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Structuring and visualiSation of business models[59]

Štefan Slávik[60]
PhD Management Department Faculty of Business Management, University of Economics in Bratislava
Richard Bednár
Management Department Faculty of Business Management, University of Economics in Bratislava

ABSTRACT Business models attracted the attention of practicians and academics at the beginning of the 90s, mostly during the dot.com era. New breakthrough technologies required a different way of making value for a customer and for a company than in the preceding era. It sparked an interest in this topic retrospectively in traditional branches of business too. The article compares an array of business model concepts picturing a company and business in various ranges of detail and through various methodologies. The purpose of business models comparisons and their ways of visualisation, is to give a true picture of main attributes of individual models, to know their functioning more deeply, divide them on the basis of similar parameters into relevant groups, to study a purpose and functionality of their visualisation, to classify ways of visualisation and by this way to contribute to a deeper knowledge of this relatively new theme of business economics and management.

KEYWORDS: business model, customer value proposition, key resources, key processes, value chain, appropriability of value, profit formula, visualisation, knowledge economy

Introduction

The business strategy answers to the fundamental and fatal questions that every company should propose: "Who are we? Where are we? Where do we want to be? Where should we go? How do we get there?" It seems that there are no more principal questions for the existence of the company. Although, there might be another thoughtful question about the strategy itself: "What occurs behind it?" And what is more important for the company than its business strategy?" It seems that under a strategy, there is a business system or a group of activities that controls deployment of resources and adjusts them continuously so that they may be in line with the needs of customers and suppliers, thus one part generates earnings and the second one generates costs. The business model is the more

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60 slavik@dec.euba.sk

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specific term for this particular business system, which answers the elementary question of business: "How to valorize the resources, how to make money?" It is obvious, that without a satisfying answer to this question, there is no sense to ask any further questions considering a strategy. The creation of a functioning business model became one of the interests of entrepreneurs and academics mainly because of the increase of new information and communication technologies. These were meeting the needs of the customers through their technical originality and attractiveness, but did not guarantee their sufficient profit for their providers. Valorization of the new and progressive technologies demanded to construct other, more fitting money making machine as well. Attention considering to the business models elicited by this way brought an interest in the business model to traditional kinds of business retrospectively and established the topics of identification, function and perfection of the business model in order to bring more benefits to the customer and more earnings to the company. The first target of this article is to explain the structure of the business model, describe the reasons of the increasing interest in this particular topic, compare various structural concepts and arrive at the classification of the conceptual approaches. I should arrange and deepen knowledge about this object. The second target is to consider the purpose and function of the visualisation of the business model and to propose some alternatives of its further application and perfection.

Definitions of the business model

Even though the term business model has become known to academics and practitioners only recently, it had already been a part of a business language of entrepreneurs for longer time. It can even be found in the works of Peter Drucker. Although there is a lot of literature regarding this topic, the definition varies. Joan Magretta (2002) considers the business model to be a story that explains the way the company works. According to her ideas, a good business model answers the questions already mentioned by Peter Drucker: "Who is the customer? What does a customer consider to be valuable and useful? How can you earn money in the particular business? What is the economic logic that explains how to bring a value (benefit) to a customer with adequate costs?"

This idea is shared by Alan Afuah (2004), who thinks the business model is a system for money making. It consists of activities that are made by the company in a certain way and time, just to provide the customers with the benefits that are desired, and also make a profit. This idea is further developed, when he states that the business model is a package of activities that are made by the company in a certain way and time. It uses its resources to realise activities typical for its industry, to create an excellent value (benefit) for the customer (low-cost or differential products) and to get to position to appropriate value.

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David Hunger and Thomas Wheelen (2008) see the business model as a method that is used by the company to earn money in the business environment. It consists of the key structural and operational characteristics of the company – how to earn revenue and make a profit.

A different view is brought up by John Mullins and Randy Komisar (2010), who regard the business model as a structure of economic activities - cash flowing in and out of the company for various purposes and timings. This structure dictates acquiring and losing money and an ability to provide investors with attractive revenues. In short, the business model is the economic expression of business in all its aspects.

Mark Johnson, Clayton Christensen and Henning Kagerman (2008) do not explain the term with an explicit definition, but they all agree, that every successful company works according to an efficient business model. If its main activities are systematically identified, the top managers understand how the model deals with satisfying the needs on a profitable basis, while using the key resources and processes. Thus they can consider whether the current model could be used to satisfy any needs that are radically different or whether they would need a new model to be able to increase their revenue.

According to David Teece (2010) the business model describes rationality and data that demonstrate how business produces value (benefit) and provides it to the customer. It portrays a structure of revenues, costs and profits connected to the way the company purveys the value. The problems related to the well-done shape of the business model are located in the core of the fundamental question that is stressed by the company strategists: How to build a sustainable competitive advantage and reach above-average profit? In short, the business model defines, how the company creates the value (benefit) and provides it to the customers, and then it converts the received payments into profit. This idea is shared by Henry Chesbrough and R. S. Rosenbloom (2002), who claim, that the business model basically represents no less than organisational and financial interpretation of business. This idea of business has more conceptual, than financial character.

A wider perspective in the business model is brought by Christopher Zott and Raphael Amit (2010), who form the concept of the business model as a system of interconnected activities, which exceed the borders of the company. Together with the partners, the system of activities enables to produce value (benefit) and to appropriate the portion of the value. Activities are organised round a focal company that is a centre of the business model and connects or maintains the relations with the partners in a certain sphere.

From a general perspective, Benoit Demil and Xavier Lecocq see the business model as a concept that describes relations between its various components that are preconditions of the creation of value (benefit) for customers and the company itself. They differentiate two applications of the concept. The static concept characterises

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the functioning of the company and processes that generate value. It shows an overall idea of how the company makes the value. The transformational approach uses the business model as an instrument to realise changes and innovations of products and processes, or the model itself is a subject of changes and innovations.

The business model by Bernd Wirtz, Oliver Schilke and Sebastian Ulrich (2010) portrays the system of operation and outputs and displays the way the company operates and produces the value. It can consist of various sub-models and domains, it specifies, what resources enter the company (resources domain), how they are transformed (value production domain) to marketable products and services (value supply domain), how the products and services are transferred to the customer (distribution domain) and how the resources are generated and obtained by the partners in business (earning domain).

An entirely different point of view is brought by Ramon Casadesus-Masanell and Joan E. Ricart (2011). Based on the research study, they conclude that one of the components of the business model must be decisions approved by the senior managers about how the organization should work. It includes the decisions on remuneration, supplying, location of the operation, the range of vertical integration, distribution, and marketing. Naturally, these managerial regulations have their consequences. The choice of the price affects the volume of sales which has an impact on economies of scale and the power of negotiation. Since these outcomes influence the company's logic of formation and realisation of the value, they need to be included in the definition of the term. Thus the business model comprises of many managerial decisions and their consequences.

Rita G. McGrath perceives this theme very briefly, but extracts an essence, when she claims that the concept of the business model provides several possibilities which can change the resources to something the customer is willing to pay for.

Hiroyuki Itami and Kazumi Nishino (2010) respond to many definitions from various authors with their point of view. They say that the business model consists of two components, specifically the business system and the profit making model. The business system is the system of activities (a manufacture-supplier system), that the company sets up within its borders and out of them to distribute its products and services to the target customers. The profit model is a formula of a company's intention explaining the way the company is going to get the profit via selling itself and/or lowering the costs. In other words, the profit model of the company is a model of its strategic intention to obtain various types of differences in comparison of its competitors (by the price or the product, etc.), while its business system is a system proposed to execute this particular strategic intention. Good intentions to persuade the customer will not bring any real outcomes, if they are not supported by the system of activities that has the main impact on the customer. The business system of the company is not only a supplying system, it is much more. In fact it is a system of learning too.

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The majority of the definitions mention three independent elements. There are products or services provided to the customer, the way the company is organised to distribute these products and services to the customer and the way to appropriate a part of the value produced, thus the profit and/or revenue model. The definitions then vary according to the emphasis on these elements. The business model is then the machine for earning money, but money is important not only to produce, but appropriate too. The business model portrays the company as a place where the decisions are taken, together with its consequences, too. It is a mixture of resources and activities, in various degrees of detail and operation view that are used for providing the customer with the value (benefit). The business model can be bounded, when it is focused only on a company or open, when the partners are also included. The economic concept of the model puts emphasis on the economy of the company, it is more narrow approach. The systemic or conceptual approach underlines more complex or complete function of the company including resources, processes and value for the customer it is wider point of view.

Where the interest in the business models originated from?

All companies had their own business models, even before the increased interest in this phenomenon and they still have them today. This matter-of-fact topic has been transformed from the implicit forms to relatively unambiguous structures due to various changes in the business environment. Recently it has become the centre of attention of the top management of companies in developed countries. The business models were more explicitly introduced and have had more public awareness within the last decade. Some authors claim that the term pioneered at the end of the 90^{s}, supported by the expansion of the internet and its wide use, specifically in the electronic commerce.

The driving forces were the start of knowledge economy, the spread of internet and the electronic trade, outsourcing and offshoring of many business activities and worldwide restructuring of financial services. The way the companies can earn money is significantly different than in the industrial era, where the volume of production played an important role and the realisation of value (benefit) was rather easy. The company simply put its technology and intellectual property to the product that was sold as an individual article or a more complex unit.

Globalization, deregulation and technical progress have influenced the increase of this topic through their great impact on rules and conventions of competition. The companies with the fastest growth in the changing environment with high speed are those that utilized its structural changes to innovate its business models, to be able to compete in a different way. Such companies are for example Google or Apple Computer, that even form the structure of their industries, they are

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pioneers of new business models that enable them to organise themselves and their interactions with the customers and suppliers in unprecedented way.

Global CEO Studies (2008) from IBM in 2006 and 2008 show, that the top managements in many industries are actively looking for the way to innovate their business models, to improve their abilities in order to create and realise value (benefit). The following research of IBM from 2009 reveals that seven out of ten companies deal with the innovation of the business model and 98 % of the companies modify their business models in a certain way. The economic fall in the developed world makes companies modify or create new business models. New strategies for the "bottom of the pyramid" on the markets of the developing countries attract the researchers and practitioners to systematic study of the business models. Socially orientated companies are establishing another resource of innovations of the business models (Yunus M. et. al. 2010). Apart from that, arrival of competitors with new technology and low costs threaten already established companies and redistributes profits.

The progress in the information-communication system was the main reason of the recent interest in business models and their innovations. Many types of electronic businesses are based on new business models. Shafer, Smith and Linder (2005) found out that eight out of twelve newest definitions of the business models are related to e-business. The additional incentive is supported by the spread of the internet that raised the elementary questions about the way the business provides the customers with the value, and how to realize the value (benefit) through the supply of new information services, while the customers expect them to be for free of charge. Individuals and the companies gained easier access to the huge amount of data and information. The rise of the negotiation force was caused by the easier way of purchase. Certainly, the internet has significantly affected the recording business, as it enabled the competition of the digital record and the traditional record. Because of illegal music recording, the recording business is nowadays facing the new challenge of business models innovations. Even though the internet destroyed the business models of the recording business and newspaper reporting, the internet companies tried to form viable business models. Within the prosperity of dot.com and the crisis in 1998-2001 many companies with no or very little profits and incredibly small revenues sucked their capital from the public market, which adapted to them, at least, for a while.

Internet has introduced wide communication, global distribution of digital products and services and computer communication with the customers. Traditional businesses had to change the logic of value formation to maintain its competitiveness. Internet is the prototype of the high-velocity environment, where the successful business models have to be regularly altered and adapted to new incentives.

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The rise of the electronic computers enabled costs to be lowered at the financial reports modelling and facilitated the study of alternative conditions of revenues and costs. According to J. Magretta the term business model launched with the rise of personal computers and tabular calculator. Before this era, the business planning was usually based on the only main forecast. At best, it was supplemented with the analysis of sensitivity of projected trend. Tabular calculator supported the planning with a more analytical approach as every important item could be valued/assessed separately divided into minor pieces and thus closely analysed and verified. Critical assumptions of the plan could be changed and their consequences counted straight away. The action and behaviour of the company could be formed before its real realisation.

Rita G. McGrath (2011) states more general reasons of the rise of the theme regarding the business models. They are:

1. The increasing speed of everything. The life cycles of the products and designs are shortening. When the pace of the change speeds up, people realise, they need to look for another option.
2. The inter-industry competition. The competition comes from unexpected places e. g. iPad is pushing electronic photo frames out the branch.
3. Disruption coming out of a new business models that provide the customer with a better experience instead of simple products.

The increase in complexity and dynamics of the business environment as well as the social, cultural and civilizational progress might be the reasons of questioning the original assumptions of function of old industries. They are even forced to look for economic function of new industries, thus to deal with new business models or with improved ones at least.

Not only historical background affected the origin and increase of the interest in the business models. There are some actual strategic circumstances that often require a change or an entry of a totally new model:

1. An opportunity to appeal to certain needs of great groups of potential customers through the revolutionary innovations, that do not have any access to the market as the existing solutions are too costly or complicated for them. It is for example an opportunity to democratise the products on the developing markets, e. g the car Nano from Tata.
2. To use a new technology as an opportunity to develop new business models, e. g Apple and MP3 or to transfer the already proved technology to a totally new market, e. g the army technologies transferred to a civil use and vice versa.
3. The chance to introduce "solution of the customers' problems" to such a place, where it does not exist yet. It is common in industries, where the companies keep improving the products, until they are commoditized. Focusing on "solving the customers' problems" helps the companies affect the industry profit. For instance, when FedEx entered the market of

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sending parcels, it did not try to compete with the lower prices or a better marketing. Instead of that, it concentrated on fulfilling the needs of totally unsatisfied customers, who received the parcels much faster and reliably than ever before. FedEx integrated its main processes and resources in a very effective way. The business model related to the emphasis on the "solving the customers' problems" provided FedEx with a competitive advantage that UPS had to overcome during for many years.

4. The necessity to ward off the violators from the bottom part of the market. If Nano is successful, it will naturally threaten the rest of the car producers. Like, the mini-steelworks threatened the integrated steelworks twenty years ago while producing steel with much lower costs.
5. The need to react on a shifting basis of competence. Something that is regarded to be an acceptable solution on the market will definitely be changed within time and the main market segments will be commoditized. For instance, Hilti needed to change its business model partly because of the lower global production costs, as "good-enough" companies from the bottom of the market started to infiltrate into the market of the high-quality equipment.

The new original business models usually arise in new industries. They might become icons very quickly and merge with the names and brands of their establishers. On the other hand, it is common that companies which introduce new models in older industries disturb the traditional logic of the particular sector.

The conceptions of the business models and their visualisation

The conception of the business models describes the term more deeply, structural and expediently in comparison of definition of the business model. The term of the model itself as a descriptor of a certain fact or real state can dispose of many forms and meaning. The model is a reduced and simplified reflection of the reality (replica scale model). The model is a template that will be copied and visualised with a rate of fidelity or idealization (imitation). The model is a visualisation of a phenomenon, system or an object with its structure and function it tries to give a true picture of essence of an operation, thereby resource and process aspect of reality (functioning of organism). Only if the model shows a true picture of the function it can be used to experimentation. The model is a tool to demonstrate and exhibit a function, the instruction and formula showing how to realise certain processes and phenomenons. The business model will mainly visualise all the basic internal and external processes, so that it is easier to understand them from point of view of efficiency and effectiveness. It is a tool to experiment with a system of resources and activities to raise the output of the company. Models with a different structure of perception and visualisation of the reality will be different conceptions.

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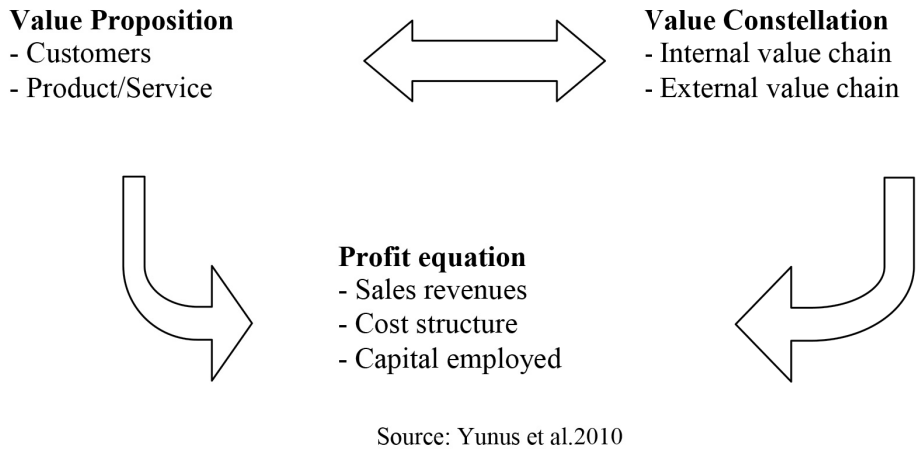
Muhammad Yunus, Bertrand Moingeon a Laurence Lehmann-Ortega claim that the business model comprises three components (figure 1). A customer value proposition answers the question: Who are our customers and what do we provide them with to satisfy their needs? A creation of value answers the question: How will we distribute the supply to our customers? The distribution is executed not only through their own value chain but through the net of suppliers and partners, too. It is necessary to put these two components in harmony, to generate a positive profit equation that is their financial formulation and shows how to capture the value from the revenues that are generated through a value supply, and displays the structure of costs and the capital spent on the creation of the value.

Figure 1: Three components of a conventional business model



Source: Yunus et al.2010

The conception of the business model of John Mullins and Randy Komisar consists of five main components, including various questions about the money's cashflow in and out of the company.

1. The model of income, e.g. "Who will buy?"
2. The model of the gross margin, e.g. How much of the income will be left after paying the direct costs for the products?
3. The model of operational costs, e.g. "What other costs of the sale are there, apart from the direct costs expended before?"
4. The model of the work capital, e.g. "What is the speed of the customers' payments? Is it possible to pay the suppliers later, after the customers' payments?"

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5. The model of investment, e.g. "What cash is necessary to put in the company before the customers will pay, to be covered the operating costs?"

The model describes the economic rules and conditions of the business very well. It emphasises the fact, that the entrepreneurs are rather often captivated by the technical originality and the supposed usefulness of their product, while ignoring, unrespecting or unknowing the economic principles of the money making. On the contrary, it does not pay attention to the process of the transmission of supplying benefit to the customer. The visualisation does not portray the model's connections and functions, it is rather an illustrative tool to help to write down the ideas and observations and hypothesis about the content of the partial models (figure 2).

Figure 2: The grid of the business model

Partial models	Relevant positive patterns	Relevant negative patterns	The ideas to shape a partial model	The hypothesis affirming or rejecting the ideas
The model of income				
The model of gross margin				
The model of operational costs				
The model of the work capital				
The model of investment				

Source: Mullins J. Komissar R. 2010

The conception of Alan Afuah mentions the components of the business model as a determinant of profitability which are the industry factors, the position of the company in the industry and activities, resources and costs of the company (figure 3). *Industry factors* determine, whether the companies in an appropriate industry are more or less or equally profitable than the companies in a different industry. Industry factors are the competitive forces, the impact of the macro environment on the companies and cooperative forces within the companies and the suppliers, customers, rivals and potentially entering companies. The other factors depending on the company determine whether the company will be more profitable then its competitor. *The positions of the company* in the industry have a shape of the value that the company provides to their customers, market segments, to which the value is offered, resources of the revenue in each market segment, relative position of the company to the suppliers, customers, rivals, new-entering companies, substitute products, complementors and prices that is asked from the customers. If the company wants to distribute the right value to the right market segment, with the right price of the product, find the right resource of revenues and adopt the right position in the industry, it needs to execute the activities that are support for the mentioned positions. The range of the success that the

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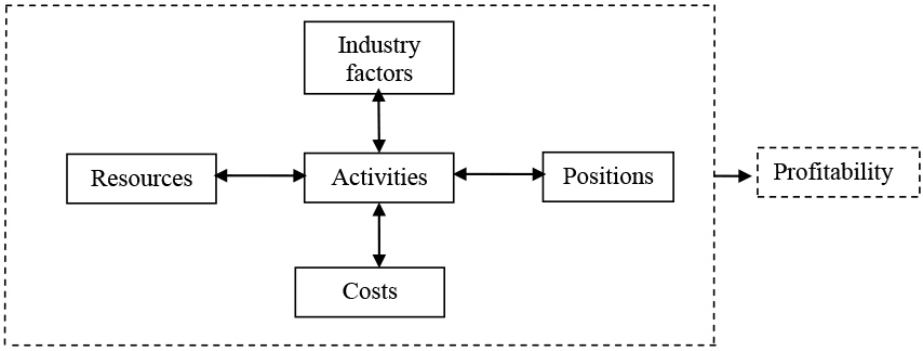
company may capture, depends on the type, manner and timing of its **activities.** Performing of the activities that facilitate the company with the ability to produce and supply a high-quality value for the customer, and adopting of the position that will allow appropriating a part of the value (profit), requires resources. *Resources* are the assets of the company. Their influence on the activities and profitability are conditioned by the ability to use them. Performing the activities requires the **costs**, both whether the company is a differentiator or a low-cost leader. The profit is the difference between the revenues and the costs, therefore the costs need to be one of the components of the business model.

A weaker aspect of the Afuah's model is the inability to bundle its parts to causal chain that would demonstrate the connectivity and links of the particular components and thus it would allow its easy practical application to ensure numerical results.

Figure 3: The components of the business model



Source: Afuah A. 2004

The business model of Mark Johnson, Clayton Christensen and Henning Kagerman consists of four interconnected elements that form and provide the value. They consider the first component to be the most important. Its main parts are (figure 4):

1. *Customer value proposition***.** A successful company is such one that has found how to produce value for the customer, hence the way to help the customer (solve the task, problem or job). A *job* means a fundamental problem that requires the solution in the particular situation. If we understand this job and all its dimensions including the whole process of its realisation, we can perform the supply. This part of the model defines:

– who is the target customer,

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– solution of a significant problem (job) or satisfying an important need of target customer,

– supply that solves a problem (job) or satisfies a need. It is important to realise, that the way something is sold is significant, too.

While thinking about the exact notion considering the value for the customer, it helps us define four of the most common barriers that discourage people to find the solutions. They are: insufficient funds, accessibility, skills and time.

2. *The profit formula*. It is a plan that defines how the company produces the value for themselves whilst providing to the customer. It consists of the *revenue model, costs structure, margin model and resource velocity.* It is recommended to start with the price proposal of the supply of the value for the customer and then deduce the variable costs and the gross profit retrospectively.

3. *The key resources***.** They are the assets, e.g. people, technology, products, buildings, equipment, distribution channels and the brand necessary to distribute the value to the customer. The emphasis is put on the key elements, that produce the value for the customer and the company and the manner in which they interact.

4. *The key processes***.** The prosperous companies have the operating and managing processes that provide them with the ability to distribute the value the way they can successfully repeat and widen. There can be various tasks, training, development, producing, budgeting, planning, selling and services. They comprise the company's principles, metrics and norms.

The model stresses the key knowledge, mentioning that the companies were not prosperous with a radically new supply of products, if they did not fully understand the liason between the opportunity and their business model, and did not make changes accordingly.

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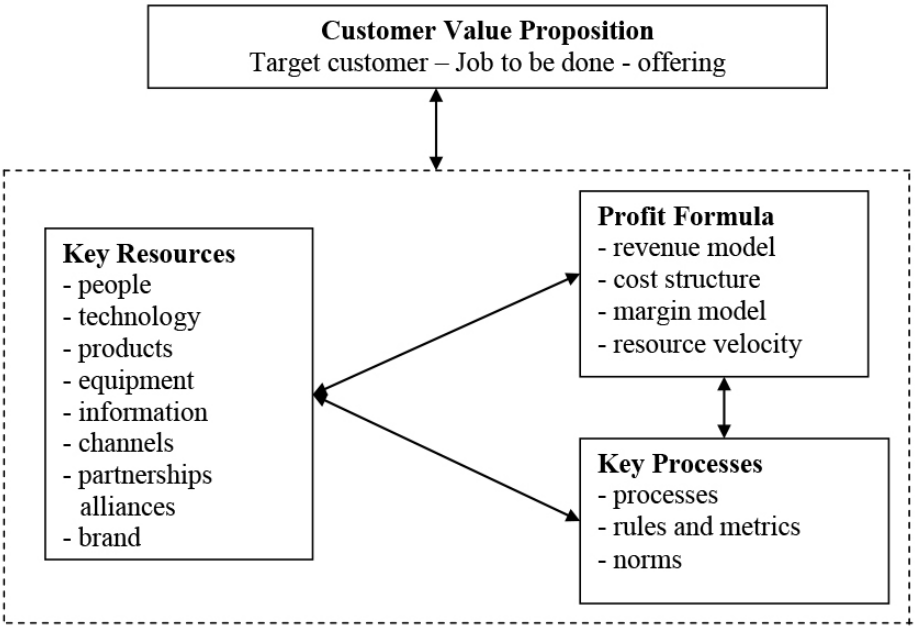
Figure 4: The elements of the successful business model



Source: Own calculation based on Demil and Lecocq

The concept of the business model of Benoit Demil and Xavier Lecocq is based on the knowledge of E. T. Penrose (1959) who claims that the company's growth is a result of the interactions between its resources, organisation and the capacity to launch offering of new values on the market. The main components of the model RCOV (figure 5) are:

1. **R**esources and **C**ompetences. The resources come from the external environment or they are built internally. The competences are the abilities and knowledge of the managers to use and combine the resources.
2. **O**rganisation. It is the arrangement of the business in the value chain inside the company, or in the value net, where the external activities also play a part.
3. The **V**alue supply. It is a delivery of the products and services.

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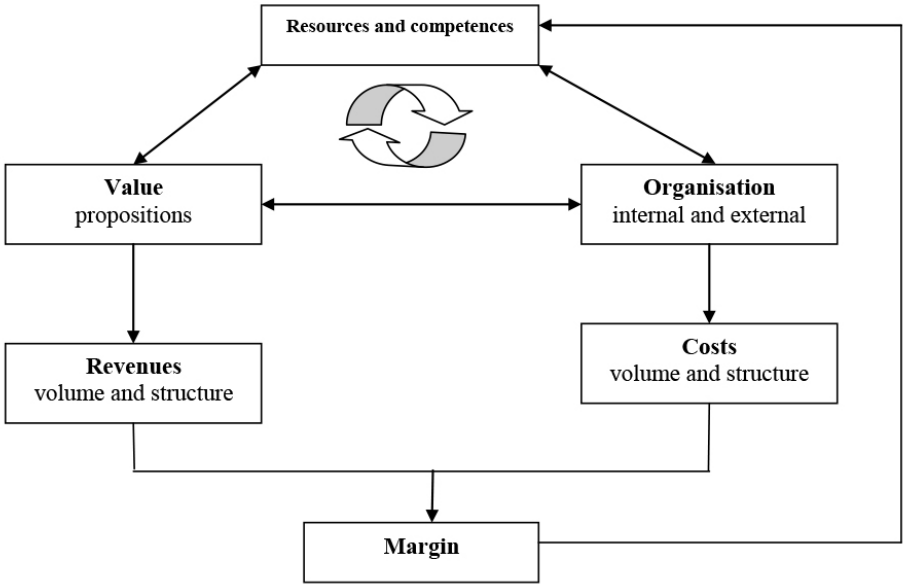
Figure 5. RCOV conception: The main components of the business model and their relations



Source: Penrose 1959

Three main components of the business model define the structure and the amount of costs and earnings of the business, as well as its margin and its sustainability. RCOV conception has created an economical and dynamic approach to the business model, which means that entrepreneurs and managers are thinking about collecting and combining the resources, organisation and the value proposition. In this particular conception, the running dynamics of the business model come from the interaction between the main components of the model and inside them. The interactions between the components head towards to a choice how to develop the propositions of the new values, produce new combinations of the resources or change the organisation.

According to Christopher Zott and Raphael Amit (2010) the comprehensive objective of the business model is to use the business opportunity through producing the value for the participating parties, thus satisfying the needs of the customers, creating the value added for the customer and meanwhile generating the profit for the company and its partners. This target is reflected in the customer value proposition as it was characterised by J. Magretta. It is explorative production of the value, which provides the company with the earnings. The system of activities is the key to understand the business model. *The activity* in the business model can be imagined as an application of the human, physical and capital resources of

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any participant to the business model (the company, the target customer, sellers, etc.) with a specific purpose that contributes to reaching the overall goal. Thus *the system of activities* is an entity of interconnected organisational activities concentrated into the company, including activities executed by the company, partners, sellers and customers etc. The company's activities can go beyond the company and its borders, but they will remain under its command, to enable the company to produce the value with its partners and acquire a share of the value, that has been created.

The system of activities is characterised by three *elements*: content, structure, and governance. The content of the activities refers to activities that are performed. The structure of the system of activities describes the connectivity of the activities and points out its importance for the business model, e.g. central, supporting and marginal. A governance of the system of activities refers to those parties who produce the activities. More concrete image of the system of activities can arise after posing questions: What activities should be performed? How should they be connected and arranged? Who should perform them and where? The system of activities describes the core of the business model and how the company conducts the business and gives a picture of an essence of the business model. The other side of the business model is related to the system of activities NICE (Novelty, lock-In, **C**omplementarities, Efficiency), that are the dominant factors producing the value. They consolidate and connect the components of the system of activities. Their characteristics are:

– Novelty. The basis of the original system of activities is the acceptance of new activities (content), new ways of connecting activities (structure) and new ways of governing the activities (governance) e.g. introducing new innovative content, structure or governance.

– Lock-in. It is a power to maintain the third parties as participants of the business model. Lock-in is for example the switch-on-costs or the network externalities that are derived from the structure, content or governance of the system of activities, e.g. to install to the components the ability to maintain the stakeholders of the business model, e. g customers.

– Complementarities are present when affiliated activities in the system offer more value than the separated activities, e.g. interconnect or unify the activities to produce more value.

– Efficiency refers to the fact, that the company uses its system of activities to reach higher effectiveness through lowering transactional costs, e.g. reorganisation of the activities to lower the transactional costs.

The emphasis on the activities respects the natural view of the managers and the entrepreneurs in the company, e.g. what activities the company keeps and what activities will be performed by the partners. The concept of the system of activities supports the systematic and holistic idea of the business model instead

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of focusing on the isolated or partial decisions, e.g. the option of producing and purchasing. The company is on the front burner of the model, which decides on the structure of the business model, e.g. how to integrate the new activities to the recent model and who will govern the activities. The concept provides us with a positive possibility of further improvements, e.g. a more careful review of the resources, how, by whom and with what other resources they will be performed.

Joan Magrettaclaims that all the business models are just variations of the generic value chain hidden inside the business. The chain has two main components. The first one consists of all the activities related to doing something – design, buying material, production etc. The other component comprises the activities related to selling something – looking for the customer, selling, and distribution of the product or the supply of the service. This concept is similar to Porter's value chain (the internal arrangement of the company) but Magretta accompanies it with a story that is based on the motivation of the key actors of the plot (external activities of the company). The story needs to be bounded with the numbers and needs to pass the exam of the meaningfulness and the numerical exam, thus deliver the expected results.

Alexander Osterwalder and Yves Pigneur (2009) together with some other colleagues created the concept of the business model (figure 6) called Canvas. The core of this business model is represented by the customers, value proposition, infrastructure and the financial viability. It is one of the most complex models. It portrays the economic side of the business through the flow of income and expenditure. It monitors the places where the costs are consumed and the profit is created. It describes the value that the company makes for the customer. The model does not only have descriptive character, it is also a key for its innovations. The visualisation enables efficiently to examine a concrete business and formulates a more general typology of the business models.

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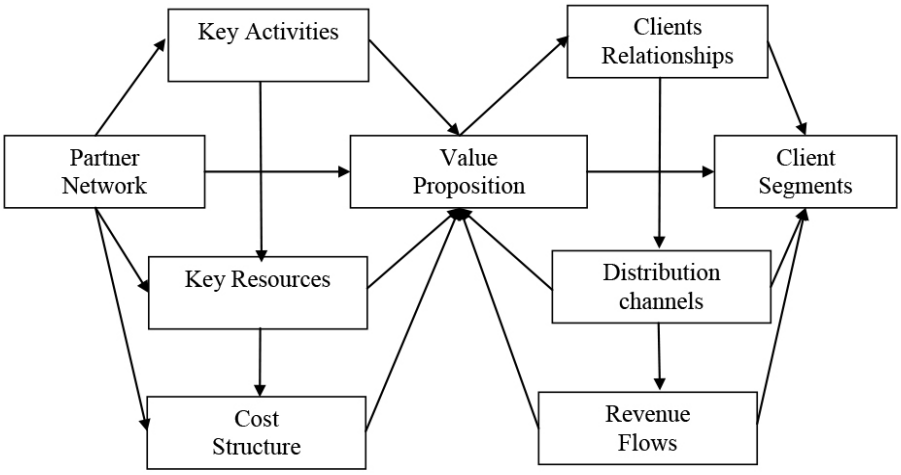
Figure 6. The business model of Osterwalder and Pigneur comprising nine components



Source: Osterwalder & Pigneur 2009

D. Watson's (2005) model belongs to more complex but on the other hand, its structure is less concentrated on the internal processes of the company, in comparison with the previous models, mostly Canvas model. However, it connects the main components of the business e.g. products, customers, suppliers, the economy of the company, management and competition. Each main component (figure 7) is expressed by several items that are considered as to be the resource of the competitive advantage that is why they are measured in a five point scale. The advantage of the model is that it is a very clear visualisation of the main components of the business and their contribution to the differentiation or lowering the costs, but, on the other hand, it does not describe the function of the company as an interconnected system of resources, functions and processes.

Figure 7. The table of the business model

The components of the business model	Competitive advantage (1 – 5 points)	Illustration/ Visualisation
1. Competitors		
2. Customers		
3. The economic of the company		
4. Management		
5. Products		
6. Suppliers		

Source: Watson 2005

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Henry Chesbrough a Richard S. Rosenbloom broaden their thinking about topic "What is the business model?" to the large list of functions:

- It identifies the value proposition, hence the value made for the users through the goods based on technology.
- It identifies the market segment and specifies the mechanism of the profit making (hence the users of the technology and for purpose of this technology).
- It identifies the structure of the value chain, necessary to produce and distribute the offered goods and complementary assets that are necessary as a support of the position in the chain.
- It specifies the revenue mechanism, which the company will use to get paid for the offered goods.
- It estimates the costs structure and the profit potential (which is given by the value supply and the structure of the value chain).
- It describes the position of the company in the value chain, connecting suppliers and customers (including identifying potential complementors and competitors).
- It formulates the competition strategy, which the innovative company will use to capture and maintain the advantage over the competitors.

Design of the business model is closely connected with new technology launching on the market. If the suitable model is not found, the technology will bring less value, as it could and, moreover, there is a possibility the competitors will make a model that will be more performing as the model of the technology pioneer. The questioning fact reflects incorporation of the business strategy that might be considered to be a superstructure of the business model and independent phenomenon.

David Teece considers the business model as an ongoing cycle of activities with an intention to make better value for the customer, attract payments and convert them to profit. The components of such models are:

- The selection of technologies and parameters that will be put into the product or service.
- The determination of the value for the customer, who will use or consume the product or service.
- The identification of the target market segments.
- The confirmation of the available, accessible revenue flows.
- The proposition of the process to realise the value, that usually consists of various degrees of progressive specifications, improvement, increasing in function and efficiency.

As follows structured business models reflect the managers' hypothesis about what the customers want, how they want to get it and what they will pay for it and,

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on the other hand, it shows, how the company should be organised to satisfy the needs of the customer in the best possible way and thus get paid well for it.

Ramon Casadesus-Masanell and Joan Ricart suggest in their research study, that one of the components of the business model must be options (choices, decisions), that are performed by managers about how the company should be organised. It includes decisions on remuneration, supplying, location of the operation, the range of vertical integration, distribution, marketing and so on. Naturally, these managerial regulations have their consequences. The choice of the price affects the volume of sales and that has an impact on economies of scale and the power of negotiation. Since these outcomes influence the company decisions and realisation of the value, they need to be included in the definition of the term. Thus the business model comprises a package of managerial decisions and their consequences.

The companies perform three types of choices when they create the business model. *The political choices* determine all the activities that the company executes through all its operations, e.g. employing non-unionized employees, placing factories in the agricultural areas, encouraging the customers to use second class for business travel etc. *The assets choices* refer to material resources that the company puts into operation, e.g. the production equipment, the satellite communication. *The governance choices* are related to the way the company determines the decision authority over the previous two types of choices, e.g. should we own the productions equipment, or should we rent it? Even little changes in the governance of politics and assets can affect their efficiency.

The consequences can be flexible or rigid. The flexible consequence is such one that reacts quickly when a principal decision is being changed. For example, the rise in the prices affects the sale immediately. On the contrary, the company culture of frugality does not disappear straightaway even though the circumstances of its origins are changed.

The business models structured through choices and consequences shape virtue cycles or loops with feedback. It is the most important aspect of the business models, even though it is frequently neglected. For example, the business model of Ryanair (figure 8) creates a few virtue cycles that maximizes the revenues through constantly lowering costs and prices. However, this state is not in existence for ever. The cycles reach their limit and their movement reverse, or they slow down as a consequence of the interaction with other business models. If they are disrupted, synergies work in the opposite direction and disturb the competitive advantage. Approving the right decisions, the companies can strengthen their virtue cycles of their business models and weaken the model of their competitors. On top of that, they can use the cycles to change the competitors to complementors.

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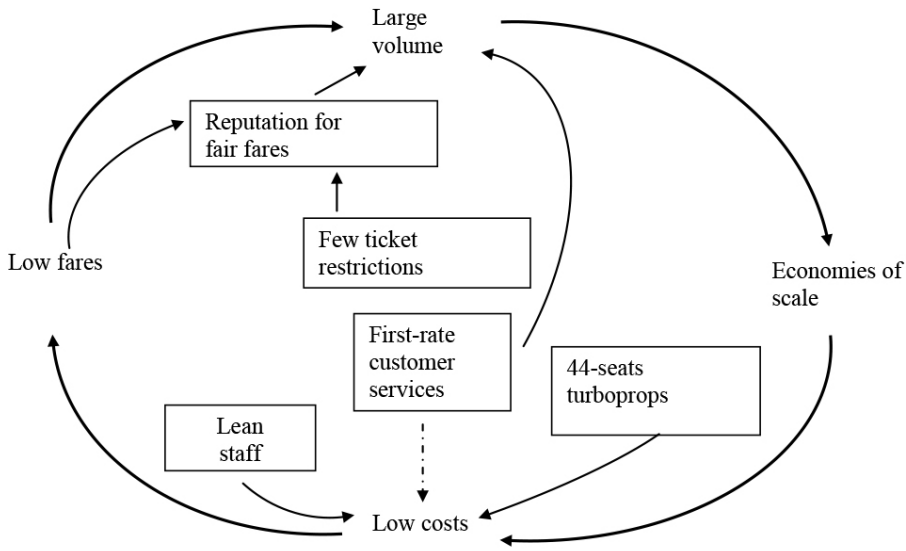
Figure 8. A former business model of Ryanair airline business



Rita McGrath outlines a business model that consists of two main components. The first one is *the unit of business.* That is a fundamental part of any business, as it is related to what the customer pays. Literally, they are the items that the company offers and the customer pays for them, e.g. products, services, warranties or other things. This is the most significant choice. Without it, the company does not have the business and business model. The reason of the use of the term "the unit of business" is that while the analysis of the business model is performed, it does not initiate the early associations about what is being sold. The terms products, supplies, goods or services do not give a picture about the new scale of offering that the companies use to earn money. The second components of the model are *processes* or the *operation advantages* that bring along the performance benefits, when the more smart deployment of the resources is more effective. After the choice of the unit of business the second package of choices refers to procedural steps, mainly the activities aimed to the sale of this unit. The processes and activities are expressed via the *key metrics***.** The key metrics are the processes or activities that seriously or critically influence the performance of the company, or they are the most critical restrictions in the value chain. For the low-cost airlines it is the occupation of the seats, for the computers producers it is the ordered production, for the branch of commerce it is the retail sales. Here the competitive advantages may appear.

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This concept is the least formalised and compact. It ignores various components and connections, thus it is more useful as an additional tool to form a business model. It is not suitable, probably, to be the only, central recipe.

Discussion

The concepts of business models differ in three basic traits. **The first feature** is the extent of detailedness and complexity of the visualisation of the business resources and processes inside the company or related resources and the processes in its surroundings. The scale ranges from the most complicated and maximal models as Osterwalder-Pignieur, Watson, Chesbrough, through the models defining the key resources and processes, e.g. RCOV from Demil and Lecocq, models of Zott and Amit up to the simple or incomplete models, e.g. this one from McGrath. The rate of complexity and detailedness of the visualisation needs not to be the principal condition of the quality model. At practical application, it is possible to start with more simple and transparent models and gradually continue towards more complex and sophisticated models.

The second feature of the models is their conceptual, content and functional visualisation. Even though the business model is still a novelty in business economics and management, the seeds of the phenomenon can be found in the concept of competitive advantage and value chain from M. Porter. The value chain describes the increase in value added and costs expended in each particular phase. More value added and generally lower costs are the main resource of the competitive advantage. The emphasis is put on formation and sustainability of the competitive advantage. A different tool to describe the business processes is a general business transformational process that records the activities of the company and observes the creation of the measurable value (Majduchová 2009). It stresses out the change of company's inputs to outputs however it is supplemented with value (reproductive process) and organisational (combinational process) dimension. The business models differ from the already stated ones with a greater emphasis on the customer and the way the value is created for him/her and how to make profit. These models became the tool to experiment and invent the business innovations. As stated by R. Grant (2008), in many new industries the competition occurs not only between the products but the business models also.

From the conceptual perspective three groups of the models can be distinguished. In the first group, there are mainly the models that describe the economic side of business. They examine, where and how the profit creates. The typical representative of such model is the one from Mullins and Komisar. The second group deals with the economy of business in a wider view and usually exceeds to the business processes, e.g. the models from Afuah (more processes) and Watson (less processes). The models in third group put stress on providing the

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value to the customer, e.g. the models from Johnson, Christensen and Kagermann, Demil and Lecqo, Zott and Amit, Yunus, Moingeon and Lehmann-Orteg and Magretta. In various rate they attach business economics and business processes to the value aspect of business as well. The model from Ostrewalder and Pigneur has a special status as it connects economic-process-value view in a great scale and detail. The value perspective can not be omited or weakened as otherwise it is not clear, why the customers buy the product, what their motives to buy are and what they value about the product.

The third feature of the business model is their methodical visualisation, the way they visualise the function of the company. Almost all the models use the resources and activities to describe it. The process aspect is the most obvious in the model from Teece, which does not explain in detail the way the company's resources work. A new original approach is brought by Casadesus-Masanell and Ricart. To visualise the models they utilise the system of decisions and their consequences regarding resources and processes. The advantage of this methodology is in its vital and managerial approach, because decision making imbeds adaptation, dynamics, innovation and development into modelling. Canvas model from Osterwalder and Pigneur is highly original as it resembles painting canvas, as its visualisation consists of nine blocks that enables to "paint" the pictures of new or already created business models. As it is drawn on a large space it encourages the discussion on the business model. Rather peculiar model is the one from McGrath. Utilisation of the term unit of business leads to unambiguous and uncomplicated description of the business and its content. Moreover, it does not mask the resource of the income, that might be traditional tangible products, but e. g. guarantee (insurance), sharing know how (consultations), attention of the customer (advertisement), comfortableness (a service accompanying the product), etc.

Visualisations of the business model can be divided into three groups. The models that are the illustrative visualisation of the reality belong to the first group. The meaning of the visualisation is to provide with the idea of its main components and relations, to understand the structure of the business model and its function, e.g. the models from Muhammad Yunus, Bertrand Moingeon a Laurence Lehmann-Ortega, Alan Afuah, Mark Johnson, Clayton Christensen a Henning Kagerman, Benoit Demil a Xavier Lecocq. The original visualisation of the model is used as a base to create a company's own functioning model, which is necessary to supplement with a great system of function relations. Models that are functional and full visualisation of the reality are in the second group. The structure of the models from Ramon Casadesus-Masanell and Joan Ricart, Alexander Osterwalder and Yves Pigneur give the universal scheme to visualise the causal connections and dynamics of the function that can be brightened up by the concrete components and relations. The third group consists of the

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only representative, which is the model from D. Watson. It visualises statically the structure and quality of the reality, but the functional relations between the components are missing, thus it is more suitable as a preparation for some other function and causal visualisations of the business models.

Descriptive and functional visualisations of the business models are a good tool to understand the operation of the company, formulation of the purpose and conditions of function. They are transparent schemes that display significant attributes of business in a little space. They identify the weak points hence those ones with insufficient purposefulness and efficiency and at the same time they help find extraordinary components and relations. High functionality, efficiency and originality of the model have a great impact on the business strategy that connects to the business model and is a way of its use. The visualisation can be used to experimentation, encouraging creativity, formulating hypothesis and business model variants.

Conclusions

The business model is natural, explicit or implicit part of each business. Irrespective of the extent, content or the method of its visualisation, it represents the hypothesis of the top management about what the customers want, how they want to get it, how much they will pay for it and how the company arranges its resources and processes to satisfy the needs of the customers and get well paid. Diversity of definitions and conceptions of the business model can be explained rather like a more-meaning and more-aspect perception of reality, possibly like a consequence of relatively young interest in this topic, than disunity of knowledge, which should be criticised and unified prematurely.

The business model does not serve only as a logical and transparent visualisation of the operation of the company and its relations with the surroundings. Its benefit resides in improving the function and economy of the company, searching for and developing the competitive advantage, that can be found only by the company that is aware of a wider sense of the business model. The usefulness of the business model is in fact that many of them represent the holistic concept of business, where the benefit of the customer, the revenue of the company, economical and purposeful deployment of the resources organised in high-performing processes and creating competitive advantage are connected together.

It is inevitable to point out the necessity to harmonise the business model with the original and the modern technology, as they usually fail because of their inappropriability and disfunctionality, being set to former technology, thus being inefficient when the innovation is introduced on the market. Searching for the new resources of the competitive advantage is not the question of the business strategy formulation only, since a smart business models themselves can become

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a considerable competitive advantage, too. It is unavoidable that, to increase the function and adaptability on new business circumstances, the business model needs to be innovated. The innovation of business model has to be put on the level of the products and processes. It belongs to the group of business innovations and it is certain that it will be necessary to pay attention to business model innovations in the future, as well as the traditionally perceived technical innovations. Regarding visualisation of the business models, progress can be expected, e.g. applications of the net graphs, process maps, development of the dynamic visualisation, an attempt to get a more precise quantification of resources and more causal logic of process transformations, deepening and examining direct connections between the customer value proposition and the profit formula.

References

Afuah, A.: Business Models. A Strategic Management Approach. McGraw-Hill/ Irwin, New York 2004, p. 2

Casadesus-Masanell, R. – Ricart, J. E.: How to Design A Winning Business Model. HBR, January – February 2011

Chesbrough, H. – Rosenbloom, R. S.: The role of the business model in capturing value innovation: evidence from Xerox corporation's technology. Industrial and Corporate Change 11 (3), 2002, p. 529 - 555

Demil, B. – Lecocq, X.: Business Model Evolution: In Search of Dynamic Consistency. LRP, volume 43, issues 2-3, April/June 2010

Grant, R.: Contemporary Strategy Analysis. Blackwell Publishing, 2008, p. 267

IBM Global Business Services, The Global CEO Study 2006 and IBM Global Business Services, The Global CEO Study 2008, IBM Corporation, 2006 and 2008

Itami, H. – Nishino, K.: Killing Two Birds with One Stone. Profit for Now and Learning for the Future. LRP, volume 43, issues 2-3, April/June 2010

Johnson, M. W. – Christensen, C. M. – Kagermann, H.: Reinventing Your Business Model. HBR December 2008

Magretta, J.: Why business model matter? Harvard Business Review, May 2002

Majdúchová, H.: III. Podnikový proces. In: Majtán, Š. a kol.: Podnikové hospodárstvo. Sprint 2, Bratislava 2009, p. 103

McGrath, R. G.: Busines Models: A Discovery Driven Approach. LRP, volume 43, issues 2-3, April/June 2010

McGrath, R. G.: When Your Business Model Is in Trouble. HBR January – February 2011

DOI: 10.21637/GT.2012.3-4.06.

Mullins, J. – Komisar, R.: Plán B. Ako vytvoriť úspešný podnikateľský model alebo zmeniť dobrý model na skvelý. Eastone Books, Bratislava 2010, p. XIX.

Osterwalder, A. – Pigneur, Y.: Business Model Generation. Self Published, 2009, p. 15 - 44

Penrose, E. T.: The Theory of the Growth of the Firm. John Wiley, New York 1959

Shafer, S. M. – Smith, H.J. – Linder, J. C.: The Power of Business Models. Business Horizons 48, 2005, p. 199 – 207

Teece, D. J.: Business Models, Business Strategy and Innovation. LRP, volume 43, issues 2-3, April/June 2010, p. 173

Watson, D.: Business Models. Hariman House, 2005, p. 2 – 74

Wheelen, T. L. – Hunger, J. D.: Concepts on Strategic Management and Business Policy. 11th Edition, Pearson Prentice Hall, New Jersey 2008, p. 110

Wirtz, B. W. – Schilke, O. – Ulrich, S.: Strategic Development of Business Models. Implications of the Web 2.0 for Creating Value on the Internet. LRP, volume 43, issues 2-3, April/June 2010

Yunus, M. – Moingeon, B. – Lehmann-Ortega, L.(2010): Building Social Business Models: Lessons from the Grameen Experience. LRP, volume 43, issues 2-3, April/June Zott, Ch. – Amit, R.: Business Model Design: An Activity Perspective. LRP, volume 43, issues 2–3, April/June