaskie provinces does not use cinema websites to check what's shown currently (Figure 2).

Almost half of the surveyed from Lublin and Świętokrzyskie provinces, and only 8% of them from Subcarpathian province use search engines to check what's played in nearby cinemas. News sites are in turn used most often by respondents from West Pomeranian and Warmian-Masurian provinces (almost every fourth of them). Mobile apps are the main source of information about the current cinema offer for every fourth respondent from West Pomeranian province.

On-line sources of information about cinema offers are used in a similar way by both women and men. Cinema websites are used by two out of three persons with a university degree, and by almost the same rate of those with completed primary education; in the case of respondents after vocational secondary education, the rate is lower than half. Cinema websites, search engines, and mobile apps are used as sources of information more often by mini- and multiplex goers than by arts cinemas' audience.

Figure 2. Cinema websites as the source of information about the current showing offer (in %)



Source: own studies.

Non-brick-and-mortar forms of booking/purchasing cinema tickets are becoming more and more popular. Every third respondent books tickets through cinema websites, and every tenth – using their mobile phone.⁶ Over two fifths of respondents aged 20–39, every third respondent aged 30–49 and below 19, and every tenth respondent aged above 50 books tickets via cinema websites. Every sixth respondent aged 30–39 and every fifteenth respondent aged 19 and below book cinema tickets by phone. Other websites and mobile apps serving as means to book cinema tickets appear to be less popular. Respondents aged 25–39 tend to the most active group in this category (Table 5).

⁶ Booking cinema tickets in person has been reported by 53.4% of the surveyed (*Widz kinowy w Polsce*, 2015).

Table 5. Cinema ticket booking based on ICT and the age of respondents (in %)

Detailed list	Overall	Respondents according to age					
		19 and below	20–24	25–29	30–39	40–49	50 and above
cinema website	32.2	39.8	42.0	44.6	35.3	30.7	11.8
mobile phone	10.2	6.6	9.8	12.6	15.8	10.3	11.2
other website	2.5	2.3	2.0	3.7	4.1	2.8	1.2
mobile app	1.7	1.5	1.3	3.7	2.5	1.4	–

Source: own studies.

Almost half of the surveyed inhabitants of cities with a population larger than 101 000, every third respondent living in the countryside or in a city with a population of 21 000–100 000, and every fourth respondent living in a city with a population lower than 20 000 book cinema tickets via cinema websites. The largest proportion of respondents from cities with a population of 20 000 or less books cinema tickets by phone, which is opposite to the trend seen in cities with more than 501 000 of inhabitants (Table 6).

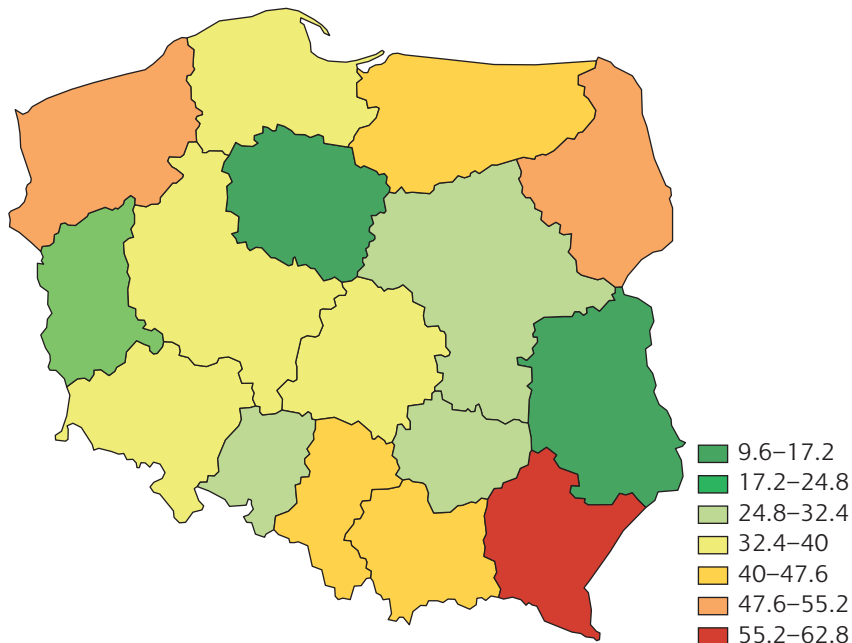
Table 6. Cinema ticket booking based on ICT and the place of residence of the respondents (in %)

Detailed list	Respondents according to place of residence					
	country-side	city (in thousands of inhabitants)				
		20 and below	21–50	51–100	101–500	above 501
cinema website	35.7	24.1	30.5	32.7	44.3	46.0
mobile phone	9.9	13.4	13.2	12.7	12.0	7.4
other website	1.4	5.9	4.2	1.7	1.6	3.4
mobile app	0.7	1.3	2.3	3.3	2.0	2.0

Source: own studies.

Cinema tickets are booked via cinema websites most often by inhabitants of Subcarpathian province, and least often by inhabitants of Lublin and Kuyavian-Pomeranian provinces (Figure 3). Inhabitants of Kuyavian-Pomeranian province book their cinema tickets most often by phone, and inhabitants of West Pomeranian province use mainly cinema websites and mobile apps to this end.

Figure 3. Booking tickets via cinema website (in %)



Source: own studies.

Both women and men from the surveyed group book cinema tickets in a similar way. Almost every second respondent with a university degree, every third respondent with completed primary education, and only one out of six respondents after vocational secondary education book cinema tickets via cinema websites. Almost twice as many respondents with completed secondary education as those with completed primary education book cinema tickets by phone. Over two fifths of mini- and multiplex goers book their tickets via cinema websites; this method of ticket booking is selected by two times fewer arts cinema goers. Also, mini- and multiplex goers tend to book tickets using other websites and mobile apps more often than arts cinemas' audience.

Conclusion

Information and communications technology is considered of key importance to the innovation of services and the enterprises and institutions offering them. This issue is relevant also to the cultural market – not only in the sphere of innovation. The possibilities of utilization of ICT in offer presentation and sales of culture-related products and services greatly extend the circle of the potential target audience of consumers. ICT has shortened the distance dividing so often consumers of culture in time and space, becoming often the decisive factor in the context of access to cultural services and products. At the same time it is reasonable to underline that the growing dependence of culture on ICT requires consumers of culture possess not only the right technical infrastructure, but also appropriate competence (operational, information, and strategic skills) to take active part in culture in the context of today. Consumers-participants of the cultural market use ICT to obtain information, gain access to cultural products and services, or to express opinions on cultural events. Information and communications technology makes it also highly possible to customize (individualize) the message addressed at potential consumers of culture, which may prove to be its biggest asset in the future.

References

- Frąckiewicz, E. (2010). *Nowe technologie informacyjno-komunikacyjne w marketingu przedsiębiorstw na rynku sieciowych powiązań*. Szczecin: University of Szczecin.
- Jaciow, M., Wolny, R. and Stolecka-Makowska, A. (2013). *E-consumer in Europe. Comparative analysis of behaviours*. Gliwice: OnePress.
- Janoś-Kresło, M. (2010). *Zachowania konsumentów na rynku e-kultury w wybranych krajach Europy Środkowo-Wschodniej (wyniki badań)*. Szczecin: University of Szczecin.
- Kos-Łabędowicz, J. (2015). *Internet jako źródło informacji w decyzjach nabywczych konsumenta*. Warszawa: C.H. Beck
- Kultura w 2014 r.* (2015). Warsaw: Central Statistical Office of Poland.
- Mazurek, G. (2012). *Znaczenie wirtualizacji marketingu w sieciowym kreowaniu wartości*. Warszawa: Poltext.
- Mącik, R. (2013). *Technologie informacyjne i komunikacyjne jako moderator procesów podejmowania decyzji zakupowych przez konsumentów*. Lublin: UMCS.

- Sobocińska, M. (2008). *Zachowania nabywców na rynku dóbr i usług kultury*. Warszawa: PWE.
- Spółeczeństwo informacyjne w Polsce (2010). Spółeczeństwo informacyjne w Polsce. Wyniki badań statystycznych z lat 2006–2010*. Warsaw: Central Statistical Office of Poland.
- Spółeczeństwo informacyjne w Polsce (2015). Spółeczeństwo informacyjne w Polsce. Wyniki badań statystycznych z lat 2011–2015*. Warsaw: Central Statistical Office of Poland.
- Widz kinowy w Polsce (2015). Raport z badań*. Katowice: Research and Knowledge Transfer Centre, University of Economics in Katowice, <https://www.pisf.pl/aktualnosci/widz-kinowy-w-polsce-raport-z-badan>.
- Wykorzystanie technologii informacyjno-telekomunikacyjnych w przedsiębiorstwach i gospodarstwach domowych w latach 2005–2015 (2005–2015)*. Warsaw: Central Statistical Office of Poland.

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