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SZYMON WIERCIŃSKI

Identifying the sources of Sustained Competitive Advantage

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Szymon Wierciński jest absolwentem University of Bradford oraz Wyższej Szkoły Przedsiębiorczości i Zarządzania w Warszawie, gdzie ukończył z wyróżnieniem magisterskie studia uzupełniające na kierunku zarządzanie i marketing. Finalista konkursu „EUREKO – Akademia Przyszłości".

Doświadczenia zawodowe zdobywał pracując przy projektach doradczych dla organizacji z sektora publicznego oraz prywatnego takich jak Szpital „Medicam", Urząd Marszałkowski, Sony Poland, Sony Centre, Paloma. Swoje umiejętności rozwijał również pracując dla Nestle Polska, Akademii Zarządzania oraz Centrum Kompetencji Europejskich, zajmując się przede wszystkich optymalizacją procesów z wykorzystaniem technologii informatycznych.

Od 2008 roku jest asystentem w Katedrze Strategii w Akademii Leona Koźmińskiego. Specjalizuje się w analizie rynków, teorii źródeł przewagi konkurencyjnej, a także w optymalizacji procesów oraz negocjacjach.

1. Research problem

The studies on the Sustained Competitive Advantage gather much attention since the introduction of the Resource Base View theory. In 1991, Barney published his work on the RBV providing a comprehensive theoretical framework, which enabled to conduct empirical research on this new approach (Nowbert 2007). While Barney based his work on two assumptions of resource heterogeneity and its imperfect mobility, during last 16 years this theory evolved changing its focus from the resources, which nature is rather static, to the dynamic capabilities approach. This required appreciating the managerial role in this process and allowed for the empirical support level increase, which is more precisely exhibiting the correlation between Key Resources (including Capabilities) and the SCA in organizations.

Despite, the popularity, which RBV has gained in throughout the recent years, some authors started to exhibit the link, which exists between this, firm-based, and the industry based perspectives (Amit and Schoemaker 1993, Collis and Montgomery 1995). Moreover, Amit and Schoemaker exhibited the importance of connection between Key Resources and industrial Key Success Factors. However, the literature does not provide yet a practical empirical model, which could help managers to identify the resources and esteem its coherence with industrial factors or its impact on the Competitive Advantage.

The Consumer Electronics e-retailing business in Poland was chosen to this research as the example of a very dynamic industry, which offers a potential to provide interesting results in terms of creating the SCA, based on internal firms factors. Dynamic changes, which affected this sector lately, provide a possibility for an on-going research answering the question why some firms achieve higher results than others.

The environmental analysis conducted in this research will provide data and information supporting an answer to the research question, while the main part of the research will be focused on qualitative data analysis (collected through interviews). Finally, the outcomes from the model, combining qualitative and quantitative data on KR and KSF will be verified using the conducted industrial investigation. It will allow to recognise the potential of the new model.

1.1. Research question

1) How to identify the sources of Sustained Competitive Advantage basing on the industrial Key Success Factors and Key Resources in a Consumer Electronics e-retailing industry?
2) How to identify Key Resources and Success Factors and estimate their impact on the Sustained Competitive Advantage in a Consumer Electronics e-retailing industry?

1.2. Research objectives

Table 1. Research objectives

Research question	Objective
What are the Key Resources and Capabilities and how are those identified, protected and deployed to the markets?	To develop the potential sustainable sources of competitive advantage.
What are the Key Success Factors for this business?	To focus activities on the main business areas.
What are the specifics and trends of the consumer electronic retail and e-business in EU and Poland?	To verify the manager's knowledge, information gathered in interviews and outcomes from the employed model.
How does knowledge gained in this research could shape the future of this business, create sustainable competitive advantage, and ensure the further market share growth?	To define the SCA and identify the main Key Resources, which possess the highest possibility to create it.

2. Methods of research

This type of research requires a specific research approach, which gives the researcher a high level of flexibility in searching for answers. Therefore, an exploratory type of study will be conducted, which allows to change the direction of the research and focus on the most important factors when new information become available. (Ghauri, Gronhaug 2005)

2.1. Qualitative data analysis – Interviews

This research will be focused on the unique actions of analysed companies, thus generalisation is not a goal of this research. As a suitable methodology of this research, an in-depth interview was chosen. (Clulow et al. 2003)

The interviews were conducted in summer 2007 on three key informants of the companies in the analysed industry. They have been examined to recognise the Key Success Factors in the industry, identify the resources possessed by their companies, and their characteristics.

The main part of the interview structure was based on the methodology used in the research conducted by Clulow et al. (2003), which was completed by questions allowing for identifying KSF and the specific business and company issues. The interviewees were reassured about the purpose of the research and about their anonymity in order to build adequate trust level in the beginning of the discussion.

Following Fahy (2000) and other RBV researchers the correlation between the Industry Success Factors and resources employed by a company, has to be significant to ensure the creation of SCA. Resources have to "meet industry success factors (Amit and Schoemarker 1993) or create new ones, generating a Schumpeterian-type revolution in the industry (Lado et al. 1992)." (Fahy 2000)

Table 2. Interview schedule and rationale

<table>
<tr><td colspan="4">The interview schedule and rationale are specified in the summary presented in the table below.
Interview schedule and rationale</td></tr>
<tr><th colspan="2">Issue</th><th>Question</th><th>Rationale</th></tr>
<tr><td>KSF</td><td>Key Success Factors</td><td>What are the key success factors in VT business?</td><td>This question asks the manager to identify the KSF in the industry, to further identify the key resources, on which the SCA can be created.</td></tr>
<tr><td rowspan="2">Resources Identification</td><td>Tangible assets (land/building/equipment/debtors/stocks/personnel)</td><td>How would you rate the importance of tangible assets compared with intangible assets and capabilities in VT?</td><td>Tangible assets are more likely to be imitable, less causally ambiguous and more appropriable than intangible assets. Differences between the various categories of resources in terms of possessing characteristics which confer an SCA need to be identified.</td></tr>
<tr><td>Intangible assets</td><td>How would you describe the VT intangible assets that you see as peculiar to you firm?</td><td>This question asks the manager to identify the relevant intangible assets and to value them from the firm's perspective for comparative purposes</td></tr>
</table>

Issue		Question	Rationale
Resources Identification	Capabilities	How would you describe the value attached to the VT's capabilities that you have identified?	This question is designed to provide the firm's assessment of the value of capabilities that may then be compared with the items identified by Fahy (2000)*
	Managerial skill	How critical is the managerial process of the VT to developing and deploying these intangible assets and capabilities?	The essential role of management in developing and deploying key resources was measured via the ability of the interviewee to identify and qualitatively assess the value of key resources.
	Barriers to duplication	To what extent are the VT's key resources able to be duplicated by rivals?	This questions asks whether key resources possess the characteristics of tastiness and casual ambiguity, resulting in the competitors' difficulty in identifying the advantage and providing the main obstacle to their duplication
	Appropriability	To what extent is the value of key resources at the VT are located with individuals/teams versus the firm as a whole?	One of the characteristics that Fahy (and others) assign to advantage-generating resources is „appropriability". This question asks whether rival claimants to the value generated by key resources are able to appropriate the resource value

Adopted from Clulow et al. (2003) * (Team-embodied knowledge, Organisational cultures, Organisational history, Learning-by-doing, Managerial skills)

2.2. Quantitative estimation of chosen factors – questionnaire

All Key informants, who participated in interviews were asked to fill in the on-line Questionnaire assessing the rating that they attached to each defined previously variable. This allowed for a fast and easy data collection. Data were verified in terms of its consistency and coherence within all companies, which allowed to estimate the average ratings for each KSF and KR, which will be further employed in the introduced model.

Interviewees were asked to rate each variable on the five degrees ordinal scale (from Very Important to Totally Unimportant) in case of KSF research. Than the KSF perceived level within the company was rated. The KR ratings were estimated on the same scale. Only the individual firm's ratings were valuated, because each company might want to achieve an advantage upon a different set or resources.

Finally, the quantitative and qualitative data were cross-analysed to create the input data for a model combining the KSF and KR.

3. Literature review

The development of strategic management is an ongoing concern for many academics and researchers who are trying to find the best way to explain the business in today's world. For decades the approach to this subject of knowledge was focused on explaining how some companies gain advantage over others. It is also changing and constantly developing, keeping the pace with the environmental changes in the business world. The methods of explaining the "business policy" (Learned et al. 1969), as strategic management was called in the past, were applicable and logical in the second period of the last century, when the dominating framework (in the textbooks, as well as in the practise of companies) was the planning and positioning approach (Obłój 2006). It does not seem sufficient to explain the basis of advantage of organisations nowadays. As research is further undertaken to find empirical evidence confirming the theory, more and more questions arise, which uncover the limitations of the actual dominant approach.

3.1. Definition of CA & SCA

Therefore, since 1960's the researchers have focused on creating competitive advantage within the organisation. According to Barney (1991) and his early definition, firms obtain Sustained Competitive Advantage (SCA) by:

"… implementing strategies that exploit their internal strengths, through responding to environmental opportunities, while neutralizing external threats and avoiding internal weaknesses."

There were two main points of view when the SCA or CA was discussed in the literature. While allies of the environmental approach (Porter 1980, 1985) were focusing on the external threats and opportunities, the opponents (Penrose 1958; Hofer & Schendel 1978) were promoting the internal strengths and weaknesses as a source of SCA. (Barney 1991)

A study by Barney (1991), which focuses on the specification of conditions, that have to be fulfilled by the resources to become a source of the SCA, adopt the definition in which a firm gains:

"Competitive Advantage when it is implementing a value creating strategy not simultaneously being implemented by any current or potential competitors", and therefore a firm achieves:

"Sustained Competitive Advantage when it is implementing a value creating strategy not simultaneously being implemented by any current or potential competitors and when these other firms are unable to duplicate the benefits of this strategy."

Barney's (1991) classification of the above definitions is more detailed and it includes two important additional characteristics. First, it extends the number of competitors in an industry including not only current rivals, but also the potential firms which might enter in the future. Second, he points out that the term "Sustained" does not refer to any settled length of calendar time, but rather according to Rumelt (1984) it refers to the possibility to resist a competitor's duplication efforts in the future. (Barney 1991)

3.2. Competitive Advantage and Performance

Many researchers in empirical studies treated Competitive Advantage and Performance interchangeably, while even by Barney (1991) those are argued to be conceptually distinct. Following Coff (1999) such approach in empirical studies assumes that the whole value generated by resources exploitation will be "fully appropriated to the firm". In practice, the ability to generate Competitive Advantage might not have much in common with creating profits. Peteraf and Barney (2003) argues that a firm posses CA when "it is able to create more economic value [both to the customers and the producers] than the marginal (breakeven) competitor in its product industry". From this point it is specific to each company, in terms of how much of this value is attained within the company and further how much in the profits. Powell (2001) argues that an empirical research, which uses the profits category as one of the research measures, are "methodologically flawed". (Newbert 2007)

3.3. Positioning & planning approaches

In the 80's when Michael Porter (1980, 1985) published his work, he shortly became one of the main contributors to the positioning approach, which has its roots in the early work of Igor Ansoff (1965), Penrose (1959) and several other economists (Chamberlin 1933; Robinson 1933), who all emphasised firms heterogeneity, unique assets and capabilities as a source of premium profits and imperfect competition. (Fahy 2000)

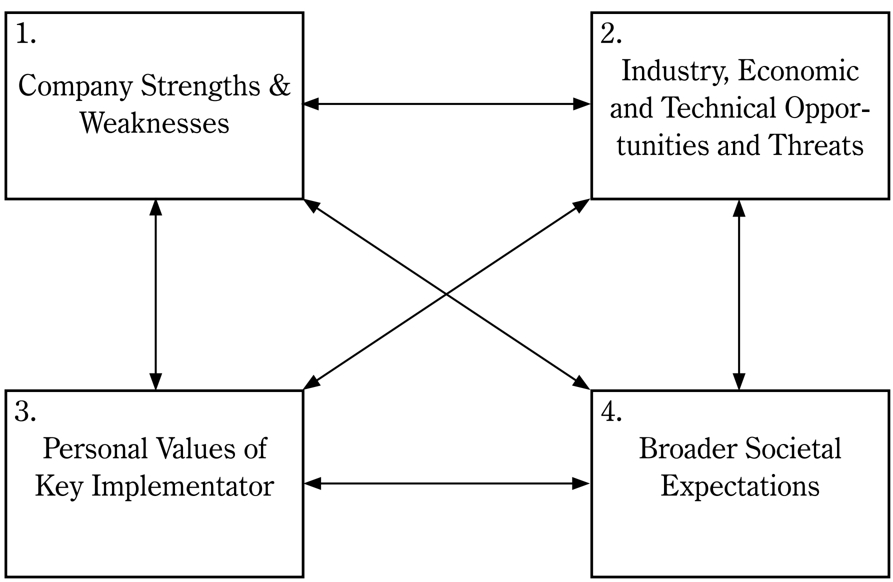
Following Fahy (2000) early models of making strategic decisions in the planning approach dominating in 60's consist of 4 main stages:

1) Setting objectives,
2) Internal appraisal of capabilities,
3) External appraisal of opportunities,
4) Finally, those steps lead to the decision to expand or diversify dependent on possessed capabilities and investments opportunities (Fahy 2000).

This concept becomes specially popular in late 1960's, despite its limitations and criticism, because for the first time it illustrated the difference between strategic expansion and diversification in the market/product matrix. (Ansoff 1965; Fahy 2000)

A few years letter the LCAG framework was published (Andrews 1971; Learned et al. 1969).It extended the Ansoff's model beyond company's and environmental SWOT, by the personal values of key implementator (3.) and broader society expectations (4.). All of the elements of this framework were seen as interrelated and interdependent. Many researches in the field of Strategic Management in the next years were focusing on particular elements of this framework (Fahy 2000).

Figure 1. The LCAG model



From Fahy (2000)

The development of planning framework during 60's and early 70's was supported (or caused) by a trend in multinational corporations which widely used portfolio planning matrices for implementing strategies and redistributing resources. Many of those companies used the 5-year corporate planning and had units responsible for this task. This harmonised situation was secure in the period of stability when the environment allowed more or less for executing plans. This situation was for the first time disrupted hugely by the first oil price shock in 1974, when corporate planning occurred useless in a situation of unexpected events and crisis. Not only companies had to cope with economic instability caused by high inflation and changed situation on the FOREX market, but they also beared with the technological changes. The process of globalisation accelerated creating opportunities for a global competition, shortening the product life cycles which were in the heart of product/market matrixes. This course of action was also responsible for an intensified competition on the markets that enjoyed the predicable, undisrupted growth in the stable environment. (Management Accounting 1998)

In such circumstances, only a few plans could be realised as they were expected. This situation pushed researchers to search for alternatives.

The significant breakthrough in the theory of strategic management was the concept introduced by Mintzberg (1978) in his work on the process of strategy formulation in companies. He presented the model in which strategy was developed using more than just a popular advanced planning model and corporate plans. He observed the difference between the Intended and Realised Strategy, and provided the model in which the final strategy is an impact of the Deliberate and Emergent Strategy. The latest one was not intended at any part of the strategy formulation process. This also becomes one of the main limitations to the Strategic Planning concept because it was later empirically proved that the strategies also emerge using other ways. (Mintzberg 1994, Management Accounting 1998)

Finally, Porter (1980, 1985) proposed useful models of five forces used for analyzing industries and strategic groups, the value chain analysis uncovering the internal strength and weaknesses of organisations, and in front of all the generic strategies, which are still used to analyse and position the companies across different industries. Those had an unbelievable impact on the corporate strategies and contribution to the knowledge and understanding of how the industry affects the organisation. (Porter 1980; Porter 1985; Management Accounting 1998).

However, the problems of the Planning Approach were seen in the organisations' environment, Porter (1980) and other researchers (Caves & Porter 1977) have further explored the surroundings of the firm in search for the source of competitive advantage. Their work was focused on looking at "… the environment conditions that favour high levels of firm performance." Those could be recognised using Porter's five forces model and could be used to portray the characteristic of the attractive industry in which treats and opportunities will be more favourable for a company to succeed. (Barney 1991)

According to Spanos & Lioukias (2001) Porter in his latest research (Porter & McGahan 1997) adapts and "outside-in" perspective, in which performance is dependent on the market structure and the organisation is seen as "… a bundle of strategic activities aiming at adapting to industry by seeking an attractive position in the market arena." In Porter's framework the influence of the competitive five forces on the "sustainability of rents" in the business is also an important issue.

In other words the differences across industries in the combination and strength of each five forces' elements (power of suppliers, buyers, substitutes, entry barriers and competitive rivalry) stands for the potential of the industry to achieve high profits. When the entrepreneur had selected the sector which characteristics will be encouraging to enter, then he faces the problem of selecting the right positioning strategy, which will enable him for maximizing the rate of return. Porter (1985) proposes three strategies that appropriately applied will become a source of the competitive advantage, unless the strategic fit between the environment and the organisation will be achieved. The low-cost, differentiation and niche strategies were widely used in the last decades of the XX century. (Management Accounting 1998; Porter 1980; Porter 1985)

It is important to remember that in the centre of Porter's latest view strategy "… is the notion of activities, (…) which are aiming at creating the specific form of competitive advantage", which is based on the mentioned generic strategies. As a result for Porter the strategy is a "product" of complicated perception of sector structure. (Spanos & Lioukias 2001)

3.1. Assumptions/Limitations in the positioning model

In the positioning framework, the environment, as a source of competitive advantage, was in the main area of interest. Despite its popularity in 80's this approach was criticised and some substantial limitations were uncovered. Moreover, many researchers (Cool & Schendel 1988; Lewis & Thomas 1990, Fahy 2000) found out that the companies within the same business, employing the same positioning strategy achieve significantly different results.

One of the assumptions of the positioning school was the view of the non-dynamic competition picture and thus underemphasising the role of innovation on business. Nowadays, it is widely recognised that the innovation impact on the business environment and structure can completely change the situation in which firms have to operate. There are businesses, such as banking or the IT & computer industry, in which SWOT or five forces analysis in the beginning of 90's would be quiet different than done 15 years later. The other great criticism of Porter's approach refers to the importance which this approach places in the industry structure, while decreasing the role of firm's individual strengths and weaknesses, which nowadays should be called resources and competences. (Management Accounting 1998)

Barney (1991) formulated another group of limitations. He noticed that Porter in his researches adopted two assumptions. First of all, following Barney, the positioning school assumed that companies in their industries or strategic groups are equal in terms of "… strategically relevant resources [that] they control and the strategy they purse." Secondly, this model assumes that even if the resource heterogeneity grows in the sector, it will be seen very shortly, because of high resource mobility between firms. Therefore, the individual strategies which are applied by companies will soon be copied because of high, regulated by the market, mobility of resources, which could be a potential source of competitive advantage. (Barney 1990; Spanos & Lioukias 2001)

3.2. Emergence of The Resource Based View

Suppositions described in the last paragraph, totally remove the possibility of creating the competitive advantage basing on the individual, immobile firm resources, which according to Barney (1991), are in the baseline of the Resource Based View (RBV). Moreover, differing to the positioning school, the RBV assumes that

> "… firms within an industry (or group) may be heterogeneous with the respect to the strategic resources they control [and it also] assumes that the resources may not be perfectly mobile across firms, and thus heterogeneity can be long lasting." (Barney 1991)

The shift in the view of the source of sustainable competitive advantage from industry and the environment towards "firm specific effects" was seen in early 90's. Not only RBV advocates (Fahy 2000; Barney 1991; Grant 1991) turn to the "inside" of the organisation, but also Porter (1991) admits that, while the sector structure is still the most important factor influencing the firm results, the role of organisations activities and positioning strategy is in focus of the dynamic theory of strategy. (Spanos & Lioukias 2001)

Furthermore, in the 80's many researchers who were empirically testing the Porter's framework spread worries of its validity. The differences in firm's performance were observed not only within the industry, but also in the same strategic groups. Moreover, some researchers (Rumelt 1991) empirically proved that the industry effects play a minor role in explaining the variance of profitability, while the Business Unit effects are responsible for more than 40 per cent of differences. (Fahy 2000) These doubts were in the hearts of RBV advocates.

3.2.1. Overview

The of Resources Based View on the organisation is connecting many elements of researches in the field of economics, organisational theory, science and strategy is one of the key characteristics of this approach. (Rugman & Verbeke 2002; Fahy 2000) This view also improves our understanding level of the bases and determinants of Sustained Competitive Advantage, as well as it help us to recognise why some assets are more value-creating than others. RBV demonstrates how it is possible to sustain competitive advantage in the conditions of "open competition" basing on resource asymmetries. (Fahy 2000)

Despite high importance and interest in the RBV, which can be seen in great number of publications and studies dedicated to this topic in the last 2 decades, many researches still claim that this framework is still far from its maturity. (Rugman & Verbeke 2002)

Some researchers tried to reduce the ambiguity and conceptual problems caused by "inconsistent and conflicting use of terminology", by providing the integrated review of theory (Fahy 2000), criticism of "conceptual foundations" and debates (Barney 1991; Priem & Butler 2001).

The official emergence of the Resource Based View is dated on the 1984, when the Wernerfelt for the first time used this term in his publication. The significance of this paper was confirmed in 1994, when it gained the award of Strategic Management Journal for the best paper. (Zajac 1995) In the 80's, Warnerfelt's theory did not get much attention. It must had been a pleasant surprise for this author, who eleven years after the publication of the first article on the RBV, wrote an another article "The resource-based view of the firm: ten years after". He is writing that he was not expecting that his previous publication will have so significant impact on the strategic management theory and it will be a source of a new approach to creating SCA. (Warnerfelt 1984, 1995)

As claimed earlier the Resource Based View has its roots in the work of economists from the first part of XX century, such as Chamberlin and Robinson in 30's (Chamberlin 1933; Robinson 1933). Already then the significance of organisation specific resources was uncovered and examined. Those researches were further developed in the work of Edith Penrose (1959), focusing on the organisations heterogeneity and exclusive assets and capabilities, as a source of the above average profits, growth potential and imperfect competition. (Fahy 2000)

However, following Rugman and Verbeke (2002) Penrose did not aimed to supply the model which was a treatment for a company to create a source of Sustained Competitive Advantage and high "steam of profits", rather she struggled with the problem of the growth process in organisations. Her work had a remarkable impact on the Resource Based View researchers.

More than 50 years before the Wernefelt's publication, economists such as Chamberlin (1933) identified resources and capabilities such as "technical know-how, reputation, brand awareness, the ability of managers to work together, particularly, patents and trademarks", which are nowadays in the minds of RBV researchers. (Fahy 2000)

The insight of the economists, who explained why the differences between the companies persist in the open market competition, into the Resource Based View also has an important role in this approach, creating a useful logical and empirical background which supports the researchers in the filed of strategic management. Fahy (2000) refers on the number of researchers (such as Amit and Schoemaker 1993; Barney 1986, 1991; Dierickx and Cool 1989; Lippman and Rumelt 1982) who examined mentioned dilemma.

In the first years of emergence of the RBV, this approach was dominated by the positioning school which has widely developed during the 80's. The breakthrough was in early 90's with two articles published year by year. The first one was written by Prahalad and Hamel (1990), who drove to the centre of attention the term of Core Competences - the ability to create essentially different new products, which was supposed to be a vital task of the managers in organizations. It exhibited, following early contributors to the RBV like Penrose (1959) and Rubin (1973), the dynamic role of management. Contrasting with the next important publication by Barney (1991) the following one described resources as a static bundle of elements, which when possessed by an organization could lead to CA. The process in which resources were supposed to become a source of the CA become undefined and overlook till the second half of 90's. This was a crucial criticism of Barney's work, however the breakthrough which was seen later was based on those two elementary publications. (Nowbert 2007)

However, the RBV, with the rational merge of economic rigour and executive reality, placed itself on the main shelf of the literature. (Fahy 2000)

3.2.2. Firm resources

Barney (1991) as resources classified all assets, capabilities, processes within organisations, company attributes, information and knowledge, and other elements which are controlled by the organisation and allow to implement efficiency and effectiveness improving strategies. Referring to the positioning school and previous traditional approaches, resources should be a strength in the LCAG model (Learned et al. 1969) presented above.

Barney (1991) in his work, referring to Williamson (1975), Becker (1964) and Tomer (1987), distinguished three classes of assets:

1) Physical capital resources – such as "plant and equipment, geographic location, access to raw materials"
2) Human capital resources – such as "training, experience, judgment, intelligence, relationships, and insight of individual managers and workers in a firm"
3) Organisation capital resources – such as "firm's formal reporting structure, its informal relations among groups within a firm and between a firm and those in its environment" (Barney 1991)

Those assets could obviously become resources in the terminology of RBV, when according to the definition they were under control of the organisation and their exploitation would allow for achieving improvement of effectiveness or efficiency. On the other hand those assets could resist the organisation from conceiving and implementing the valuable strategies or even worse, could lead to implementing the strategies which could cause the decrease in the level of the performacne of those two characteristics. (Barney 1986b)

According to the definition of Competitive Advantage, the assets which were the resources at one moment, in future could become the weaknesses or might occur irrelevant, when the industry settings change. However, the resources which are the source of the Sustained Competitive Advantage cannot be abolished through duplication efforts from competitors. (Barney 1991)

3.2.2.1. Resources and Capabilities

While the basic resources classification was comprehensively summed up in Barney's (1991) paper, in the future, the definition of resources became much broader. It covered not only static resources, but also managerial actions and organizational routines, which due to its differences are usually (but not always) classified separately, which is still causing confusion. Because the RBV still did not reach its maturity the nomenclature is not precisely defined. Therefore a variety of labels are used to portray the company's set of resources. Later in this paper, following Fahy (2000), the simplistic classification will be exhibited to overcome this ambiguity. (Fahy 2000)

3.2.3. Assumptions in the RBV

Another important aspect in the RBV theory are the assumptions about the resources homogeneity and mobility, which have been already mentioned, while describing the limitations to the traditional models. Barney (1991) argues that it seems logical to expect that in most industries there exists at least a minimum level of "resources heterogeneity and immobility". If in an industry firms possess the same resources, they are able to implement the same strategies and all their improvement in efficiency and effectiveness will be nullified. In such an industry it is obviously impossible to create a Sustained Competitive Advantage.

However, Barney (1991) argues that there are some evidences, which clearly shows that in certain cases one firm can gain a sustained competitive advantage over others. One doubt to the statement from the previous paragraph is the situation of "first mover advantage" (Lieberman & Montgomery 1988), during which a company can gain "access to distribution channels, develop goodwill with customers, or develop a positive reputation", before the competitors will. It is clear that if companies posses identical resources, it is not possible to create a source of advantage. It is the exclusive resource, the knowledge about the chance in the environment, which allows to implement the strategy before others. This implication shows that organisations in such an industry have to be "heterogeneous in terms of the resources they control."

Another evidence of the possibility of existence of the SCA are the "entry and mobility barriers" in the industry (Bain 1956; Caves and Porter 1977). Firms, which are protected by the mobility or entry barriers, will be in an advantageous position allowing them to earn above average profits. (Porter 1980) This situation is possible only if some of the competitors are "heterogeneous in terms of the resources they control and if these resources are not perfectly mobile". (Barney 1991)

3.2.4. Characteristics of firm resources

Following the definition (Barney 1991), resources are a source of firms' effectiveness and efficiency, which might lead to competitive advantage if, as proved above, we agree that the resources might be heterogeneous and not perfectly mobile. Moreover, only a limited number of resources ”hold the potential of SCA”. Barney (1991) identifies the resources' attributes leading to the Sustained Competitive Advantage. Those resources must be valuable, rare, imperfectly imitable and "there cannot be strategically equivalent substitutes for this resources that are valuable but neither rare or imperfectly imitable."

Fahy (2000) explaining the role of resources in achieving the SCA by the organisations claims that a firm has to possess and control "key resources", meaning the resources characterised by the attributes of "value, barriers to duplication and appropriability". Then in the Resource Based model the firm's managers are charged with the task of "identifying, developing and deploying key resources to maximise returns". The three key elements of the resource based view are:

1) Sustained Competitive Advantage and superior performance
2) the characteristics and types of advantage-generating resources
3) strategic choices by management (Fahy 2000)

The theoretical approach in researching the RBV will be further analyzed in next chapters.

During the 90's many researchers examined the role of specific firm resources and their impact on Sustained Competitive Advantage. Those studies allowed for describing a long list of attributes of key resources, but all of those can be easily grouped into 3 main categories proposed by Fahy (2000). In depth studies of those features seam to point out that most of them are based on the first classification proposed by Barney, completed by the attribute of appropriability proposed by Amit and Schoemaker in 1993. It is also evident that the most important and the most explored factor is the Barrier to Duplication, which is one of the three indispensable attributes of resources of SCA.

It is worth to describe in more detail the main attributes, especially focusing on the early categorisation by Barney, which seems to be a source of other types of duplication barriers.

The most important and obvious attribute of SCA resources is the value. Resources are valuable when they allow a company to create and employ the strategies improving efficiency and effectiveness. (Barney 1991)

Fahy (2000) is adding up that it is the value to customers which have to be kept on mind while identifying and exploiting resources in search for the SCA.

The rareness of resources allows companies to implement "value-creating strategies" which according to the definition are not being simultaneously implemented by the (numerous group of) competitors. If the resources are valuable but not rare, those become unimportant in the terms of SCA, but otherwise those resources can guarantee a firm's survival. Barney (1991) does not answer the

Table 3. Resources' characteristics.

Author	Resources' characteristics		
Fahy (2000)	1. Value	2 .Barriers to Duplication	3. Appropriability
Barney (1991)	1. Value	2. Rare 3. Inimitability 4. Non-substitutability	
Grant (1991)	1. Durability 2. Replicability	3. Transparency 4. Transferability	
Collis and Montgomery (1995)	1. Competitive superiority 2. Durability	3. Inimitability 5. Substitutability	5. Appropriability
Amit and Schoemaker (1993)	1. Complementarity 2. Durability 3. Overlap with strategic industry factors	4. Scarcity 5. Low tradability 6. Inimitability 7. Limited Substitutability	8. Appropriability

Adopted from Fahy (2000)

question of the rareness level sufficient for generating competitive advantage, but he points out that when the resources are rare, those should generate at least a competitive advantage and it is even possible for a small number of competitors to share the valuable resources and implement competitive advantage strategies. This situation will be possible until the number of firms will exceed the level needed for a perfect competition in a sector. (Hirshleifer 1980; Barney 1991)

Barney (1991) gave much attention to the Imperfect Imitable attributes of resources, which prevent other companies from obtaining those. Those resources have the potential of being a source of SCA. Following Barney there are three reasons for which it can create inimitability: unique historical conditions, casual ambiguity, social complexity of resources.

Unique historical conditions as a source of SCA in the RBV are recognised and it is approved that also a time and space are crucial for gaining the advantage. Moreover, this assumption found its evidence in the traditional strategy researchers (e.g. Ansoff 1965) and in economics suggesting that performance of the company depends on other elements, not just simply industry structure, as it is assumed in the positioning approach. Those include also the exclusive path that a company is following in exploiting its resources and implementing strategies, which are beyond the benchmarking possibilities of others firms in the industry. (Barney 1991)

Casual ambiguity exists "when the link between the resources controlled by a firm and a firm's sustained competitive advantage is not understood or understood only very imperfectly". In such a case it is difficult for other companies, which want duplicate the strategy through copying the resources, to recognise which of them to replicate. It is interesting that the firm whose value-creating strategy is based on the casual ambiguity, cannot understand the source of its advantage, because then other firms sooner or latter will become aware of it. In other words "as long as numerous plausible explanations of the source of sustained competitive advantage exist within a firm, the link between the resources controlled by a firm (…) remains ambiguous, and thus which of a firm's resources to imitate remains uncertain." (Barney 1991) This example of gaining SCA basing on the ambiguity can be the Polish newspaper "Gazeta Wyborcza", which since the 90's is a leader in the market. The complexity of resources, also connected with it's unique history allows for creating as many explanations of its success as many researches would be carried. This highly tacit resources does not allow competitors for coping the Wyborcza's key resources. (Obłój 2006)

The final reason for the Inimitability of resources will be a social complexity, which is beyond a company's management abilities. These resources might be "the interpersonal relations among managers in the firm (Hambrick 1987), a firm's culture (Barney, 1986b), a firms reputation among suppliers (Porter 1980) and customers (Klein et al. 1978)". Despite the obvious link between the firm's resources and CA, it occurs for other companies impossible to copy the source of advantage, because it is beyond the socio-technical management capabilities of competitors. (Barney 1986b, 1991)

The last attribute of key resources defined by Barney (1991) is the Substitutability, which means that "there must be no strategically equivalent valuable resources that are themselves either not rare of imitable". The strategically equivalency is seen when at least two resources, which are being exploited independently can lead to implementing the same value-crating strategies. The substitutability might be achieved either by employing the similar resource that will allow for implementing the same strategy, or very different from the original one. It might be a similar set of employees creating a team that is a resource in other company, or a different formal system allowing for achieving the same results. However, in the case of substituting resources it will be always the matter of the degree to which those resources impact the strategies and how similar will they be. (Barney 1991)

Finally, the last attribute, which was identified 4 years after the Barney's (1991) publication, is the Appropriability defined by Amit and Schoemaker (1993). When the value is already pulled out from resources it becomes important who should appropriate this value. The pool of claimants is wide from the customers through employees, up to the stakeholders and government. Therefore, firms have to protect their value added and exchange it into profits. (Kay 1993; Fahy

2000) The resources will be the source of Sustainable Competitive Advantage only if the value captured by exploring those resources using appropriate strategy will be held within the company. (Clulow et al. 2003)

3.2.1. Types of resources

Since the 80's researchers provided us with the variety of models and classifications of firms' resources. The nomenclature was changing through years, but following Fahy (2000) the three distinctive sub-groups were common for all frameworks: tangible assets, intangible assets and capabilities. (Fahy 2000)

Table 4. Firm's resources bundle

Author	**The firm's resource bundle**		
Fahy (2000)	**1. Tangible assets**	**2 . Intangible assets**	**3. Capabilities**
Salznick (1957) **Hitt and Ireland (1985)** **Hofer and Schendel (1978)**			Distinctive competencies
Itami (1987)			Invisible assets
Wernerfelt (1989)	Fixed assets	Blueprints	Cultures
Irvin and Michaels (1989)			Core skills
Prahalad and Hamel (1990)		Core competencies	
Hall (1992)		Intangible assets	Intangible capabilities
Hall (1993)		Assets	Competencies
Amit and Schoemaker (1993)			Intermediate goods

Adopted from Fahy 2000

The tangible assets is the classification of resources which are less likely to posses the attributes allowing them to be a source of SCA. Those are, according to the definition by Wernerfelt (1989) the fixed and current assets which posses the "fixed long-run capacity". Those assets are valuated using accounting rules and are usually "reflected in the balance sheets." Because of that, tangible assets are relatively easy to copy, because of its transparency and they do not possess much potential guarding them from competition. (Fahy 2000) However, in some cases it might present enough potential to become a source of advantage such as in the case of localization, which is connected with the unique path of history.

Intangible assets are rather resistant to imitating or substituting attempts by other firms in the industry, so their potential of becoming the source of SCA is much more likely than of the previous group. Intangibles can be easily seen in the difference between the book value and the market valuation of the quoted firms. The resources such as "databases, networks and reputation are examples of asset stocks (Dierickx and Cool 1989) and the inherent complexity and specificity of their accumulation hinder imitability and substitutability in the shot run." (Fahy 2000)

Additionally, it is much more difficult to define the assets such as reputation, client trust, intellectual property, networks and databases than tangible assets, which increase its ambiguity. Moreover, "(…) databases contain information proprietorial to the firm and can be used to build client relationships, to promote loyalty and stronger ties. Reputation and client trust are also 'time-path-dependent' and accrue over time as the result of a 'history of honest dealings' (Dierickx and Cool 1989)." (Clulow et al. 2003)

Finally, capabilities following Grant (1991) include managerial skills and companies routines and the way they are integrated, managed and coordinated with the firm's specific resources. Moreover, they are more difficult to valuate even than the intangible assets. As an example we can point out the capabilities such as organisational culture, history, trust between the management and workers, team embodied knowledge (Clulow et al. 2003; Fahy 2000) Capabilities are also "interaction based" and therefore the are more tricky to imitate or duplicate, because of high level of casual ambiguity. Those according to Fahy (2000) are the resources, which in the RBV are the most probable to become a source of Sustained Competitive Advantage. (Fahy 2000)

3.2.1.1. Core Competences

The last type of resources requires an additional concern. Core competences concept included by Fahy (2000) into the Capabilities category, emerged in 1990 when Prahalad and Hamel published their article on the RBV "The core competence of the corporation". By core competences, they meant critical capabilities, which are necessary to create SCA. Those should "provide potential access to variety of markets, (…) make a significant contribution to the perceived customer benefits of the end product and be difficult for competitors to imitate" (Prahalad and Hamel 2000). These competencies allow for introducing a wide range of products to the different markets. Characteristic to this concept is that the products possess the same core base, exploited in many different ways. Within this interesting approach, Prahalad and Hamel drove the attention to the managerial role which was overlooked in the developing RBV, therefore they had significantly contributed to the latest progress in this theory.

3.2.2. Static versus dynamic recipe

Much inspiring criticism, which was attached the static nature of Barney's (1991) model, allowed for the development of a dynamic approach. The pressure was placed on those elements, which were explaining how the resources are becoming a source of Competitive Advantage. Later Barney (2001) had also answered these voices. He claimed that the actions that managers have to take to utilize resources "will be self-evident" and happen automatically. Despite superficiality of this statement in 1997 Barney contributed significantly to the RBV again, presenting his VRIO model.

Barney following Mahoney and Pandain (1992) argued that besides the fundamental characteristics of key resources (Valuable, Rare and Inimitable elements), those have to be also Organized to ensure the attainment of the Competitive Advantage for the firm. He understood that a firm has to be Organized in such a way that it will ensure the full exploitation of a potential hidden in the resources. In further debate on the Organized aspect to the "skills, that could ensure proper resource exploitation [Barney] included such organizational components as structure, control system and compensation polices". (Nowbert 2007)

Simultaneously to Barney's theory a new approach was born, in which the process of resources exploitation is more precisely defined. The Dynamic Capability framework presented in 1997 by Teece, Pisano and Shuen explains how by combining resources and competences in an organization, following the earlier work of Amit and Schoemaker (1993), those can be **"developed, deployed and protected"**. They defined Dynamic Capabilities as "the firm's ability to integrate, build and reconfigure internal and external competences to address rapidly changing environments" (Teece et al. 1997).

Finally, as Nowbert (2007) argues, both approaches found their place in the work of Eisenhardt and Martin (2000) in which they argued that the resources are useless for the company in isolation and their real value can be only appropriate to the firm via "its idiosyncratic dynamic capabilities". They defined Dynamic Capabilities as "(…) the organizational and strategic routines by which firms achieve new resources configuration as markets emerge, collide, split, evolve and die." (Eisenhardt and Martin 2000, Nowbert 2007).

In this process, the RBV developed from the description of static resources, affecting the Competitive Advantage, into the "dynamic recipe explaining the process by which these ingredients must be utilized to attain this end". (Nowbert 2007)

3.2.2.1. Managerial role

As Fahy (2000) reviews, during the 90's many researchers pointed out that the resources are not becoming a source of the competitive advantage without the managerial activities, which will apply or bring them to the market. (Key 1993) Those have to be converted into the value to customers via: identifying, developing, protecting and deploying. (Amit and Schoemaker 1993). Teece (et al. 1997) further develops this concept into the Dynamic Capabilities approach, however for Fahy the managerial role is so important that it should be investigated separately. This approach will be further explored in Fahy's model chapter.

3.2.3. Theoretical approaches in empirical RBV researches

In 2007 Newbert in his publication in the Strategic Management Journal examined the literature in search for empirical evidence on the RBV on the firm. Basing on the sample of more than 50 empirical articles, he exhibited trends, theory development and level of support for each approach. Comparing to similar research conducted a few years before by Barney and Arikan (2001), whose work almost unanimously supported the RBV, Newbert found out that only a bit more than a half of articles provide the empirical support for the most appreciated and accepted theory of Strategic Management. He also discovered the differences in the support level not only between different sets of resources, but also between the chosen research theoretical approaches, which evolved during last 2 decades.

In the **resource heterogeneity approach**, quantified amount of valuable, rare, inimitable and/or non-substitutable resources and capabilities "possessed by a firm, are correlated (…) to some measure of competitive advantage." This approach allows for finding the correlation between the amount of possessed resource and its impact on the CA. The second, **organizing approach** is identifying the conditions in organization, which allow for effective resource and capabilities exploitation. Therefore, in this research academics seek to find special firm's environmental elements, which support firms' success in utilizing specific sets of resources. Next one, **conceptual-level approach** seeks to confirm if the resource's characteristics are essential for a resource to play a vital role in Advantage building. Finally, the most difficult one, the **dynamic capabilities approach**, tests the level of "specific resource-level processes improve a firm's competitive position by operationalizing the independent variable as the interaction of a specific resource and specific dynamic capability". Than it correlates such a relationship with some measure of the CA. (Newbert 2007)

The obvious research trend shows that the most widely utilized approach is the Resource heterogeneity, which occurred in around 90% of all analyzed articles. The less popular is the newest approach – only 3 articles (including 13 test) are focused on the dynamic capabilities. The trends in the timeline of articles concerning each approach, show that in the future we should expect to see more research concerning dynamic capabilities than those focused on static resources.

The most interesting outcome of this study is the difference in the level of support for each approach. The most supportive occurred in the conceptual-level approach with more than 75% of tests confirming it, comparing less then 40% in case of Dynamic Capabilities. Interesting results were also seen in the heterogeneity approach, which proved that capabilities and core competences (71 and 52%) are much more probable to explain CA in the firm than static resources, which achieved only 37% of support.

Following Newber's (2007) findings it might be more probable that the "firm's organizing content and its valuable, rare, inimitable capabilities (dynamic and otherwise) and core competences rather than its static resources are essential to determining its competitive position." This knowledge will be very helpful in identifying Key Resources in an analysis of qualitative data collected in interviews.

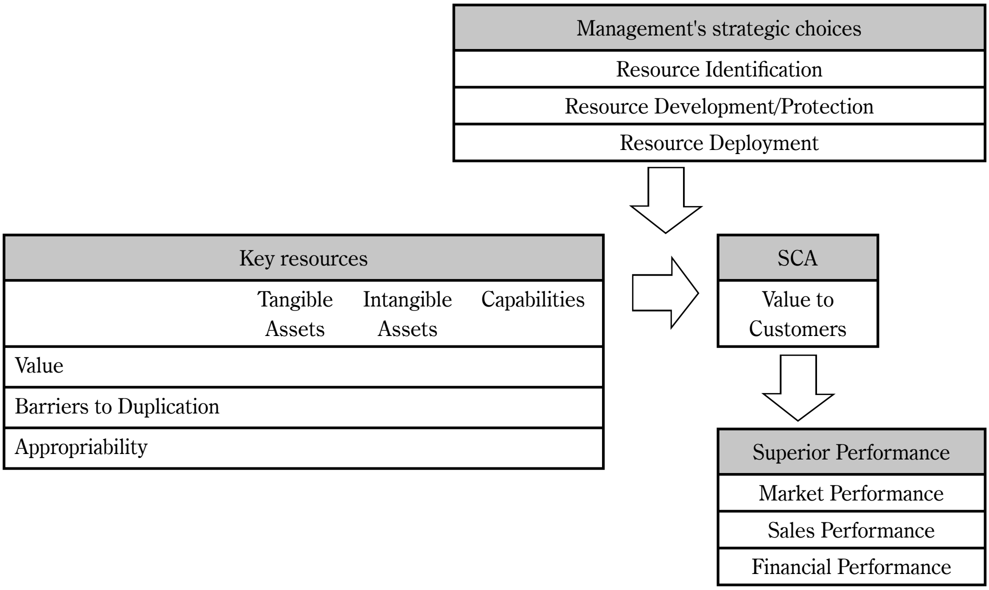
3.2.4. Fahy's (2000) model

Fahy (2000) expands the model of resources grid referring to other researchers who explored the problem of turning resources into Sustained Competitive Advantage. According to Dierickx and Cool (1989), Fahy underlines the role of management in consistent investment in assets, which need time and effort to become valuable resources. Other models of RBV points out that without the continuous re-investment the stock of resources depreciates. (Bharadwaj et al. 1993)

After the identification, when resources are developed they must be protected "guarding the trade secrets and using the legal framework". Only then resources can be brought to the marketplace where they have to be "effectively deployed". (Fahy 2000)

Another important research which Fahy (2000) employs in his framework is the work of Amit and Schoemaker (1993). They exhibit the importance of connecting resources with the **industry key success factors**, either existing ones or those which can be created by implementing the new strategy based on chosen resources. The managerial role is such an important and complex factor in Fahy's model, that according to the Castanias and Helfat (1991) "good quality, top management, in itself is a potential source of SCA" and it has to be consider separately. (Fahy 2000)

Figure 2. Fahy's (2000) model



From Fahy 2000

Summarising, the most important elements of the RBV in the firm are "the firm's key resources and the role of management in converting these resources into positions of sustainable competitive advantage, leading to superior performance in the marketplace". Fahy's model "highlights that not all resources are of equal importance in terms of achieving SCA and that management plays a critical role in the process of its attainment." (Fahy 2000)

3.2.5. Limitations of the RBV

There are some substantial limitations, which should be exhibited when analysing the RBV, which are a subject of criticism, but also a point in the debate about the validity of this approach. One problem in identifying the source of advantage might be "unobservable" resources, such as intangible assets, or even worse, capabilities, which are very difficult not only to valuate, but also to test empirically. (Godfrey and Hill 1995) Moreover, because of its high level of tacitness and casual ambiguity the best resources should never be identified. (Fahy 2000)

Another important problem is the "circular reasoning in that one of its fundamental elements, namely, value, can only be assessed in terms of a particular context". Those are the resources, which have a potential of creating competitive advantage, which in turn determinates how should the value creating resources look like. This is an essential oversight, emphasizing that the RBV literature pays not enough attention to the method of resources growth. (Fahy 2000)

It's also possible that the resources can become the most "limiting liability", when the environment changes and firms have to face new conditions in the marketplace. (Fahy 2000)

Those limitations are still a subject of ongoing debate, which seems to aim at integrating all perspectives, allowing to combine knowledge from different points of view.

3.3. Contrasting RBV with Positioning Approach and others

The main difference, besides the limitations regarding the heterogeneity and mobility of resources (Barney 1990), between the Resource Based View and the Positioning School is that the company is seen as a "bundle of unique resources", comparing to the "bundle of activities" proposed by Porter (1991). (Spanos & Lioukias 2001)

Moreover, for Porter (1991) resources are developed from activities taken by the organisation, such as implementing certain "product" of strategy, or they are taken from the market/environment or a combination of both. This means that resources available for an organisation reflects the past managerial activities, what logically must be more important than resources themselves, because acquiring or creating them is possible only due to "different resources and skills, organisational arrangements, control procedures and inventive systems". Following this thought, resources cannot be valuable themselves, but they are closely related to those activities and to sustain the value of those resources companies have to constantly reinvest by applying the same actions. (Spanos & Lioukias 2001)

Spanos and Lioukias (2001) referring to Rumelt (1984) and Conner (1991) claim that the key point is that Porter sees the strategy as being mainly industry driven, while the resource based approach states that the spirit of strategy has to be described by the organisation's distinctive resources and capabilities. Moreover, the value size of a successful strategy, is the organisation's ability to implement and sustain an advantageous position in the market, which is dependent on the possessed and controlled resources.

Additionally, it is worth emphasising that in the resource based view the managers have the possibility to choose the strategy, because of the constantly changing environment, but they are always limited within the recognised model of possessed resources. (Spanos & Lioukias 2001)

Another assumption in the positioning and other environmental models is that the firm's performance can be examined independently of the unique company's history. (Porter 1980) In the RBV this is seen as a limitation, which does not allow to identify barriers to duplication and thus recognise the potential source of SCA. (Barney 1991)

The linkage between the traditional SWOT analysis and the resource based perspective is also highlighted by Barney (1991). He claims that this environmental model can assist in identifying those assets that could take an advantage of opportunities and/or counterbalance threats, while the RBV provides the model suggesting what characteristics should those assets posses to produce SCA. If advantage is to be attained, a company has to identify all resources "which are overlapping or are congruent with the strategic industry factors (SIFs) prevalent at the present time and likely to be important in the future." (Amit and Schoemaker 1993; Fahy 2000)

Finally, it is interesting that Porter (1985) introduced the concept to the value chain analysis. He adopted his theory, still within its main limitation, allowing managers to identify the resource based advantages in the firm. The RBV is just an extension of this model, allowing to examine if the characteristics of the identified resources could lead to SCA. (Barney 1991) This example clearly shows the ambiguous linkage between those frameworks.

3.4. RBV and Porter's model complementarities

In the late 90's the new view started to become more and more accepted by many researchers. Instead of arguing which perspective is more accurate to explain the source of SCA, with empirical and logical proofs both on the side of business unit (Rumelt 1991) and the industry effects (McGahan and Porter 1997) some researchers started to recognise that both approaches play a crucial role in the this debate. Fahy (2000) refers to advocates of RBV (Amit and Shoemaker 1993; Collis and Montgomery 1995) who suggest that RBV may "act as a bridge between firm-based and industry-based perspectives", because while "its insights are primary endogenous, it does not ignore industry" effects. (Fahy 2000)

Rugman and Verbeke (2002) exhibits that RBV can be a good base for the Strengths and Weaknesses analysis, while the positioning school can be seen as the keystone in identification of Opportunities and Threats, which was already pointed out by Wernerfelt (1984) and Barney (1995). This point brought us to 1969, when the LCAG model was published, but the knowledge accumulated through last 40 years allows us to take a deep look inside this model. This view seems to treat those two approaches as "the two sides of the same coin" (Werenerfelt 1984), "covering different domains of application." (Spanos and Lioukas 2001)

Spanos and Loiuks (2001) summarize the similarities between the RBV and Porter's perspective pointing out three reasons of complementarities:

1) "the two perspectives are complementary as explicants of firms' performance (…)
2) both perspectives seek to explain the same phenomenon of interest and
3) because the unit of analysis is identical in both cases"

The key aim of the "composite model" is to recognise the firm specific aspects versus the industry impact. (Spanos and Loiuks 2001)

The future of this discipline should seek to gain from all perspectives and to find interdependencies between different points of view. This approach should lead to the model which will be consistent, will be able to connect different criteria and find multi-criteria correlations and patterns of organisational behaviour. While a general view will give an outlook on the reality-simplifying model, the deeper steps should lead us to well known perspectives and tools.

3.5. Key Resources and Key Success factors

The linkage between the Key Success Factors and Key resources within the organization should be consistent. RBV is focused on the inside of the firms and is trying to explain its market success in terms of Competitive Advantage focusing on the Resources, Capabilities, Core Competences and its characteristics, settled in the specific organizing context. However the managers must be aware of external factors impacting the business to make effective and rational decisions.

Amit and Schoemaker (1993) argues that it is a challenge, for firm's managers to "identify, ex ante, a set of Strategic Assets (SA)", by which they understood the combination of strategic (key) resources and capabilities, on which the SCA will be further developed.

On the other hand managers are required to identify the actual "set of Strategic Industry Factors (SIF)", which Amit and Schoemaker (1993) defines as the Key Success Factors examination, extended by an outcome of environmental investigation combining Porter's 5 Forces Model and PEST analysis. The manager's role is also to predict the future set of Strategic Industry Factors, because one of the most significant criticisms of the KSF analysis is its non-dynamic nature, which does not fits into today's business environment.

Than the managers will be able to make rational decisions on "further development of existing and new Strategic Assets – those that are most likely to contribute to the creation and protection of economics rents." (Amit and Schoemaker 1993)

The KSF analysis, despite it is commonly use by practitioners, by scholars should be employed more carefully. The KSF was criticises as a core concept in strategy building process by Ghemawat (1991) because of it lack in 4 areas – Identification, Concreteness, Generality and Necessity.

Table 5.

Identification	There may be many success factors, making it hard to decide which ones to focus on
Concreteness	Ambiguity about the causal processes that tie the firm's success factors to its performance
Generality	To be success factors they must be undervalued; i.e. the cost benefit ration associated with their development must be less than one
Necessity	The failure of the success factor approach to account for dynamic aspects of strategy

Adapted from Amit and Schoemaker (1993)

The KSF analysis usability should be also examined in terms of how it will be employed. As a tool this model is obviously very helpful in understanding and recognizing the forces that are impacting an analysed business, but when it is used in the strategy building process its limitations have to be kept on manager's or consultant's minds. Otherwise, the outcome can be corrupted by the methodological mistakes committed in the process of input data analysis.

The literature is missing the practical model, which could be used to help managers to assess the value of the resources that they identify and predict its impact on the Competitive Advantage, simultaneously linking the outcomes with the most important factors influencing the analyzed business. In this paper, a concept of such model will be proposed and the results will be verified on the example of the e-retailing market in consumer electronics in Poland.

4. Identifying key resources and key success factors

Following Fahy (2000) the impact of the Key Resources on the SCA will be analysed in this chapter, starting with the need of resource identification. Reviewing the methodology adopted by Clulow et al. (2003) in the research on financial services industry in Australia outlines an interesting approach to resource identification and examination of their impact on SCA – the qualitative analysis with in-depth interviews.

However, focusing strictly on the interviews with key informants in the sector's top companies might cause a problem of missing some substantial factors, which are not a subject of knowledge of those managers. One of the key resources' characteristics – barriers to duplication – might be according to Barney (1990) based on "casual ambiguity", which means that the "link between resources (…) and SCA is not understood or understood only very imperfectly". As practice shows many managerial decision is not precede by any complete researches and the outcomes of those actions is sometimes unexpected. The manager's intuition usually leads them into a right direction, however continuous work in one business, despite it increases the knowledge and experience, can also drive the attention away from the obvious opportunities.

To overcome those limitations, this research will combine the outcomes of both qualitative (interviews) and quantitative (macro environmental) data, to identify the key resources and KSF in this business.

4.1. Data analysis

The interviews with managers, who were asked the questions listed in table (Table 2.), will be analysed in the following paragraphs. Those responses will be "related to the literature on the RBV, with particular reference to Fahy's (2000) model" following the methodology applied by Clulow et al. (2003), which will be a subject of examination in the final step.

In the next stage, gathered qualitative results were analysed to identify the main forces influencing the examined business. Those results allowed to develop the base for the quantitative factors assessment, which will be necessary in the final stage of KSFKR model implementation. The managers, who had participated in interviews, quantitatively assessed the recognized Success Factors and Key Resources using the on-line questionnaire. The results of the quantitative research were then verified by author and compared with the qualitative data collected in Interviews. This allowed for a reliable estimation of analysed factors and resources. These two-step research outcomes will be presented and discussed in the next section.

4.2. Key Success Factors

The interviewees were asked about the Success Factors that stand for a superior performance in this market. Their answers, despite some nomenclatural differences, were rather consistent and exhibited a few main areas of managerial activities, which are necessary to achieve success in the on-line Consumer Electronic retailing market.

The most significant area of a managerial attention is focused on the price factor. Because of the technological development nowadays, comparing prices become such easy and popular among customers that companies who keep higher margins are instantly losing its market position. However, it is possible to compete in the Internet on other basis than the price, managers claims that in this industry, "[where] everybody are selling the same products, only the best [price] offer wins. It is very difficult to convince a customer through Internet, to pay 5 or 10% more for the same product, when he can compare the offer from more then 70 e-shops by a few clicks."

Another group of identified Success Factors was connected with the products accessibility and the delivery time. Customers seek for a fast purchases and they generally do not want to wait long for a product. It is also affected by still high level of perceived risk attached to Internet buying, especially when customer are spending much in one transaction. Some companies to overcome this problem contact directly with each customer before finalizing the transaction, despite the technological possibility to "close" the transaction automatically.

On the other hand respondents also mentioned the importance of Building the sustain relationship with customer to create loyalty, however this factor was perceived as extremely difficult to implement, because of almost non-existing switching costs. Despite those difficulties managers agree that CRM importance is increasing. Other marketing activities like Advertising and building Brand awareness were also mentioned as source of success.

Finally, the company reputation, client trust and individual customer approach, supported by superior customer care were pointed out as important to this business. These factors, as well as the good products knowledge were grouped into the Excellent Customer Care category.

The discussion of each identified force and its valuation, which will be presented further.

4.3. Tangible assets

Tangible assets were not regarded as a matter of key success artefacts. The IT solutions were mentioned as necessary but not sufficient to become the source of SCA, because its duplication barrier is very small and many adequate programs are available off-the-shelf. Those assets are totally replicable and substitutable, which eliminates it's role in crating the sustained competitive advantage, despite its appropriability to the firm. (Barney 1991)

4.4. Intangible assets

More important for managers was the intangible assets category, where they mentioned a few assets, with potential for creating the SCA. The key identified value-added resources were firm's reputation, customers' trust level and company's culture.

The reputation that firms earn in the Internet retailing can be easily measured. There are at least three price comparison portals, which provides on opportunity for customers to leave feedback about their purchase experiences. Moreover, there are also special dedicated services, where customer are encouraged also to rate e-shops in few categories like the speed of delivery, customer care etc. Therefore, firms who does not care about its reputation and do not care about their customer have to face the problem low trust level, which is negatively correlated with purchase possibility. Possessing a good reputation among the Internet users can contribute strongly to winning a customer. Firms also can build a strong barrier to duplication, when they achieve a significant level of positive comments, which can benefit for years.

Company's Culture can also play an important role as a source of the Competitive Advantage, because it is affecting many other resources and success factors. In the first line it contributes strongly to the customer care level. The internal routines and climate affects the customer approach and its quality. In some cases employees are supposed to be an experts in their sales categories to achieve an excellent results in contacts with customers. Such resource is usually perceived as rare, but unfortunately it is substitutable, it is decreasing its importance in the strategy building process.

Mangers also confirmed the importance of building a customers database, which can be used to increase the level of loyalty and can contribute to building a relationship with customer. This resource, surprisingly was not mentioned as one of highest importance, which seems to exhibit that it is still undervalued. In terms of duplication barriers it seems rather week, because its low degree of rareness and non-substitutability, however it requires unique history to build, so it appears to be very valuable resource.

All mentioned intangible resources are appropriable to the firm.

4.5. Capabilities

The capabilities category occurred to be the most important for managers, which is not surprising. It was already empirically proved that capabilities are most capable to explain the Competitive Advantage in companies. (Newbert 2007)

Managers keep underlining the capability of Cost reduction within their companies, as an important element in a strategy building process. In the case of the smallest firm it was claimed that, "even if some competitors can offer the same price as we do, we are still in advantage position despite our products access and small fixed costs, which allows us to earn higher margins than those, who employ lots of people."

Managers seem to attach very high importance, to this valuable resource, overvaluing its rareness and non-substitutability. Despite low entry costs, selling on so small margins seem to be enough to be a barrier to duplication for the managers and they accept the rules of price war, where only the best Cost Savers can survive.

On the other hand two managers claimed that the Relationship with Customers is an important factor in creating the CA, while the last one argued that: "It is impossible to build the relationship and loyalty [with customers in this business], because the most important factor for customers is price. (…)"

However, the managers confirmed that building relationship with clients is very important and very difficult activity. Moreover, the importance of Customers Retention was underlined, as a source of SCA, which in long term might decide about the firm's market success. Those two capabilities are very valuable, however the previous one is more likely to resist the duplication barriers, because it is more ambiguous and socially complex. Client retention might be simply substituted by attracting more new customers i.e. by increasing advertising expenses.

Another aspect in the relationship and loyalty building was the individual approach and product knowledge. However, as it was correctly argued: "it often happens that customers gather the product information from many sources, including our sales specialists, and than they purchase the product in the shop offering the lowest price. That is the climate of Polish market."

In this situation its not easy to sustain the value of resources within the firm and efforts should be focus on increasing the correlation between the resources impacting purchase decision indirectly and a purchase decision itself.

Building a good relationship with suppliers and creating a network relation is also important, especially on the market where the fast delivery, possible due to good products access is an essential factor. This relationship is much stronger in case of firms specialized in one product category or one brand, when the products are ordered directly from the national supplier. However, in case of multi-brand e-shops, which are the great majority in this sector, good relations with wholesalers might stand for market success. Most retailers offer products that are not in their warehouse, so they depend on their relations with suppliers. Usually only the most popular products (bestsellers) are in the stock of those companies. This capability is undoubtedly valuable for analyses sector. On the other hand, it cannot be characterized as non-substitutable, but it should be noticed that creating such strong relationship is rather a rare resource.

Another interesting aspect of this history is a perceived specialization level of companies. At this point, the answers were different between firms in terms of the importance in creating the SCA for their companies, however it was agreed that higher specialization level allows for better customer care and more predictable sales, which affects the relationship with suppliers. Firms, which are more specialized, are better equipped to answer the market dynamics, which impacts the customer satisfaction level (faster price adjusting, better products access, faster delivery, less uncompleted transaction). However, not all companies can declare high level of specialization it is perceived as a capability, which might be very valuable in this business.

4.6. Managerial skills

Managerial skills were measured following Clulow et al. (2000) by recognizing the managers ability to "identify and qualitatively assess the value of key resources". Despite the resources value in most cases was estimated rationally, the role in terms of building a SCA in case of some resources was overvalued. (see Table 7. Key resources) Some of resources did not provide reasonable level of the duplication barrier and therefore, by definition cannot these stand for a Sustained Competitive Advantage, because sooner or later it will be copied by rivals.

Managers seem also to focus on already identified resources and developing its capacity. Also the importance of deploying resources into the market is obvious. On the other hand, managers seem not to provide enough attention to resources identification and valuation. Therefore, their activities sometimes seem to focus on developing the resources and capabilities, which does not provide enough duplication barriers, so they cannot stand for a long term success. The discussion tends to focus on known resources, which were directly influencing the sales performance level.

5. Implication

Basing on conducted interviews and environmental researches carried out previously the Key Success Factors were identified. Moreover, their importance of these factors in the CE on-line industry was analysed for each of three analysed companies and the results are showed in the table below. The weight of each factor was calculated and analysed, grouped and sorted.

Table 6. Key Success Factors

	Weights				Ratings				Weighted average			
	Firm I	Firm II	Firm III	Average Weight	Firm I	Firm II	Firm III	Perfect firm	Firm I	Firm II	Firm III	Perfect firm
Low cost & prices	6	5	5	5,3	5	4	5	5,0	26,7	21,3	26,7	26,7
Accessibility of products	5	5	5	5,0	5	4	5	5,0	25,0	20,0	25,0	25,0
Speed of delivery	4	5	5	4,7	4	3	5	5,0	18,7	14,0	23,3	23,3
Customer relationship & loyalty	4	5	5	4,7	2	5	4	5,0	9,3	23,3	18,7	23,3
Marketing	4,0	5,0	3,5	4,2	3,0	4,3	4,3	5,0	12,5	17,7	17,7	20,8
Advertising	5	5	4	4,7	3	5	4	5,0	14,0	23,3	18,7	23,3
Brand awareness	3	5	4	4,0	2	4	4	5,0	8,0	16,0	16,0	20,0
CRM	3	5	4	4,0	2	3	4	5,0	8,0	12,0	16,0	20,0
Company reputation	4	5	3	4,0	5	5	5	5,0	20,0	20,0	20,0	20,0
Excellent customer care	3,5	3	4,5	3,7	3,0	3,5	5,0	5,0	11,0	12,8	18,3	18,3
Contact with customer	4	3	5	4,0	3	4	5	5,0	12,0	16,0	20,0	20,0
Products knowledge	3	3	4	3,3	3	3	5	5,0	10,0	10,0	16,7	16,7
Client trust	3	3	3	3,0	4	5	5	5,0	12,0	15,0	15,0	15,0
									187,2	221,5	252,0	272,5
									69%	81%	92%	100%

Adopted from (Obłój 2006)

Basing on the data gathered in Interviews, the ratings were verified in term of its cohesion with qualitative data analysis. This allowed for grouping the success factors into the categories representing similar area of business impact and reduces wide groups of identified success factors into a sample of 7 key elements. Additionally it should be clarified that in case of Firm I, the Low cost & prices factor get one additional point, because the firm's manager in the interview increased the role of this factor significantly, accessing its value, as the most important.

The most important Success Factors were described as a Low cost & prices, which in terms of full offers transparency is an indispensable factor, Accessibility of products and Speed of delivery. Moreover, this study exhibits one more very important area, which in some cases is not enough developed in the on-line market. Consumer relationship and loyalty, rated ex aequo with Speed of delivery on the third place, which was successfully used in the traditional distribution channel, seems be overlooked by many Internet companies. However, the increased usage of CRM is visible on the market, it leaves the impression that it is still not fully exploited.

As it was mentioned before Speed of delivery and Accessibility of products are essential factors for this business, because the switching costs are minimal. When customers face the a long delivery time problem (which in same cases may take over a week or “when the product will be available”) than they can simply choose another offer. The most popular product in LCD category are being offered by more than 70 different e-schops on the price comparison portals. Those factors, along with Low price (not necessary the lowest one) stand for a success in this business, and only companies which adopted to such high competition demands can achieve spectacular success.

Another two groups of success factors focus on Marketing and Customer Care. Well-known brand name supported by advertising activities attracts much Internet users on the website. However it have to be remembered that in some cases more than 50% of traffic on the website is driven by the Price comparison portals like ceneo.pl or skapiec.pl, so many customers are familiar with the possibility to compare prices. In case of Customer Care two main factors were described – sellers knowledge about products and contacts with customer. Those factors are also important, however those are not essential for customers in the buying process.

The last mentioned factor is the perceived level of customer’s trust, which might decide about buying decision. If the e-shop does not provide contact information or is not professionally designed, the perceived risk level might be too high and customer will look for other options.

This rating allowed for an estimation of perceived managerial view of their companies compared to the “Perfect firm”. As the table above exhibits the analysed firms were rated by their’s managers as coherent with their expectations from 69 up to 92%. In case of Firm I the weaknesses are seen in Customer relationship, Marketing and Customer Care, while first 3 factors are meet. In case of Firm III managers see biggest problems in Marketing, which might be a first area of needed improvements.

The identified resources will be analysed using the Fahy’s model (2000) with the respect to the Key Success Factors in this industry and its necessary link with resources ability to create the SCA.

Role of each type of assets in the goal of implementing the SCA will be further analysed. Therefore, the tangible assets did not meet the requirements of Fahy’s (2000) model and cannot be treated as a source of Sustainable Competitive Advantage. Those assets cannot be protected from duplication, so their usefulness in this model is limited, however they are necessary for a business to survive.

The intangible assets are most probable to meet the Fahy's and KSF linkage requirements, while Capabilities are from definition hard to duplicate, and appropriable to the firm. Those also are highly possible to link with the KSF and should be analysed as a source of SCA.

In the following step the Key Resources will be analysed using the combined Fahy's (2000) model with the Resource examination methodology proposed by Barney (1990), which will allow for complete assets and capabilities classification and diagnosis in terms of capacity to build the Sustained Comparative Advantage.

The categorized resources were given the marks from 0 to 5, allowing to estimate their importance in building SCA. Those characteristics following Barney (1990) can have different weight, as those are "(...) always a matter of degree" such as in case of Substitutability, where substitutes are not required to have the same implications for the organisation to successfully imitate the strategy. Resources which get 0 in any category are not classified as Key Resources, because those cannot alone stand for SCA and they are deficient in the fundamental resources' characteristics. In the barriers to duplication criterion, at least one of the five elements had to posses the ability to protect resources, otherwise it should reject.

Table 7. Key resources

			Key Resources								
			Tang.	Intangible Assets			Capabilities				
			IT	Reputation	Culture	Customer Database	Cost reduction	Client relation	Supplier Relationship Building	Customer Relationship Building	Specialization
Value			4	3	5	5	5	5	5	5	5
Barriers to Duplication	Rare		0	2	5	3	2	2	3	3	4
	Inimitable	Unique historical conditions	0	4	5	5	3	2	4	5	5
		Casual ambiguity	0	4	4	-	2	4	-	5	-
		Social complexity	0	5	5	-	4	5	-	5	-
	Non-Substitutable		0	3	2	4	2	2	3	5	2
Appropriability			5	5	5	4	5	5	4	5	5
			0,0	3,7	4,4	4,2	3,3	3,6	3,8	4,7	4,2

The highest capacity in creating the SCA was identified in the most valuable, difficult to duplicate and appropriate resources. In case of resources identified in analyzed companies these were the Capability of Customer Relationship Building (4,7) supported by Customer Database (4,2). Important role possess also firms Culture (4,4) and Specialization (4,2), which as discussed before can also impact Key Success Factors. The next important Capabilities will be Supplier Relationship Building (3,8), which affects two most important Success Factors and Client Retention (3,6). Further, we will find the Intangible asset – firm's Reputation among customers (3,7). It is interesting that in this analysis the Cost Reduction Capability (3,3) is placed on the last position, which occurred rather week in terms of Barriers of Duplication. However, it is not surprising that simple cost reduction cannot have high impact on the creation of Sustained Competitive Advantage.

5.1. Linking KSF with company resources

To fully explore the correlation between KSF in the on-line CE market identified Key Resources (KR) and its impact on the SCA, the model combining previously conducted analysis will be employed. The impact of KSF will be explored by linking those forces with Resources in the matrix below. Than the ratings estimated in previous analysis (KSF VT weighted average and Resource capability in creating SCA) will be multiplied on the criss-crosses of KR and KSF. Finally, the percentage share of those categories in the whole estimation will be calculated to the "Perfect firm", which ratings are based on the "Perfect firm" weighted average in KSF, estimated in table (Table 8.)

This model exhibits the most important Resources, which should be taken under consideration in the process of developing the sources and defining the bases of the SCA. Moreover, it allows for an estimated distribution comparison of resources share in potentially the best-wanted strategy, based on the industry key success factors and the firm's actual resources share.

The aim of this model is not to numerously show a way to the best possible strategy, however it allows for pointing out the main areas of managerial efforts and its possible impact on strategy. Additionally, the disproportion between actual and wanted resources utilization exhibits the areas, which potentially require improvements and which are overexploited, not allowing to fully benefit from other key resources.

This model clearly exhibits the linkage between Key Resources and industrial Key Success Factors. All factors are linked by at least one connection, however it is interesting that the three most important Success Factors are con-

Figure 3. The KSFKR model

		Key Resources									
		Tang.	Intangible Assets			Capabilities					
		IT	Reputation	Culture	Customer Database	Cost reduction	Client retention	Supplier Relationship Building	Customer Relationship Building	Specialization	PF
Key Success Factors	Low cost & prices					87,7		101,3			10%
	Accessibility of products							95,0		105,0	11%
	Speed of delivery							88,7		98,0	10%
	Customer relationship & loyalty	0,0	86,7		98,0		83,3		110,0		21%
	Marketing	0,0	77,4		87,5		74,4		98,2		19%
	Excellent customer care			81,2	77,0				86,4	77,0	18%
	Client trust		55,7	66,4					70,7		11%
	PF	0%	12%	8%	15%	5%	9%	16%	20%	16%	

nected by only two pairs of resources. Low cost, Products Accessibility and Fast delivery are linked only by Supplier Relationship Building Capability, which possess a capacity (3,8 points) to be a source of SCA. Low cost & prices factors influence additionally only one Capability – Cost Reduction, which achieved the lowest rate in Resources potential estimation (Table 7. Key resources). That is the reason of its low rate in the whole Success Factors impact on SCA. In case of Products Accessibility and Speed of delivery factors, only Specialization increases its influence on the Competitive Advantage. Therefore, in the analysis of Perfect resources allocation Low prices, Access to products and Speed of delivery impacts is estimated only on 1/3 of total influence. These results might be not highly correlated with manager's expectations, however because of low Barriers to Duplication characteristics of resources affecting these factors its seems rational and logical. Especially in long term perspective, building Strategy and Competitive Advantage on resources that might be duplicated by rivals seems not to be a right direction.

We can also see that according to the presented model the most important Success Factors in terms of creating the SCA are Customer relationship & loyalty, Marketing and Excellent customer care, which estimated total impact is calculated on almost 60%. The highest impact share possess the Relationship building factor (21%) and Marketing (19%), which are supported by more than five resources. The highest impacts on those factors have Customer Relationship Capability and Customer Database Intangible Asset, which possess the highest capacity to create the SCA (adequately 4,7 and 4,2), however also Client Retention and Reputation contributes strongly to this result.

The Excellent Customer Care factor, which is supported by four most important Key Resources (Culture, Customer Database, Customer Relationship Building, Specialization) also seems to contribute strongly to the impact on the SCA, however its low rating in the KSF analysis allowed it only to achieve the third place.

Surprisingly, a Client Trust seems to play also a quiet important role in terms of creating the SCA, which in case of one of analysed firms might be explained as an important factor in customers purchasing decision. One of managers argued that "information about our belonging to a national distribution network impacts our credibility, which has direct relation with customers purchase decision". Reputation that affects this factor might contribute strongly to buyers' decisions.

Adopting the different point of view, we can spot a light on Key Resources utilization in building the SCA coherent with the industrial KSF. In the "Perfect firm" the most important Key Resources, will be not only those which possess the best set of characteristics, but rather those which have the biggest impact on Success Factors. In presented case, those will be the Supplier Relationship Building, Customer Relationship Building, and Specialization. By those Capabilities more than 50% of SCA impact can be explained. It is interesting remark that the Customer Relationship Capability is connected with 4 Success Factors, which are not of the highest importance for managers, however it might contribute very strong to build SCA. More obviously, Supplier Relations and Specialization help to support the main factors - Accessibility of Products and Speed of Delivery.

Other Key Resources, which should be kept on mind in developing the sources of SCA are the Customer Database, Firm's Reputation and Client Retention, while not surprisingly the Capability of Cost Reduction seems to play an minor role with only 5% of estimated impact. That is because, despite high importance attached to Low cost and Prices factor by managers, its low resistance to duplication logically does not allow it to achieve high score. Moreover, the Cost Reduction Capability impacts only one KSF.

In the next steps an examination of each individual managers responses will be analysed to present the perceived view of each organization in comparison to the "Perfect firm" described above.

As seen in the table below Firms II and III have a resource configuration more or less similar the Perfect firm. It might be a clue that managers in those firms are building its resource configuration using a long-term perspective. However, it may also be explained that managers cannot look critically on their companies or assess the real influence on KSF.

On the other hand, Firm I seem to has different resources configuration and differently assess its ability to fulfil the Success Factors. Comparing to the "Perfect firm" its Success Factors point out the most important are of managers interest is still in the main three factors: Low prices, Products Accessibility and Speed of delivery. The Customer Relationship and Loyalty with Marketing activities is pushed into the business background. This situation seems to be confirmed in the qualitative firm analysis. In interviews managers claimed that in their opinion those factors are the key to achieve success and they developed only resources supporting those issues. Managers in this company are not developing resources supporting Customer Relationship.

Table 8. KSF comparison

		I	II	III	PF
Key Success Factors	Low cost & prices	15,3%	10,0%	11,3%	10,1%
	Accessibility of products	16,1%	10,6%	11,9%	11,1%
	Speed of delivery	12,0%	7,4%	11,1%	10,4%
	Customer relationship & loyalty	12,2%	25,1%	18,0%	21,0%
	Marketing	16,3%	19,0%	17,1%	18,8%
	Excellent customer care	15,6%	14,9%	19,1%	17,9%
	Client trust	12,4%	12,8%	11,5%	10,7%

Finally, a quick look at the resources configuration seems to confirm the suspicions of low investment level in Customer Relationship Building (17,1% comparing to 20,2%) and Customer database (11,1% comparing to 14,5%). This results in overestimating the importance of Supplier Relationship Building and Specialization, which are the highest of all analyzed businesses. Firm I also allocate much attention in Cost Reduction Capability (7,1% comparing to 4,9%). This strategy, despite it is bringing profits nowadays, should be revised in the long term, because it might loose its temporary Competitive Advantage – low costs and products access. In example, it might face problems in the future, when without loyal and returning customers this firm will have to face a competition of multinational retailers, who will enter an on-line market.

Other managers perceive that theirs' firms are developing its resources with more attention to Customer Relationship Building and other resources with high capacity of creating a SCA.

Table 9. KR comparison

	Tang.	Intangible Assets			Capabilities				
	IT	Reputation	Culture	Customer Database	Cost Reduction	Client retention	Supplier Relationships Building	Customer Relationship Building	Specialization
I	0,0%	10,1%	8,2%	11,1%	7,1%	6,3%	21,6%	17,1%	18,5%
II	0,0%	13,8%	8,2%	15,0%	4,7%	9,7%	14,0%	21,6%	13,1%
III	0,0%	11,4%	8,8%	13,7%	5,2%	7,7%	17,0%	19,6%	16,7%
PF	0,0%	12,2%	8,2%	14,5%	4,9%	8,7%	15,8%	20,2%	15,5%

Summarising, the aim of this model is not calculating a best path, which will lead to the market success. It rather allows for painting a market picture, which will allow to better understand the forces that drive the market. It should result in taking better managerial choices and therefore, superior market performance.

Every model finally exhibits the results of data that are used at "the enter", which is the biggest limitation of this approach. However, this analysis exhibits the connections between the identified factors and estimates its weights and impact on SCA. It will show a linkage between KSF and KR, which when analysed separately might lead to different, not coherent results and will not allow to spot all existing implications.

The first results cannot be treated as a final product, which can be used to support the decision. Instead, each connection should be revised in terms of its logicality and managerial intuition. It will allow for a better and deeper understanding of analyzed data and might contribute to spotting the issues, which were behind the perception level.

5.1.1. Practical Limitations

It has to be pointed out that this model has same limitations, which might in practice affect significantly the results. First of all, as it was underlined in the

Literature Review, KSF are rather static in nature and they do not include future market changes. It has to be remembered that when the market changes dramatically, the success factors might transform. It will have significant impact on the Resource Configuration and might occur that the resources that were developed before are not as important as it was predicted before.

Secondly, the method of assessing the KSF and KR is a matter of researcher and interviewee's biases. In this study, the managers individual responses concerning their businesses were analyzed both qualitatively and quantitatively. Those answers were compared and verified (before employing into the model), which in some degree has reduced the interview bias. Moreover, those data were verified with the macro environmental analysis to ensure the most appropriable and correct information were analysed.

The other problem with estimating the quantitative value of Resources and KSF, which are qualitative in nature might cause o potential trap for researchers. It have to be remembered that the outcome form such a qualitative model, depends entirely on the data that were settled on the enter. Therefore when analyzing the outcomes from the research, we have to remember that the findings are based on the previously made assumptions about quantification of qualitative data, which might influences the results.

Finally, the problem of estimating the resources capacity in terms of creating the SCA also has to be double-checked and carefully adjusted to real market and firms conditions, to ensure that the results will be reliable.

As mentioned earlier there is no correct numerous model, which could lead us towards the "best or optimal strategy", however by applying the proposed analysis the researchers, can learn more about the main areas of business interests and its potential impact on the developed strategy.

5.2. Applying Fahy's model

Fahy (2000) states that "not all resources are of equal importance in terms of achieving an SCA and that management plays a critical role in the process of its attainment." The managerial role plays a very important part in Fahy's model and therefore is presented outside the resources box, although Fahy following Castanias & Helfat (1991) allows for classifying very good Managerial skills as a firm Capability, which might be a source of Competitive Advantage.

Fahy's model has been adopted and extended by including the potential ways of impact of Management's strategic choices on key resources and SCA. In the Key Resource box, the analysis of KSF and KR were summarised and further the SCA and the Superior performance in the on-line CE business were defined.

Figure 4. Resource-based model of Sustainable Competitive Advantage

Management's strategic choices

Key Resource Identification

Key Resource Development/ Protection

Key Resource Deployment

Key resources			
	Tangible Assets	Intangible Assets	Capabilities
Value	Value in IT platform	Recognised in 3 assets: 1) Firm's reputation, 2) Culture and 3) Customer Database	Value recognised in: 1) Cost reduction, 2) Client retention, 3) Supplier relationship building, 4) Customer Relationship Building and 5) Specialization
Barriers to Duplication	Easy to duplicate, imitable, not rare	Relatively high barriers to duplication due to unique historical condition in case of (2&3)	Very rare and inimitable due to unique historical conditions (4&5), social complexity (1,2&4), ambiguity (4) and non-substitutability (4)
Appropri-ability	Fully to firm	Resources fully appropriable to the firm	Fully appropriable to the firm due to non-transferability

SCA

Value to Customers - Constant supply of the best individual, relationship building, complete services, to loyal customers, through internet.

Superior Performance

Growing on-line market share, with enlarging base of loyal, well known customers

Adapted from Fahy (2000)

The Competitive Advantage has to be based on the Key resources, which have the tightest connection with the most important Success Factors in the on-line CE retailing industry. Those resources must also satisfy the requirements of high Value, Barriers to duplication and Appropriability to the firm. When resources will be protected against the duplication efforts of competitors, they are highly possible to become a source of Sustainable Competitive Advantage. (Amit and Schoemaker 1993, Fahy 2000)

According to those assumptions, the SCA is defined as a Value to Customers, which will be reflected in constant supply of individual services, which consist of valuable offers for customers. (Fahy 2000) Those services have to be based on the high quality and attractive price offers, as those two forces are transparent in the on-line environment and can result in loosing the loyal customer. These services have to allow for further relationship development and increase in loyalty. It should also satisfy the customers' needs for the CE purchases fully, to reduce the possibility of losing customers.

This strategy will be based on a set of unique and valuable resources. Further exploring Relationship with suppliers, Customer Relationship and Loyalty development, enlarging the Customers' database and taking advantage of firm's capabilities, will impact the KSF, which should focus on building Customer Relationship, Loyalty, Trust and firm's good reputation supported by marketing efforts and good price/quality positioning.

Creating such a Competitive Advantage should lead to Superior market performance, where "Perfect firm" should increase its market share, by gathering new customers and developing relations with old ones.

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