Influence of a Company’s Dynamic Capabilities on its Innovation of Value Creation Models

Lovorka Galetic,
Faculty of Economics & Business
University of Zagreb, Croatia.
E-mail: lgaletic@efzg.hr

Zeljko Vukelic,
Marius Consulting, Croatia.
E-mail: zeljko.vukelic@zg.t-com.hr

Abstract

The use of advanced concepts of strategic and innovation management have become a necessary means for successful company operations. The strategic application of dynamic capabilities on the one hand, and business model innovation on the other, with the creation of their mutual alignment and a synergy effect, can significantly contribute to the creation of value within the business, including a competitive edge and business results. This paper provides a theoretical overview and an empirical investigation of the influence of a company’s dynamic capabilities on its capability for business model innovation, with an emphasis on innovation of value creation models. A new multi-dimensional model of dynamic capabilities is presented, with an overview and focus on the innovation of the value creation model. Through the empirical study, the research model was tested on a representative sample of large and very large companies in Croatia, and the test results confirmed the hypotheses and found a significant correlation between the company’s possession of dynamic capabilities and its capability for value creation model innovation. This study confirmed the novel model of dynamic capabilities and the capability for value creation model innovation. As such, this model can serve as the foundation for new international research on a larger scale. The results of a significant correlation between the capabilities analysed in this paper could serve as guidelines for management for the more in-depth consideration and integration of both of these important strategic concepts in company operations, and for examination of the use of their synergy effects.

Key Words: dynamic capabilities, business model innovation, value creation model innovation, competitive advantage, business result
1. Introduction

The functioning of the modern organization is increasingly tied to readiness for change and the ability to execute dynamic action and innovative moves. Today’s leading companies know that profit and opportunity belong to those who can step out of the box and implement innovations that truly differentiate their business (IBM Global Technology Services, 2006). The goal is to achieve the greatest possible differentiation, which in times of turbulent change can help the company retain its competitive edge. In order to achieve this, it is necessary to achieve a unique concept of business functioning that can face the challenges of modern business.

The scientific literature states that there is, on the one hand, an evident evolution in the capabilities of the greatest importance for companies, while on the other, there is no progress in the methods necessary for their creation (Benson-Armer, Otto and Webster, 2014). Since the creation of capabilities requires focused attention (Dermulle, Grehan and Sagar, 2015), so does putting the required methodology in place to enable their creation, along with the necessary construction of the appropriate models for their identification and use, which are clearly focused on achieving a competitive edge and the expected business results. This paper outlines a concrete model of dynamic capabilities of a company and the innovation of its business model, with particular emphasis on the innovation of the value creation model. In line with these models, these business capabilities can be identified and employed to serve the business.

2. Dynamic Capabilities of a Company

The dynamics interwoven through the business environment today poses new challenges for company operations. The strategic concept of a company’s dynamic capabilities, presented at the end of the 20th century, described the manner in which the company can apply powerful strategic tools in a dynamic environment to meet its business targets and guidelines. The 21st century has thus far been marked by highly turbulent conditions for business, which has placed new demands on this concept, requiring its adaptation.

Dynamic capabilities have been recognized as a concept that is able to lead the company through the demanding processes of adaptation and transformation, while also creating the opportunity for the company to dictate the market rules for other participants, by influencing the dynamics of its own business environment. These fundamentally represent a system of capabilities, where the key element is the possibility of making complex adaptive processes in the company (Leoncini, Montresor, and Vertova, 2005). They are defined as the ability of a company to reconfigure, redirect, transform and appropriately shape and integrate its existing key competencies with external resources and strategic and complementary assets, so as to respond to the challenges posed by a business world marked by competition and imitation,
rapid changes and time limitations (Teece, Pisano and Shuen, 1997). Dynamic capabilities encompass multi-dimensional processes that include seizing opportunities, managing resources, organizing activities, intensive use and management of knowledge, and finally, coordinating the performance of the company’s business activities in harmony with the business conditions subject to constant and frequent change. In line with their significance, as recognized by the academic and business community, businesses need to be able to determine whether they possess dynamic capabilities, to determine the degree to which they possess them, and to provide guidelines for their use and development, so as to improve their business performance.

For many organizations, it can be seen that certain business opportunities defined as priorities were never realized, while for others they failed to have a sufficient and desired influence and ultimately were unsustainable, all due to an insufficiently successful implementation process (Pustkowski, Scott and Tesvic, 2014). Despite a number of years since the presentation of this concept and the scientific considerations and business use over time, it is evident that for management, the concept of dynamic capabilities is not sufficiently clear, as it does not come with specific guidelines for their implementation or the active implementation of the results of the processes of sensing, exploitation, reconfiguration, transformation and integration that characterize the primary concept of dynamic capabilities as it arose at the end of the 20th century. In other words, the process of exploitation, which includes the segment of managerial decision-making and the segment of final activities (Teece, 2009) has often not been conducted in such a way so as to generate a specific business result. For that reason, the dynamic capabilities model presented in this paper separates these two segments, positioning the managerial decision-making to seize business opportunities directly after their sensing, while the final business activities that bring results are positioned at the end of the process. Following this, a group of factors has been defined, in line with their properties and real time needs, to identify the dynamic capabilities in the organization, and the degree to which the company possesses them. The order of these factors is such that it outlines the order of the necessary organizational processes aimed at fully exploiting these capabilities for business purposes. This paper defines these factors that consider the dynamic capabilities of a company in a range of domains, and expand on the existing knowledge in the area of dynamic capabilities of a company and respond to the needs of modern operations:

- sensing and seizing business opportunities;
- reconfiguring and acquiring resources;
- internal and external transformation of a company;
- integration of internal and external knowledge;
- business coordination and company activities.
In this concept, the capability to sense should result in a systematic, dynamic and ongoing process implemented into the very roots of the organization, aimed at revealing more or less visible opportunities in the business environment. A fresh viewpoint is oftentimes more valuable than the pure mental strength (Hamel, 2000) that is often the basis for the traditional model of strategic management and operations, and which due to its static nature is rapidly losing significance in current times that demand a dynamic approach. The fundamental challenge for the capacity of sensing is in limited rationality (Teece, 1998), and the company needs to develop a system that can objectively and openly collect the necessary information and knowledge so as to identify business opportunities, and then to launch the further processes in the organization. Seizing opportunities within the first factor of dynamic capabilities is observed in this paper as making strong managerial decisions to launch new business processes, so as to act on the sensed opportunity and to engage all available resources in this process. Accordingly, seizing opportunities is not viewed here as the ultimate achievement of the result, which is considered within the fifth factor, but as the concrete start of the process that leads to it.

The company needs to recognize the dynamic nature of its environment, and also its resources (Itami and Roehl, 1987), and it should be able to accomplish its goal concerning the possession of unique properties of its resources and their management, which will sufficiently differentiate it from the competition. In order to do this, the company must be capable of actively conducting reconfiguration of its existing resources and, as needed, to acquire new ones in alignment with business needs. With this, the organization approaches a state that can allow it to successfully adapt to changing market conditions, and to independently set new business conditions for others. A dynamic approach to treating resources in the organization is contained within the construct of dynamic capabilities that can enable the company to successfully implement the described activities. Dynamic capabilities represent much more than a simple add-on to the concept of resource theory, since they manipulate the resources and other capabilities that create value (Zott, 2000), and as such their contribution has multiple uses in the accompanying organizational processes.

The business conditions of the present day do not allow for rigidity in the organizational structure. Businesses must constantly be able to transform and retransform (Teece, 1998). Company transformation involves changes at various organization levels, depending on need, and this represents an unavoidable consequence of configuration, and involves the strategic process that leads the company from one state to another (Mintzberg, Ahlstrand and Lampel, 1998). Retransformation is the ability of the organization to be prepared for new changes, following such a transformation, as new market conditions demand, all with the aim of retaining or creating a new level of competitive edge or success. The possibility of successful internal transformation in response to the business environment is an important demand on
the company aiming to meet the current market challenges, and involves looking inwards on the company. In considering the view outwards from the company, the need placed before the modern organization is its ability to successfully transform towards clients, suppliers, external institutions and other relevant factors in its environment. Internal and external transformation therefore is a necessary factor of adaptation in volatile and dynamic business conditions.

In turbulent conditions, increasing attention must be focused on the capabilities of the business to learn (Bontis and Choo, 2012), as the greater the degree of knowledge integrated into the company capabilities, the more difficult it will be for the competition to copy it (Grant, 1996). The dynamic characteristics of today’s market demands the establishment of a dynamic model for a strategic approach to handling knowledge in the company, which is contained within the construct of the dynamic capabilities. Knowledge is not static, and innovative knowledge now will be essential knowledge in the future. Therefore, defending and improving the competitive position of the company requires continual learning and the acquisition of knowledge, while the combination of external knowledge and unique internal knowledge can result in completely new and unique organizational knowledge (Zack, 1999) that shapes uniqueness and differentiation on the market. The company needs to be in a position to view and use the knowledge, both internal and external, that is useful, as, ultimately, the integration of knowledge from both within and outside the organization is an important factor for its success (Teece, 2009). For these reasons, the integration of internal and external knowledge is an important issue to consider within the factors of dynamic capabilities.

The process of cooperation and coordination of the resources the organization has at its disposal is a precondition to actualizing its productive activities (Grant, 1991). As such, business coordination directly precedes the final processes of implementation of all prior steps and the final activities, in the sense of using the dynamic capabilities to achieve business success. The importance of implementation is evident in the results of a global survey conducted in 2014, which showed that companies with good indicators for the implementation of their strategic activities recorded 30 percent higher financial indicators and success on average than other companies (Pustkowski, Scott and Tesvic, 2014). The ultimate achievement of the business goal is based on the activities taken, and is a direct consequence of the business agility. This implies the ability of a company to develop and use its capabilities so as to successfully compete on an uncertain and unpredictable market (Hooper, Steeple and Winters, 2001). This includes the collection of possible business initiatives that a company can readily implement, by levelling the predefined competences with management costs and risks (Westerman, Weill and McDonald, 2006), and which represent the successful exploitation of competitive factors via integrating resources that can be reconfigured, and the best practices from the environment characterized by a wealth of knowledge, to be able to
offer customers products and services on a rapidly changing market (Yusuf, Sarhadi and Gunasekaran, 1999). Via the factors of the use of resources, transformation processes, knowledge and other organizational competencies, this business agility leads towards the achievement of business goals, as the specific use of dynamic capabilities aimed at achieving the desired business results and a competitive edge.

The five defined factors of dynamic capabilities together create a new multi-dimensional model of dynamic capabilities adapted to real time demands. This model clearly describes the necessary processes and activities, and lists their order. With sensing business opportunities, consideration is given to their use and of making internal decisions aimed at implementing new business processes to seize the sensed opportunities, including the engagement of all available resources into this process. Once company management decides to seize the identified opportunity, the company takes the optimal approach to reconfiguration and the acquisition of the required resources, its internal and external transformation, and the integration of internal and external knowledge. The final step involves the coordination of all these processes and taking the final business activities.

3. Innovating the Company’s Value Creation Model

The dynamics and speed that characterize customer needs should be viewed in the dynamic approach to the functioning of the company’s business model. Since the business model articulates logic and provides data on how the business is conducted and brings value to customers, while also defining the architecture of revenues, costs and profit of the company (Teece, 2010), its strategic consideration should account for all available factors that can ensure that the business model is adequate for the current business environment. Traditional management models that prefer optimization over innovation and continuity over change are simply unable to deal with the challenges of the modern business environment (Hamel, 2012).

In order to create a business model that addresses the needs of present day conditions, and a model that is oriented towards the future, it is necessary to apply innovative practices and principles. The 21st century demands a ‘transformational approach’ to the business model, in which it is considered to be a concept or means that can respond to change and focus on innovativeness (Demil and Lecocq, 2010).

The recent scientific literature shows that despite comprehensive considerations, there is no consensus on what in essence makes up the business model (Zott, Amit. and Massa, 2010), that this concept is also seen to lack a theoretical basis founded on economic or business research (Teece, 2010), and many top managers are not clear on how to apply this concept (Shafer, Smith and Linder, 2005). The company business model represents a means by which to create business opportunities, despite its relatively poorly developed framework (Bock and George, 2011), as such, future research and publications should aim to further develop this
area of study. Accordingly, this paper focuses on the topic of business model innovation, with special emphasis on innovation of the value creation model.

Business model innovation is particularly important in times of instability (Lindgardt et al., 2009), which is a characteristic of the current business environment. Business benefits from the use of this concept can be significant and many-fold. Business model innovation has succeeded in preformulating entire economic branches, and redistributing billions of dollars in value (Johnson, Christensen and Kagermann, 2010). There is a consensus that business model innovation is a key element in business performance (Zott, Amit and Massa, 2011). It has aroused the attention of managers, entrepreneurs and the academic community as it represents an insufficiently exploited source of future value, making it more difficult for competitors to imitate or replicate a completely new system of activity than just one new product or process, and it can become a strong competitive means to achieving a sustainable advantage (Amit and Zott, 2012). Business model innovation, which in the literature is even called strategic innovation, directly addresses the buyers, giving them tangible new values, including new marketing approaches, sales methods, access to customers or positioning of brands (Tucker, 2009). Business model innovation has specific determinants, which involve an iterative, spiral approach to innovation on the one hand (Ernst & Young, 2012), and the rapid application of a completely new business model based on radical innovation on the other. There is increasing agreement in the literature that the business model of a company is defined by the following elements (Giesen at al., 2009):

- which values are passed on to the buyer, by observing the buyer segment, subject of sale and manner of sale,
- how company revenues are achieved, in view of the price model and monetization methods,
- how to transfer the value of the organization, by considering internal resources and processes, and external partnerships,
- how the company is positioned within the economic branch.

On the basis of these elements, and considerations in the literature to date, the fundamental principles that ultimately create the capability of a company to innovate its business model are defined:

- innovating the value creation model of the company through the products or services offered to customers,
- innovating the operative model of the company through the creation of new price models and policies, and reconfiguring the structure of its assets and costs,
- innovating the corporate model of the company, which involves the reconfiguration or ability to create completely new value creation chains and to conduct an organizational transformation of the company,
innovating the industry model of the company, by redefining operations in the existing industry, or expanding operations into new industries or environments.

This paper analyses the innovation of the value creation model, which represents the first fundamental principle of a company’s capability to innovate the business model, as shown above. Since it is known that the business model begins with value creation for the customer, and then the model is constructed to outline how to pass that value onto the buyer (Chesbrough and Rosenbloom, 2002), the products and services, as an element of the construct of value creation model innovation, must be considered together with the customer segment for which they are intended. Therefore, within this segment, the model considers the role of the product or service and the role of the customer, i.e. it monitors its innovation via the creation of value through offers of the product or service to the target segment of customers. Suppliers are expected to learn which value customers demand, and to develop the corresponding delivery process (Berghman, Matthyssens and Vandenbempt, 2006). However, it can be observed that development in the global economic has changed the traditional balance between customers and suppliers, and that the value system that presents the product to the customers should be re-evaluated (Teece, 2010). For this reason, a completely new and innovative approach to value creation is required, both for companies and for customers, and this model must be aligned with the company needs to achieve the business goals and to meet customer expectations.

In viewing company operations, this innovative approach can be achieved through application of the business model innovation concept, and in the segment addressed by this paper, through innovation of the value creation model. The ultimate goal of the business activities of a company is to expand the scope of its achieved revenues, i.e. for its activities to expand onto new market segments not previously tapped into. Following economic logic, in creating value, the company should concentrate on the sale of the greatest number of products and services to customers, which are maximally aligned with their needs and expectations. This company task can be achieved in two ways. In examining the existing customer base and its changing needs, completely new products and services can be offered to that segment, which may be complementary to the basic product, and which corresponds to the actual perceptions of customer expectations by creating new values. On the other hand, in examining the existing base of its products and services, the company can apply various business techniques to expand its customer base, and to encompass previously untapped market potential, by creating added value through the use of new technologies to impact the way the product is used, delivered or promoted. A recent analysis of business practices showed that some of the most successful and innovative new business models were not founded on offering new products, but on offering existing products in a different way, thus changing the customer perception and experience of the product (SAP, 2008). As such, the existing product
or service becomes a subject of interest for a completely new customer segment, and becomes an acceptable or desirable option. Pursuant to the above, the subject of this paper was to examine the result of innovating the value creation model by focusing on individual or joint effects of offering completely new products or services to the existing segment of customers on the one hand, and offering existing products and services to a completely new customer segment, i.e. creating the company’s capability to do so, on the other hand.

4. Theoretical Links between Dynamic Capabilities and Innovation of the Value Creation Model

Recent scientific study has examined new circumstances in light of the increasing dynamics of business and the accompanying changes as an important and influential factor on organizational performance. Also, it has been observed that the prior principles of business model functioning are increasingly misaligned with actual corporate expectations. The capability of a company to create value will be threatened if it does not serve to create a new business model (Teece, 2010), and so the imperative in the sense of an initiative to create a new and innovative value creation model takes the forefront. Receiving information in real time, defining product prices quickly and rapid problem solving have become fundamental expectations of private and corporate users in the digital reality age, thus placing pressures on companies to rethink the elements in their business models (Bughin, Chui and Manyika, 2013). Accordingly, the literature considers the dynamic processes that result in business model evolution (Demil and Lecocq, 2010), confirming that the company’s capabilities and its changes will positively contribute to its innovation (Björkdahl and Holmén, 2013). The dynamics and speed that characterize today’s market should be viewed also in the dynamic approach to business model functioning, in the form of active upgrades to the existing model, or the creation of completely new models. This dynamic approach is increasingly tied to innovativeness and the accompanying innovative processes in the company. Processes within the company are becoming increasingly innovative and dynamic, and the theoretical concept of innovation is based on a strongly active and dynamic component. From this, the dynamic capabilities of a company should influence its capability for innovation and to develop its business model. The value and key capabilities of a company, and their mutual relations, are intertwining factors that impact the overall value creation chain of products or services (Kothandaraman and Wilson, 2001). As such, the company’s capabilities can be used as a tool to improve the creation of new or added values in an organization. From this point, the theoretical links between dynamic processes and a company’s capability to innovate the business model approach and thus to create new value, can be addressed.

In examining the separate factors of dynamic capabilities, it is possible to establish theoretical parallels between each factor and the properties of the innovation approach to the value creation model. With the increased global accessibility for most products and services,
it is evident that their perceived validity period has been shortened, and customers are becoming more demanding with regard to their needs and expectations. Companies are exposed to the need to actively monitor all indicators and trends associated with their operations, so as to be able to respond to new needs. When a company lacks the capability to observe the market and capabilities concerning customer relations, this can result in the loss of the company’s ties with the market, shifting away from the realistic customer demands, and making it unable to take the appropriate business reactions and innovation steps (Berghman et al., 2006). The capability to sense or observe is a critical function, for when performed successfully, it can enable the company to tie in with its environment and wisely invest its resources, thereby creating superior economic returns and concrete value for the company (Teece, 1998). On the other hand, the business model approaches the entrepreneur’s idea of the ultimate determination of business opportunities, sets up a relevant group of targets that directs the business actions and organizational scope, and links with the implementation of organizational activities aimed at seizing a sensed opportunity (Bock and George, 2011). The processes of sensing and seizing business opportunities are the elements of the first factor of dynamic capabilities, and can theoretically be associated with the functioning of the business model to create value for the company. Since the point and goal of the sensing process is to recognize new circumstances in the corporate environment, the certain outcome for companies wanting to sense and seize opportunities is a new and innovative approach to value creation that is aligned with the actual expectations of customers, which is subject to ongoing change.

The resources and capabilities of a company are mutually connected in the way that capabilities can have a direct impact on resources, and as such enable the creation of new values, while the influence of dynamic capabilities on resources and their organisation and use can improve business results. While resources are the source of a company’s capabilities, the capabilities are the main source of the competitive edge (Grant, 1991). Since the dynamic capabilities are aimed at seizing newly sensed opportunities, via the effects of reconfiguration and resource acquisition, or the ‘wise investment’ of company resources, they also create business solutions that lead towards new means of creative value, which is increasingly innovative in nature.

In observing organizational structures of companies, it is clear that the rigidity of their structures is not adequate to meet the actual needs dictated by the market. With the need for a principled establishment of more flexible organisations able to easily adapt over time, the specific task placed before the organisation is to perform more frequent internal and external transformations. This also shapes the elements of the factors of dynamic capabilities, which can be a very demanding task. This transformation concerns business optimisation that includes the application of innovative processes, and changing and optimizing business
activities in real time, as conditions change (Gallardo, 2008). In line with this, it is possible to observe a theoretical connection between dynamic capabilities through their components in the form of transformation and optimization processes using an innovative approach, which ultimately aims to create a business model that generates value.

The organizational approach to knowledge and its adoption and use in creating value in an enterprise have long been considered an essential part of doing business. The greatest demands placed before an enterprise in conditions of rapid change is its ability to continuously transform towards new and higher levels of knowledge and learning (Rainey, 2006), and companies that operate in dynamic and unpredictable environments are not able to found their business on clear and stable strategies. Thus an organizational approach based on learning becomes inevitable in order to find solutions in such circumstances (Mintzberg, Ahlstrand and Lampel, 1998). The integration of internal and external knowledge form the elements of the dynamic capabilities factors, and also represent a condition for creating value. The new market changes demand new and innovative knowledge that can be applied to create new values in the company, i.e. new models for the creation of these values.

The processes considered within the final factor of dynamic capabilities involve business coordination, which is followed by execution in the sense of taking steps that bring new value via the creation of the final product or service. The company activity that brings new value is a dynamic circumstance that is closely tied to corporate agility. Considering that corporate agility is defined as the use of existing company capabilities to quickly create new business values while reducing cost and risk (Ross, Pitteri and Beath, 2007), it is evident that there is a theoretical link between the elements of dynamic capabilities and the creation of new values. In wavering and uncertain market conditions, companies should aim to build agile business models that are more focused on client needs instead of treating growing complexity as an obstacle to doing business, and in that way turning it into a source of business opportunity (IBM Global Business Services, 2011). In observing client needs, it is clear that the link between the values the customer wants and the possibility of the organization to provide that value should be tied to the evaluation of the current key capabilities of the company and the future capabilities needed in order to make the future needs for value creation possible (Kothandaraman and Wilson, 2001). From this, dynamic capabilities have been recognized as a tool the organization can use to increase the agility of its business models, and to lay the foundation for establishing new and innovative value creation models.

Ultimately, the values concerning the relations between market supply as marked by the competition and the accompanying prices is dependent on the company’s ability to deliver a high-quality product or service that provides the advantages that are important to the customer (Kothandaraman and Wilson, 2001). In considering the concept ‘dynamic consistency’, the ability of the company to accept the effects of change and to implement changes to adapt its
business model to retain existing levels of business or to restore it (Demit and Lecocq, 2010), there is a clear association of the concepts of value creation, the company’s dynamic capabilities and the new company business model. Dynamic capabilities pertain to the possibility of a company to give an innovative response to changes in the environment (Jones, MacPherson and Jayawarna, 2010), and in viewing the results of dynamic capabilities, it is evident that they also increase the degree of organizational understanding for changing customer demands, thus facilitating the company to take innovative measures (Lin and Huang, 2012). In conclusion, there is a clear link between the dynamic capabilities and the innovativeness of a company, and ultimately with its theoretical ability to innovate the value creation model.


5.1 Research Model

For the purpose of the empirical study, a research model was developed to associate dynamic capabilities with the innovation of value creation models in a company. On the one side, the variables contain the determinants of the company’s dynamic capabilities, defined through their factors, while the other side lists the determinants of the capability to innovate the value creation model, in line with the fundamental assumptions of a company’s capability to innovate its business model, with emphasis on value creation. The model linking the dynamic capabilities and the innovation of value creation model of a company is shown in Figure 1.

Figure 1: Research Model Testing the Influence of Dynamic Capabilities on the Company’s Capability to Innovate Its Value Creation Model

The following hypotheses were set in relation to this research model:

H1 – The possession of dynamic capabilities is positively associated with the ability to offer products or services to a completely new customer segment

H2 – The possession of dynamic capabilities is positively associated with the ability to offer completely new products or services to an existing customer segment
5.2 Methodological Framework of the Study

The study was conducted in late 2014 on a population of large and very large Croatian companies, i.e. classified as having a minimum of 250 employees. The total sample population was 624 companies, with complete responses received from 114 companies (18.27% return rate). The sample can be considered representative, particularly noting that the companies from the sample employ 10.9% of the total workforce in the Republic of Croatia (based on employment data for October 2014 released by the Croatian Central Bureau of Statistics). The research instrument was a questionnaire. In filling out the questionnaire, participants provided their perceptions of measuring company characteristics. The possession of dynamic capabilities was tested with a total of ten questions determined by factors for their identification, and the capabilities to innovate the value creation model was tested by posing two questions that represent their key elements. Those surveyed were top management in the included companies. The five-point Likert scale was used to measure the traits of dynamic and innovative capabilities. For both variables, the position of the observed company was analysed in comparison to the competition in the branch on a scale of one to five. A score of one represents a position significantly below the level of the competition, score of two below the level of the competition, score of three at the average level of the competition, score of four above the level of the competition and a score of five a position significantly above the level of the competition.

With regard to the size of companies in the sample, statistical analysis showed that 64% were large companies (having between 250 and 1000 employees), and 36% were very large companies (having over 1000 employees). In terms of the ownership structure, 92.1% were under private ownership, and 7.9% were under majority state ownership.

5.3 Results of the Empirical Study

Table 1 provides an overview of the descriptive analysis of indicators of the possession of dynamic capabilities in the surveyed companies.

<table>
<thead>
<tr>
<th>ELEMENTS</th>
<th>n</th>
<th>MEAN</th>
<th>ST. DEV.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Possession of the internal capability to sense, interpret and react to business opportunities in the environment</td>
<td>114</td>
<td>3.82</td>
<td>0.68</td>
</tr>
<tr>
<td>Possession of internal structures, procedures and mechanisms to seize opportunities from the environment with the aim of improving business results</td>
<td>114</td>
<td>3.76</td>
<td>0.79</td>
</tr>
<tr>
<td>Possibility of successful reconfiguration of existing company resources in the case of a change in the operating conditions</td>
<td>114</td>
<td>3.56</td>
<td>0.80</td>
</tr>
<tr>
<td>Possibility of successful and rapid acquisitions of new external resources necessary in the case of a change in the operating conditions</td>
<td>114</td>
<td>3.75</td>
<td>0.92</td>
</tr>
</tbody>
</table>
Possibility of successful internal transformation of the company in the case of business needs caused by changes in the operating conditions  | 114 | 3.48 | 0.77
Possibility of successful transformation of the company towards clients, suppliers and external institutions in the case of business needs caused by changes in the operating conditions  | 114 | 3.80 | 0.69
Ability to integrate new knowledge available outside the borders of the company into its new operating capabilities  | 114 | 3.82 | 0.90
Ability of the company to improve its existing operating capabilities by using new knowledge as a consequence of learning in the organisation  | 114 | 3.70 | 0.75
Ability to coordinate and reorganise business resources, tasks and activities, with the aim of creating new operative capabilities of the company  | 114 | 3.67 | 0.71
Ability of the company to offer new products or services in a short time to market  | 114 | 3.82 | 0.95
**Possession of Dynamic Capabilities of Companies**  | 114 | 3.72 | 0.67

The results of the descriptive statistical analysis indicate good to very good mean indicators of possession of the determinants of dynamic capabilities, indicating a good average result for the companies in the sample. Following from this, it can be concluded that the companies from the sample possess a good level of dynamic capabilities. Previous studies reported that the metrics in the area of dynamic capabilities have not been sufficiently considered by companies, with regard to their ability to quickly offer new products or services to the market (time to market), and a global survey conducted in 2010 on a sample of 1590 members of top company management on the main global markets and economic branches showed that only 20% of companies oversee and measure this capability (Andrew et al., 2010). The research conducted here contained this metric as part of the new model of dynamic capabilities as presented in the theoretical section of this paper. This metric addressed the final business activities, and thus highlights the significance of the new fifth factor in the shown model of dynamic capabilities, involving business coordination and activities. Above average values of this answer in comparison to other companies indicates that the surveyed company has very good levels of this capability. Such a result is exceptionally good in the current business conditions, which require very rapid new business activities. Table 2 shows the results of the descriptive analysis of the possession of capabilities for innovating the value creation model for the companies in the survey.
Table 2: Descriptive Analysis of Indicators of the Capabilities for Innovating the Value Creation Model for the Companies in the Survey

<table>
<thead>
<tr>
<th>ELEMENTS</th>
<th>n</th>
<th>MEAN</th>
<th>ST. DEV.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Possibility of offering its products or services to completely new customer segments</td>
<td>114</td>
<td>3.31</td>
<td>0.75</td>
</tr>
<tr>
<td>Possibility of offering completely new products and services to the existing customer segment</td>
<td>114</td>
<td>3.99</td>
<td>0.81</td>
</tr>
<tr>
<td>Capability of Innovating the Value Creation Model</td>
<td>114</td>
<td>3.65</td>
<td>0.78</td>
</tr>
</tbody>
</table>

The above results show that the surveyed companies possess an average of good capability to innovate the value creation model. New business conditions have strengthened the need to consider not only how to more precisely meet customer needs, but also how to create greater value from the offer of new products and services (Teece, 2010). The criteria for determining the capability to innovate the value creation model contained both the possession of the capability of offering existing products or services to completely new customer segments, with an average good score, and the possession of the capability of offering completely new products or services to the existing customer segment, with an average very good score. This indicates that these companies are well prepared to use the existing customer base, while there is still room for improvement to improve their business position to exploit previously untapped market areas and customer groups.

The survey results relating to the set hypothesis follows. With the aim of testing the set hypotheses, correlation tests were performed to examine whether there is an association between a company’s dynamic capabilities, in line with the research model, and the existence of its capability to innovate the value creation model. Table 3 shows the results of the correlation test aimed at testing the first hypothesis. This examined whether there is a correlation between a company’s dynamic capabilities and its ability to offer its products and services to completely new customer segments, which is the first of the two segments considered within the capability to innovate the value creation model in the organization.

Table 3: Correlation Test between the Possession of Dynamic Capabilities and the Capability to Offer Existing Products or Services to Completely New Customer Segments, for the Companies from the Sample

<table>
<thead>
<tr>
<th>Possession of dynamic capabilities</th>
<th>Possession of the capability to offer existing products/services to completely new customer segments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spearman coefficient</td>
<td>0.597</td>
</tr>
<tr>
<td>Significance (two-way)</td>
<td>0.000</td>
</tr>
</tbody>
</table>
The results of the correlation test on the companies from the sample indicate that there is a significant correlation between the possession of dynamic capabilities and the capability of a company to offer its products or services to completely new customer segments (Spearman coefficient 0.597, with two-way significance 0.000). This result provides empirical evidence to support the theoretical conclusion on the basis of linking the theoretical elements of dynamic capabilities and business model innovation, emphasizing the innovation of the value creation model, and pursuant to this analysis, the hypothesis H1 is accepted. It is concluded that there is an association between the dynamic capabilities of a company and its ability to offer its products or services to completely new customer segments.

In order to test the second hypothesis, a correlation test was performed to examine whether there is an association between a company's dynamic capabilities and its ability to offer completely new products or services to its existing customer segments. Table 4 shows the results of the correlation test.

Table 4: Correlation between the Possession of Dynamic Capabilities and the Capability to Offer Completely New Products or Services to the Existing Customer Segment, for Companies from the Sample

<table>
<thead>
<tr>
<th>Possession of dynamic capabilities</th>
<th>Possession of the capability to offer completely new products/services to the existing customer segment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spearman coefficient</td>
<td>0.709</td>
</tr>
<tr>
<td>Significance (two-way)</td>
<td>0.000</td>
</tr>
</tbody>
</table>

The results of the empirical survey based on this correlation test show the existing of a strong association between the possession of a company’s dynamic capabilities and its ability to offer completely new products or services to its existing customer segment (Spearman coefficient 0.709, with two-way significance 0.000). Following from the theoretical analysis of the close relationship between a company’s dynamic capabilities, as the means to improve the level of understanding of the organization for changing customer demands, and the ability to innovate the value creation model, the obtained results empirically confirm the theoretical conclusions. With this analysis, the hypothesis H2 is accepted, and it is concluded that there is an association between a company’s dynamic capabilities and its ability to offer completely new products or services to the existing customer segment.

Ultimately, on the basis of the empirical findings, it is concluded that there is an association between the dynamic capabilities and innovation of the value creation model in companies focused on the individual or joint effects of offering completely new products or services to current customer segments on the one hand, and offering existing products or services to completely new customer segments on the other hand.
6. Conclusions

Business models have often been mentioned in the literature, though they have rarely been analysed and as such are often less than fully understood (Teece, 2010). It can be observed that oftentimes, the concept of dynamic capabilities is still not clear to company management, for the reason that it does not come with clear guidelines concerning implementation, or the active implementation of the results of processes as described in the original concept of dynamic capabilities as defined in the late 20th century. This poses the challenge of analysing and innovating company business models in the sense of creating value for the company, and construction of a new model of dynamic capabilities that meets the requirements and needs of the present day. This consideration led to the selection of this topic and its scientific consideration.

Both the construct of dynamic capabilities and the concept of innovation of the business model in the sense of creative value for the company are important strategic tools. Since they mutually build on to the complementary organizational capabilities, they can generate a synergistic effect, and its result is greater than the sum of the results of each of its components independently. Therefore, this study examined the influence of dynamic capabilities on a company’s capability to innovate its value creation model.

The strategic importance of a company’s capabilities is evident at the global scale, and the results of an international survey conducted in 2014 showed that half of the companies surveyed considered the creation of capabilities to be among their top three priorities (Benson-Armer, Otto and Webster, 2014). Since the ultimate goal of applying these capabilities is to create a unique concept of company functioning that will differentiate it from all other organisations, the dynamic capabilities of the company stand out as a concept that is able to fulfil this task, which results in the creation of a competitive edge for those companies using them successfully. This study presents a model of company dynamic capabilities that represents a novel concept based on the literature, and adapted to meet the current needs of the 21st century. Since designing a successful business model is an art (Teece, 2010), the fundamental principles of this paper were carefully conceived, in view of the scientific literature, to create the foundation of a research model of a company’s capabilities to innovate its business model. Further consideration is focused on the innovation of a company’s value creation model.

Considering the dynamic capabilities and innovation of the value creation model of a company indicated their theoretical links. An empirical study was conducted to test the proposed hypotheses of these concepts, and to examine the influence of a company’s possession of dynamic capabilities on its ability to innovate the value creation model. Descriptive statistics showed good indicators of the arithmetic means of the dynamic
capabilities determinants, and the determinants of the capability to innovate the value creation model, which presented an average good result in the surveyed companies. The correlation test results for companies from the sample shown a significant correlation between the possession of dynamic capabilities of a company in terms of their five factors, i.e. sensing and seizing business opportunities, reconfiguration and acquisition of resources, internal and external transformation, integration of internal and external knowledge, and business coordination and activities, with the existence of the capability to innovate the company’s value creation model. On the basis of these results, both hypotheses were accepted. Ultimately, it was concluded that there is a significant to strong level of association between the dynamic capabilities and the capability to innovate the value creation model in a company. The research conducted confirmed the new models and as such can serve as the basis for new research in other countries and regions, and on a larger population. Furthermore, the study examined the influence of dynamic capabilities of a company on its capability to innovate the value creation model, and the conclusions reached can be applied in former scientific consideration and testing. The results obtained show a high level of association between these capabilities, and is applicable as an aid for management to better understand these concepts, and to promote the more active integration of both these strategic concepts into company operations.

References


