

# Analysis of Business Models

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## Abstract

The term business model has been used in practice for few years, but companies create, define and innovate their models subconsciously from the start of business. Our paper is aimed to clear the theory about business model, hence definition and all the components that form each business. In the second part, we create an analytical tool and analyze the real business models in Slovakia and define the characteristics of each part of business model, i.e., customers, distribution, value, resources, activities, cost and revenue. In the last part of our paper, we discuss the most used characteristics, extremes, discrepancies and the most important facts which were detected in our research.

*Keywords: business model, Canvas, customer relationship, distribution channels, customer segments, value propositions, key resources, key activities, partners, cost structure, revenue streams*

*JEL classification: M10, M21*

## 1. INTRODUCTION

The post-industrial 21 century is characterized by instability and turbulence in a business environment. Companies change not only their products, but also culture, ways of selling, relationships with customers or internal structure. They are trying to stay on the market, differentiate from their competitors and create value added, which gives them an advantage for a long time. New technologies, better education, globalization, new communication tools and sophisticated distribution networks create new opportunities for business development. The main aim of this business models analysis is to identify business systems, new trends and changes.

In the first part of this paper is compiled overview of knowledge about the business model as the visualization concept and its components, with regard to different views of authors. Using this knowledge, we create the research tool for the analyzing of real business models and their components. In the second part of the article are presented the results of business models research, their characteristics and trends. In the last part we discuss about the most important results.

## 2. CONCEPTS OF BUSINESS MODELS

The term business model comes from the financial journalist Michael Lewis, who in his articles predicted that future companies will be based on business models connected only with the Internet. David T. Teece (2010) considers that “business model still has no fixed theoretical foundation in economics.“ It is really difficult to identify those processes and components, which are necessary for business and would define a creation of value in a company comprehensively and fundamentally.



Several authors define a business model as a system for making money. In their opinion, business model is an **economic concept, which “produces”** revenues and costs. It is a set of activities, which create profit due to the cooperation of processes and technologies. Definitions of authors, who see the business model as the economic concept, are presented in Tab. 1.

Tab. 1 - Economic business model

Author	Definition
Allan Afuah	“Business model is a framework for making money. It is the set of activities which a firm performs, how it performs them and when it performs them so as to offer its customers benefits they want and to earn a profit.“ (Afuah, 2003)
Itami a Noshino	“Business model is a profit formula, system of business and learning system.“ (Baden-Fuller & Morgan, 2010)
John Mullins Randy Komisar	“Business model is the pattern of economic activity – cash flowing into and out of your business for various purposes and the timing thereof – that dictates whether or not you run out of cash and whether or not you deliver attractive returns to your investors. In short, your business model is the economic underpinning of your business, in all of its facets.“ (Mullins & Komisar, 2009)
Henry Chesbrough	“The business model is a useful framework to link ideas and technologies to economic outcomes.“ (Chesbrough, 2006)
Don Debelak	“A business model is the instrument by which a business intends to generate revenue and profits. It is a summary of how a company means to serve its employees and customers and involves both strategy as well as an implementation.“ (Debelak, 2006)
Alfonso Ganbardella Anita McGahan	“Business model is a mechanism for transformation ideas to revenues through the acceptable costs.“ (Baden-Fuller & Morgan, 2010)
Thomas Wheelen, David Hunger	“Business model is a method for making money in the concrete business environment. It is consisted of key structural and operational characteristics of company – how company earn and create profit.“ (Wheelen & Hunger, 2008)

Purely economic view of the business model does not represent a complex view on the company. The business model should (except of production revenues and costs) capture also the other side of the business and it is creating value. The definitions in Tab. 2 present opinions, which see business model as a combination of economic and value view.



Tab. 2 - Economic and value business model

Autor	Definition
David Watson	“A business model describes operations of company, including all of its components, functions and processes, which result in costs for itself and value for customer.“ (Watson, 2005)
David J. Teece	“Business model defines how a company provide value to customer and transfer payments to profit.“ (Teece, 2010)
Joan Magretta	“Business models are, at heart, stories that explain how enterprises work. Like a good story, a robust business model contains precisely delineated characters, plausible motivations and a plot that turns on an insight about value. It answers certain questions: Who is the customer? How do we make money? What underlying economic logic explains how we can deliver value to customers at an appropriate cost?“ (Magretta, 2010)
Michael Rappa	“Business model is the method of doing business by which a company can sustain itself – that is generating revenue. The business model spells-out how a company makes money by specifying where it is positioned in the value chain.“ (Rappa, 2010)
Wikipedia	“Business model describes the rationale of how an organization creates, delivers and captures value (economic, social, cultural, or other forms of value).“ ( <a href="http://en.wikipedia.org/wiki/Business_model">http://en.wikipedia.org/wiki/Business_model</a> )
Alexander Osterwalder Yves Pigneur	“A business model describes the logic of how an organization creates, delivers and control value and how money are earned in a company.“ (Osterwalder & Pigneur, 2009)
Štefan Slávik	“The business model is a machine for making money, but money is important not only to produce but also to appropriate. Business model visualizes company as a place of decisions and consequences, it is a group of resources and activities in the varying degrees of detail and operational view, which result and serve to offer value to customer.“ (Slávik, 2011)

We think that **the business model is a system of resources and activities, which create a value that is useful to the customer and the sale of this value makes money for the company.** The purpose of the analysis of business models is to deepen and broaden the knowledge about basic components of a business model. We see the importance of this aim in improving the functionality and economy of the business models, and in „discovering and developing competitive advantage, which can be detected by the companies themselves (Slávik, 2011)“.

According to John Mullins and Randy Komisar (2009) successful business model stands on five pillars, which predetermine the economic viability of the business. **The revenue model** is defined by the authors as the money that comes from a customer who is willing to buy what the company sells. **Gross margin model** is the difference between revenue from sales and cost for

production, thus money, which lefts after payment of direct costs. **Operating model** includes fixed costs that are indirectly paid for production. **Working capital model** is a cash which must be available to ensure fluent operation until the customer pays for the goods. **Investment model** describes the usage of money that the company wants to invest for the development of business. The recipe for a successful model is in the harmony of all five models, what helps to be more effective and this harmony creates value for customers and profit for the company. A successful company is one which after paying of the gross margin, operating costs, operating capital and investments has still free money. A positive mathematical result is a sign of success in the present and probably also in the future. This concept could be applied for an analysis of business economy and evaluation of financial health, but it abstracts from other components of the business model. This model gives just little attention to the value, which is offered to the customer, and that is why this model is not useful for the complex analysis.

The concept of Alan Afuah (2003) divides model into 4 components, hence the determinants of profitability (Fig. 1), which influence all the activities in company. Industry factors analyze impact of market elements: competitors, barriers and customers. Resources help to create value-differentiation. Cost brings new type of value – low cost model. Positions are about looking for the right places, which are not occupied, or the company can deliver to the existing market new, interesting values. Cooperation of these components creates a successful business model and their uniqueness is a source of competitive advantage.

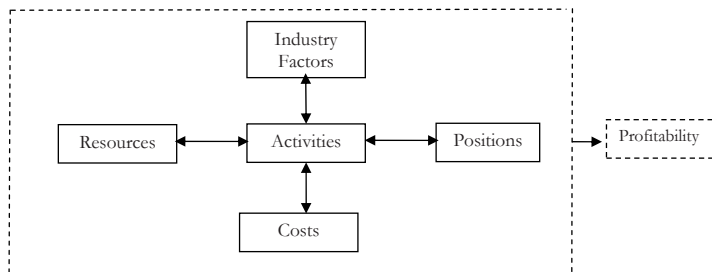


Fig. 1 - Components of business model by A. Afuah (2003)

This model does not comprehensively define the company as a complex system. A business model should describe a system of creating revenue and value, their relationship with processes and provide a sufficient overview of the business model structure. Another weakness of this concept “is no connection of components into causal chain that would demonstrate the connectivity and bonds of elements. The concept does not allow the clear practical application to concrete numerical results (Slávik, 2011)”. Model also includes component - industrial factors that does not belong to the business model. The external environment may well determine the characteristics of the business model, but is not part of it.

David Watson (2005) shows and evaluates business model through six components: competitors, customers, economy, management, products and suppliers. He offers new and unusual insights into each component. **The competitors are** defined by barriers of entry to market, threat of



substitute products, competition within the industry and the advantage of being the first in the market. **Customers** are evaluated according to their characteristics, types of contracts and payment rates. Author highlights the advantage of continuous discovery of gaps in the market. **Economy of company** is analyzed considering to acquisitions, economies of scale, earning on the growth of another company, dividends and breakpoint. **Management** is evaluated by the moral view, conflicts checking, accounting rules, success in the past and relationship with partners. Analysis of the **products** is focused on the brand loyalty, competitive advantage, creating new products, differentiation, sale places and innovation of value chain. **Suppliers** are defined by their negotiation power and opportunistic buying.

This model has a complex character. Its uniqueness is that the model analyzes sector factors, such as competition, which belong to an environment of business model, but is not part of business model components.

Another concept is made by authors W. M. Johnson, C. M. Christensen and H. Kagerman (2008) who define business model as a set of four components, which are interconnected: value for a customer, profit formula, key resources and key activities. Successful company creates **value** for customers and generates **profit**. A necessary condition for the success is having the resources (people, technologies, tangible and intangible asset, brand) and doing the right **activities** (trainings, development, production, budgeting, planning and selling). The concept comprehensively describes all the essential components of business.

Concept of authors Alexander Osterwalder and Yves Pigneur, called Canvas (2009), defines business model using nine components: customer segments, customer relationships, distribution channels, value proposition, key resources, key activities, partners, cost structure and revenue streams. Canvas is a powerful visualization tool and clearly shows all the components and their interconnections (Fig. 2).

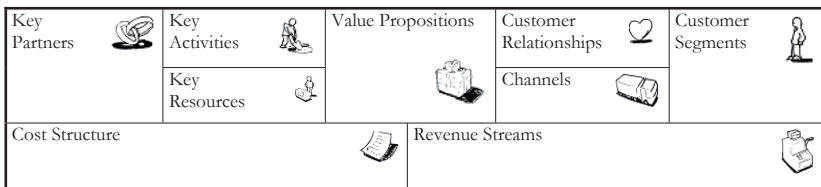


Fig. 2 - The visualization tool Canvas by Osterwalder & Pigneur (2009)

**Customer segments** are defined by five types of market: mass, segmented, niche, diversified and multi-sided. Mass market represents a large group of customers with similar needs and problems. Segmented type divides customers into groups based on the same characteristics. There are the products and services tailored to the customer in niche markets. Diversified markets are located in two or more industries with different needs and problems. Multi-sided type uses interdependent segments and connects them (provider of credit cards VISA creates a relationship between three groups - banks, cardholders and merchants).

The ground of the business is creation of a primary value, which is defined in the mission of the company and describes the core product or service that the firm sells to the customer. The company adds to primary value also “extra value“ (or group of extra values) called value added, which increases a sense of the product or service for a customer.

Companies, which are deciding about **distribution channels**, can choose between selling through its own sales network (direct sales: store, salesman, website, application in smartphones, telephone) or outsource the sale (indirect: intermediary).

Standard **relationship with customers** is personal assistance, which is based on human interaction. Customer communicates directly with the salesman during the whole sale process. Modification of this type is dedicated personal assistance, when client has got the only agent, who takes care of him. In self-service type, the company has no contact with the customer, and just provides the service or product. Automated services connect sophisticated customer service with automated processes (internet) and use CRM system that recognizes client and can recommend him the suitable product or service. Enterprises are increasingly using communities to improve connections with customers. This type of relationship provides free quality database of observations directly from the customer. The modern type of relationship is co-creation, which makes relationship beyond the standard and client becomes co-creator of product or service.

A component **revenue stream** describes cash flows. Among the most used, authors include the sale of goods and services. Rental and leasing generate income from the providing exclusive rights to use certain assets. Licensing generates money from giving customers permission to use protected intellectual property in exchange for licensing fees. Brokers earn from each deal. Advertising generates revenue from providing medial areas.

**Key resources** include tangible resources (production facilities, buildings, vehicles, and equipment) and intellectual resources (brand, knowledge, patents, copyrights, partnerships, customer databases and human resources - staff and managers). **Key activities** describe the most important activities involved in value creating. It can be production, delivery of product, designing, marketing, selling.

A component **key partner** describes the most important companies, authority or people cooperating with the company. Optimization and economies of scale lead to partnerships that serve for cost reducing. Sharing of know-how, finance or technology motivates companies to join the activities in a partnership. An example is the Blue-ray technology, which was developed by a group of the world’s leading manufacturers of electronic, and after research and development they started to sell their Blue-ray products individually. Acquisition of resources and activities also encourages companies to search for partners, because companies do not own all the necessary resources or do not execute all the necessary activities for their business. For example, insurance companies have brokers who sale products and insurance company can deal with the core business. **Costs** represent a monetary award of production.

An analysis of the concepts follows (Tab. 3) that the most complex concepts are model by Johnson, Christensen and Kagerman and model Canvas from Osterwalder and Pigneur. Both describe not only the economic and business processes, but also creation of value. An important advantage of the concept Canvas is the scheme (Fig. 2), which has some universal visualization



features and clarifies the processes, enables connectivity of all components and analyzes them with a distance and bird’s eye view. For practitioners, it is user-friendly and for scientists enough qualified. It can be used in any industry and is enough flexible.

Tab. 3 - Overview of all the business models concepts

Economic concepts			Economic – valued concepts	
Mullins - Komisar	A. Afuah	D. Watson	W. M. Johnson C. M. Christensen H. Kagermann	A. Osterwalder Y. Pigneur
1. Revenue model	1. Position	1. Competitors	1. Value for customer	1. Customer segments
2. Gross margin model		2. Customers		2. Value proposition
3. Operation model	2. Resources	3. Economy of company	2. Profit formula	3. Channels
		4. Management		4. Customer relationships
4. Model of working capital	3. Industrial factors	5. Products	3. Key resources	5. Revenue streams
5. Investment model				4. Costs
		6. Suppliers	4. Key processes	7. Key activities
				9. Cost structure

### 3. AIMS AND METHODS OF RESEARCH

The main objective of this paper is to clarify and systematize the latest theoretical knowledge about business models, to develop their critical analysis, choose effective visualization method and make a research of the real business models properties. The visualization tool Canvas is, in our opinion, the most complex, analytical, flexible and general, so it can be used for research of companies in all industries. Of course, the technique of Canvas has got some limitations considering absolute perception of a company, e. g. it does not include purpose of company and competitive environment, however it contributes essentially to a cognition about how a company is working.

For the research needs, block of key activities has been modified by the Porter value chain, which divides the processes into primary and secondary. The block of sources was divided into tangible, intangible resources and capabilities. Activities and resources was evaluated by VRIO method that analyzes characteristics according to four criteria: value, rarity, imitation and organization. We added the fifth criterion, which evaluate the importance (weight) of source. The other blocks are used without modification, and are consistent with the concept of Canvas (Fig. 2).

The research sample was analyzed quantitatively and qualitatively. Quantitative analysis is consisted of measuring the frequency of occurrence of certain attributes of the business model. The advantage of this type research is extensive range of responses and disadvantage is the less detailed information. Qualitative research allows knowing causes and correlations very deeply. Questionnaire was send to managers or internal business professionals possessing sufficient amount of reliable knowledge.

We collected questioners from 315 enterprises. After a thorough check of completeness of responses and information, the number of companies narrowed to 208. Data from this sample were recorded in SPSS Statistics 14.0, which is designed for statistical analysis. Its advantage is that in addition to standard statistical methods allows generating and creating derived data and cross-tables. After the quantitative result we add short case studies. Each company is completed with information about sector, number of employees and revenue in 2011. All the next tables contain data of own research.

## 4. ANALYSIS OF BUSINESS MODELS

Results of the research business models correspond to the nine-blocks of the concept Canvas. In the first part we analyze customer segments (Tab. 4). We wanted to find out, whether companies unify customer needs and create a mass product, or divide them into groups according to some criteria, or adapt product or service according to individual needs.

The most used type is a niche market (43.27 %), when the product is tailored to the customer. It is typical for the manufacturing, civil engineering, logistics or publishing. Company **Okart, L.L.C.** (paper industry, 11 empl., 0.684 mil. €) produces cardboard boxes of paper and paper-board. Ninety percent of production in this company is produced according to specific customer requirements. Customer defines the exact size, type of material and other properties in each order. Only a small part of the production is standardized, for example cake and pizza boxes. Segmented type of market there is used by 25.77 % of the enterprises. **Slovnaft, a. s.** refinery (petrochemicals, 3689 empl., 3 505 087 million. €) processes annually from 5 500 000 to 6 000 000 tons of crude oil. Its customers are divided into two segments: retail (small buyers) and wholesale. The company has the largest retail network in Slovakia, which sells motor fuels, oils and provides a wide range of services for motorists. In retail trade (9 % of revenue) company sells motor fuels, oils and automotive chemicals. In wholesale trade (91 % of revenues) company sells motor fuels, fuel oils, bitumen, chemicals, plastics and automotive chemicals.

The mass market type is less used (24.52 %). Enterprise **HYZA, a. s.** (food industry, 1095 empl., 93.8 mil. €) sells products, which are a basic need for a large number of people. In addition to the production and processing of meat and meat products, the company is focused on retail and wholesale and offers food products, poultry, venison and eggs. The products are sold to buyers for further production or resale.

Diversified and multi-sided market is used rarely. Diversified market (5.77 %), where a company sells products on two or more markets, is used in wholesale and production of machineries and equipments. The advantage of this type is diversification of risk. Multi-sided type (1.44 %) connects a few markets, for example buyers and sellers. An example is the auction platform



**Drazby-preprav.eu**, which offers space for transport companies and producers to negotiate the best price. Similar to this type there is the auction portal **eBay.com**, which mediates buyers and sellers in a wide range of electronics, books, cars, clothes. Free newspaper is another type, which connect buyers of adverts, the newspaper publishers and the readers.

Tab. 4 - Customer segments

Customer segments	Number of companies	Share of using (%)
Niche market	90	43,27
Segmented	52	25,77
Mass market	51	24,52
Diversified	12	5,77
Multi-sided	3	1,44
SUM	208	100,00

Tab. 5 - Customer relationships

Customer relationship	Number of companies	Share (%)
Personal assistance	153	73,56
Dedicated personal assistance	77	37,02
Automated services	23	11,06
Self-services	11	5,33
Communities	8	4,3
Co-creation	5	2,4

In the next block we analyzed relationships with customers, which specify the degree and form of cooperation between enterprises and customers (Tab. 5). Companies could label no more than two of the most used types. Each distribution channel and communication tool are dependent on the customer relationship.

Enterprises use in the majority human interaction with clients like personal assistance (73.56 %) or dedicated personal assistance (37.02 %). Communities, co-creation and automated services belong among the modern types of customer relationships. Automated services (11.06 %) connect internet with CRM system and allow to describe purchasing behavior of customers and help to target them more precisely. More than 18 % of enterprises are going to create this type of relationship or think about it seriously. **Eset, s. r. o.** (IT industry, 230 empl., 137 million. €) is the global provider of security software for corporate and domestic clients. With technology ThreatSense.Net it collects data from voluntary users from around the world, what allows responding to new threats by far the fastest. Most of the processes are fully automated. Purchase of basic products (Eset Nod 32 Antivirus, Eset Smart Security 4 and ESET Cybersecurity 4) is allowed through online system itself. In case of problems, customer can call the hotline or send an online request. During the validity of the account, the system is constantly refreshed and after termination of contract the customer is notified about this ending and system offers him payment option.

Another trend of the relationship with customers is using self-service (5.33 %). This type saves labor costs, allows opening of shop 24 hours 7 days a week and allows to sell product on places which would not be otherwise profitable. Slovak Telekom offers on the hotline automatic activation and purchase of a few services, hypermarket Tesco has a self-service paying or petrol station

Tang & Go is one of the stations, where customer can buy petrol just using credit or payment card without any assistance. Underused types of relationships are **communities** (4.3 %) and **co-creation** (2.4 %).

In spite of technologies progress, human factors have the central role in the relationships with customers. There is dominated personal interaction between seller and buyer in models. Kind of relationship is influenced by the size and complexity of the product and type of value. The dedicated personal assistance is used in complicated transaction, long-term taking care of customer or bigger purchasing. This type improves and simplifies the relationship. Automated relations (internet), self-service and co-creation are almost always only supplement to personal assistance.

**Distribution channel** is material or information connection between clients and company. Channel is used for value supplying. Companies look for channels that could deliver product or service to the customer in good quality, efficiently and at reasonable cost. The channels are divided into two groups – direct, when a company owns the channel or indirect, when the channel is outsourced.

The most frequently used type (Tab. 6) is direct channel (56.3 %) such as stores, sales representatives, hotline and online sales. The main advantages of this type are control over the whole sale process and having direct feedback from the client. The disadvantages are the high costs, less possibility of geographic dispersion and the lack of knowledge about market in expansion abroad. The indirect channel is less used (17.3 %), but in many companies still preferred because of low costs, bigger geographic dispersion and using of intermediaries experience. The main disadvantages are little control over the sales process, the absence of direct interaction with customers and often unreasonable amount of commission. Combination of both types is used by 26.4 % of the enterprises.

The effectiveness of direct and indirect channels was one of the main questions in **Kofola company** (food industry, 2 600 empl., 345 million. €) in 2009 year. The company divides customers to retailers and stores (they are also hotels, restaurants, catering companies and pubs). Products of Kofola were distributed in two-level indirect distribution channels through wholesalers. Company began to lose the position on the market. It defined the problem – bad quality of distribution channel. The company decided to change the distribution from indirect to direct type. Company can now control better all the levels of distribution. Business partners gained through direct distribution certainty that the drinks come in the same, good quality in which they left the factory. Kofola improved also sales support through direct sale. The main result of these changes was growth of sell.

Afterwards we analyzed using of each channel type. The frequency of using different types of channels is showed in Tab. 7. Enterprises could select a maximum of two most common types of channels.



Tab. 6 - Direct or indirect channels

Type	Share (%)
Direct channels	56,3
Indirect channel	17,3
Combination	26,4
SUM	100

Tab. 7 - Distribution channels

Type	Share (%)
Salesman	70,7
Store	41,3
Intermediator	30,8
Website	24,5
Hotline	5,8
Exhibitions/fairs/conferences	5,4
Direct mail	0,5

Human resources play the major role in distribution channels, because customers still want to meet seller, asked him about information of products or solve problem with him. Most companies use a combination of several channels. **Allianz** - Slovak insurance company, a. s. (financial and insurance sector, 2 079 empl., 67 mil. €) manages more than 6.6 million insurance contracts and is the top company in the Slovakia. Allianz had 29.94 % share of the insurance market at the end of 2010, of which 21.71 % share was in the life insurance market and 37.6 % share was in the market of non-life insurance. The company uses a combination of five types of channels: front office, hotline, blue phone on reporting cases, direct sales department via internet and intermediates. **Bus Karpaty, s. r. o.** (road transport, 62 empl., 1.2 mil. €) selling tickets in a store on bus station, by salesman in the bus (driver) and on the website. Despite the new channel most people buy tickets directly at the entrance to the bus. Tickets are sold directly in the bus and this channel is considered by company as the most convenient and the least costly, because the bus driver is a salesman in one person, and therefore there are no additional costs.

Enterprises regarded as the most effective distribution that of, which are based on personal contact with the client (salesman, store, agent). For this part of the business model there is the most obvious trend to be as much close to client as it is possible. Sales via the website, although significantly minimizes the cost for place and staff, is mostly used as a supplement to personal selling.

The first decision in starting business is about choice of the needs and problems, which company will solve, hence the value, which will be offered to the customer. The value satisfies customer needs and solving his problems, e. g. transport by car or airplane. Companies deliver “value added“, which improves the primary value. Value added is also a tool for companies to differentiate themselves from each other and thus create a competitive advantage. Value added can be connected to the product itself (quality, brand), can be formed directly in the purchase (accessibility, cost) or customer experiences it after buying (cost reduction, risk reduction). The analysis is showed in Tab. 8.

One of the most important value added, which companies emphasize and which also creates differentiation among them, is the price. **Tesco Stores Slovakia, a. s.** (retail, 8 300 empl., 2 300 mil. €) is the retail company, which manages a network of stores, service stations and distribution centers. In addition to the comfort of purchase (a large variety of products under one roof and a large parking area) the company is characterized by low prices. Tesco sells also own brand

products, which are aimed to cost-sensitive customers. The mission of the Tesco Value brand is offering a wide range of fresh and durable food and non-food goods at the lowest price in the market.

Tab. 8 - Dividing of values according to phases of selling process

Before purchasing	During purchasing	After purchasing
quality (44,7 %)	price (46,15 %)	cost reduction (25,96 %)
adaptation (43,75 %)		
brand (39,9 %)	accessibility (35,1 %)	risk reduction (18,75 %)
production power (32,69 %)		
novelty (28,85 %)	comfort (33,17 %)	
design (26,92 %)		

One of the important values is an access to the product. **Pivovar Šariš, a. s.** (brewing, 550 empl., 50 mil. €) is the largest company in this sector in Slovakia. Product availability is crucial in this sector. Sale must not be putting only to supermarkets, but also to small stores, petrol stations, restaurants and pubs. Only this way is right to steady and gain customers, who want to find their brand everywhere and have no problem to change the brand, if they can not buy their favorite goods. The most important product of this brewery is beer branded Šariš. Customers can buy it in almost every store in Slovakia and is offered in 1 044 restaurants and pubs.

Companies look for value added to differ from the competitors. In the majority they use 2-3 main values, which help them to create competitive advantage. Most firms use combination of quality and price adjustment.

Revenues represent one of the most important blocks of the business models and their generating is the main reason and aim for existing business. There are many ways to create a revenue stream. The range of income is from renting, through sales to licensing. Enterprises could select a maximum of three key revenue streams (Tab. 9).

Tab. 9 - Revenue streams

Types	Share (%)
Selling of products	77,88
Selling of services	59,20
Rent/leasing	21,63
Fees for the use	11,54
Advertisement	7,21
Other	7,21
License	3,37
Brokerage fees	2,88
Subscription	2,88

Tab. 10 - Payment forms

Types	Share (%)
Transfer/deposit account	85,10
Cash	58,10
Debit or credit card	20,70
Check	9,10
Food vouchers	2,40
Cash on delivery	1,40
Barter	1,00

Almost half of the models use multi-source revenue streams, the most frequently combinations are sales + rental, sale + advertisement, sale + license (or fees of use). Another way to multi-source streams is selling the basic product in combination with complementary product or service. Most companies use non-cash payments. Cash is seen rather as a supplement. Detailed list of forms of payment is located in Tab. 10.

In the next section we analyzed the key resources, which define the part (component) of a company whose existence is necessary for creating value and its level of quality affects the quality of the product or service. Resources were evaluated according to the method VRIO and in Tab. 11 are ranked according to the significance. Highest quality resources of surveyed enterprises are knowledge and experiences that reach from the national to central European level of quality and companies consider them as the most important. In second place there are the brand and reputation, whose quality is at the national level.

**Euromobilex, s. r. o.** (retail, 12 empl., 4 mil. €) sells, rents, mediates and imports new and used vehicles. Company perceives its reputation at the national level. According to the company, “scandals damage the reputation in the industry very fast, because there are many problems connected with selling of used cars such as inadequate and false information on the state of the vehicle, filling kilometers on the speedometer and the other.” To avoid this problem, especially by brokering the sale, when the original owner may withhold many facts also to the company, Euromobilex offers to customers an independent inspection of the vehicle. This fact clearly distinguishes company from competitors and becomes a national rarity.

Tab. 11 - Key resources

Resource	V	R	I	O	Avarage	IS	O by IS
Knowledges and experiences (know how)	3,44	3,25	3,51	3,56	3,44	5,38	1
Brand and reputation	3,37	3,24	3,49	3,45	3,39	5,25	2
Sale network	3,24	3,17	3,14	3,34	3,22	4,39	8
Machines and technologies	3,09	3,06	3,12	3,26	3,13	4,72	5
IT	2,72	2,91	2,96	3,05	2,91	4,38	9
Managers	2,77	2,72	2,88	3,05	2,86	4,95	3
Finance	2,63	2,83	2,86	2,92	2,81	4,86	4
Lands (location, infrastructure)	2,39	2,88	2,59	2,75	2,65	3,42	7
Workers	2,45	2,50	2,61	2,77	2,58	4,95	3
Buildings	2,24	2,65	2,39	2,44	2,43	3,54	6

Legend: V - value, R - rarity, I – imitability, O -organization, VRIO scale: 0 - and are not needed, 1 - local level 2 - regional level, 3 - national level, 4 - Central European level, 5 - European level, 6 - the world level, IS – importance of sources (1 - least important, 7 - the most important), O by IS - order of significance of source

The third relatively highly rated source is a sale network. **Slovenská sporiteľňa, a. s.** (banking, 3 898 employees, 503 857 million. €) has the largest retail network in the retail banking sector in Slovakia. The company has become, after entering a strategic foreign investor Erste Bank, part of a strong financial group, which has a leading position in the Central European retail market.

Company gained valuable know-how, it was included into the network in neighboring countries without additional costs and clients can use sales offices of Erste Bank abroad.

Companies considered the most important resources, which are formed and grown long. They have a non-material nature, e. g. know how, experiences, executive employees and managers. Human resources (managers) were rated as one of the weakest (although companies attribute them high importance) and human resources (workers) were rated even as in lower quality.

VRIO method was also used to assess the **capabilities** that put resources in productive motion. The key capability defines those characteristics of a firm that directly affect the quality of the competitiveness model. Evaluation of capabilities is showed in the Tab. 12 and they are sorted by aggregate average parameter values of VRIO. For the highest quality capacity is considered innovation, which is relatively strongly distanced from other capabilities. Quality of social atmosphere is the weakest among all the capabilities. In this turbulent business environment, speed is one of the most necessary capabilities. According to director of **IT Fragment, s. r. o.** (IT industry, 8 employees, 0.72 mil. €) the speed is the key factor. Every day companies bring new technologies, better and more powerful processors, operating systems. If a company will sleep for a while, competitors will overtake it.

Tab. 12 - Key capabilities

Capabilities	V	R	I	O	Average	IS	O by IS
Innovation	3,13	3,07	3,13	3,20	3,13	4,77	4
Speed	2,89	2,82	2,76	2,85	2,83	4,94	2
Cooperation between departments	2,76	2,75	2,77	2,86	2,79	4,27	7
Learning	2,84	2,74	2,68	2,87	2,78	4,43	5
Company culture	2,60	2,75	2,81	2,79	2,74	4,07	8
Communication	2,71	2,65	2,67	2,90	2,73	5,11	1
Management system	2,65	2,74	2,67	2,82	2,72	4,79	3
Cooperation inside the departments	2,67	2,64	2,75	2,82	2,72	4,35	6
Social atmosphere	2,38	2,54	2,63	2,59	2,54	4,01	9

Legend: V - value, R - rarity, I – imitability, O -organization, VRIO scale: 0 - and are not needed, 1 - local level 2 - regional level, 3 - national level, 4 - Central European level, 5 - European level, 6 - the world level, IS – importance of sources (1 - least important, 7 - the most important), O by IS - order of significance of source

Companies include to the highest standard of capabilities that of help them to grow. However, there is a strong discrepancy between the character and significance of its quality. Although companies consider as the most important communication and management system, currently they are characterized by lower quality. On the other hand, innovation, cooperation between departments and culture, which are considered as the less important for companies, are rated as quality capabilities.

Another of the analyzed components there are **key activities** that co-create value of product. According to Porter value chain, they are divided into primary (Tab. 13), which directly create the product, and secondary (Tab. 14), which help to improve it. Between primary activities the dominant core processes are production and sale. Sophisticated activities are often outsourced to experts, e. g. sales support and customer service, input and output logistic or warehousing. Secondary activities such as technology development, personal management, internal control and procurement do not directly contribute to value creation, but their existence is essential for the developing and innovation.

We identified three main reasons for outsourcing. The most common motive for the creation of partnerships is the purchase of resources and activities, particularly the purchase of products and materials (70.10 %). Most companies do not have enough resources or just wants to concentrate on core business. The second motive is to optimize investments and economies of scale (38.94 %). It is often more economical for companies to buy semi-finished product or the finished product from wholesaler, as it would be produced by themselves. The third important motive is risk reduction, especially in developing technologies, major investment projects, competitive fights or price wars. Companies in industries such as energy, chemicals and food create alliances, which help them to negotiate better prices and they have a better position in negotiations with government and that is why they can hold prices at an acceptable level.

Tab. 13 - Primary activities

Primary activities	Number of firms	Share (%)
Sale and marketing	116	55,77
Production/operation	106	50,96
Sale support and customer services	75	36,06
Input logistic, purchasing, warehousing	73	35,10
Output logistics, distribution	61	29,33

Tab. 14 - Secondary activities

Secondary activities	Number of firms	Share (%)
Technology: research, development, technical preparation	93	44,71
Management and development of human resources	83	39,90
Infrastructure: planning, finance, IS/IT, law services	80	38,46
Procurement	58	27,88

Afterwards we analyzed resources and activities (Tab. 15), which are outsourced the most frequently. The largest share of outsourcing has got purchase of material and input logistic. The second one is outsourcing of production of products, which is typical for resellers. Companies in the least outsource sources that have high value added hence brand, reputation, managers.

Tab. 15 - Outsourcing of resources and activities

Outsourced resources	Share (%)	Outsourced activities	Share (%)
Material	37,97	Input logistic, purchase, warehousing	33,17
Machines and technologies	21,14	Production/operation	13,46
Finished products	20,66	Sale and marketing	11,05
Knowledge and experiences	13,45	Other	7,21
Finance	12,01	Logistics	6,25
IT	9,61	Sale support and customer services	5,76
Sale network	9,61	Research and development	4,8
Buildings	2,88	Output logistics, warehousing, distribution	3,36
Workers	2,4	Guidance	2,88
Brand and reputation	2,4	Service	2,4
Other	1,44	Education	1,44
Location and infrastructure	1,44		
Managers	0,48		

In the block **cost structure** we analyzed the highest costs for of running businesses. We divide companies into two groups. The first one consists of cost-controlled enterprises, which minimize the costs. The second one is value-driven, which is primarily focused on value creation. Most companies are situated between these two extremes. Cost-driven model is used in 90.38 % of enterprises and the purely cost model is used in 21.63 % of them. Value-driven model is used in 78.35 % enterprises, purely value-driven model is typical for 9.6 % enterprises. Among the largest costs companies include investments in equipment and technology, which are directly related to production and investment to workers. Overview of costs of activities and resources is showed in Tab. 16.

Tab. 16 - Cost of key resources and activities

The most costly activities	(%)	The most costly resources	(%)
Production/operation	34,13	Machines and technologies	25,9
Input logistics, purchasing, warehousing	20,19	Workers	25,0
Sale support, customer services	11,53	Material	17,7
Sale and marketing	8,17	Buildings	7,69
Research and development	7,69	Lands (location and infrastructure)	4,32
Other	4,8	Finance	3,84
Logistics	4,32	IT	2,4
Education	1,92	Sale network	1,44





Innovations	1,44	Managers	0,96
Service	1,44	Knowledge and experiences	0,96
Building	0,48	Energy	0,48
Corporate culture	0,48	Brand and reputation	0,48
Consulting	0,48	Other	0,48
Output logistics, warehousing, distribution	0,48		
Communication with customers	0,48		

Purely cost-driven model uses about 20 % of enterprises, value-driven model about 10 % companies. Other models oscillate between these two extremes, but majority tends to cost reduction. More than 2/3 of the cost is used for buying equipment, technology, salary of workers and managers or material procurement. Paradoxically, the least costs are spent on those resources, which were identified as the highest quality hence brand, reputation, knowledge and experiences. More than 2/3 of the costs are spent on activities like producing, purchasing and logistics input, sales promotion, therefore the processes which are directly related to production and sales.

## 5. DISCUSSION

Adapting to the customer is one of the main values that companies offer to customers. This decision is more necessity than a free strategic choice. Sale in mass production is for companies organizationally and economically advantageous. Complicated products and services do not allow the use mass market, and therefore companies must group customers into segments. The solution is to create a product that customers will be able to adapt by them, or to innovate according to their needs. One of the examples is smart-phone, which allows to set the user environment. Mobile phone can be game console, e-reader, music player, credit card or typewriter. To the opposite way, home bakery manufacturers went who instead of the ordinary mass product created a machine, which helps people to bake according to their taste. Customers escalate requirements and accentuate the value of adaptation, and therefore companies should constantly look for ways how to change the pressure on effective product or service.

In models, the sale dominates with human interaction between customers and salesmen (98 %). Despite the growth of internet shopping, customers want to have the certainty of human contact. According to the online survey of Data Mediaresearch Slovakia from August 2011 (Biel & Cwitkovicz, 2012) 54 % of respondents still prefers brick and mortar outlets before the internet. Customers want to try the product, see and touch it and they are still afraid of returning process in case of claim. For other customer internet is still complicated and they do not understand all the processes, they must do for purchasing. All these factors have forced online retailers to return to traditional stores. “The biggest online sellers in Slovakia turned back to the traditional stores (Nové trendy v internetovom nakupovaní, 2012)“. Internet Retail Group (IRG), which includes six Czech and three Slovak online stores, led by Hej.sk, with a turnover over 79.5 million Euros in 2010, began to create hybrid concept of stores. In 2010 the IRG opened a branch in Prague, Brno and later in January 2012 in Bratislava. Book merchant of Martinus, which has

traditional shops in Bratislava, Žilina and Nitra, uses the stores not only as a retail distribution channel, but also to promote sales. Spaces provide for presentations of books and interviews with famous writers.

Companies are still trying to find new ways of selling through the Internet, which has got several advantages, e. g. 24 opening hours, low operating costs and sales worldwide. Phoning by the web (Skype), ordering drugs or food through an online form delivered to your home ([www.mojalekaren.sk](http://www.mojalekaren.sk), [www.itesco.sk](http://www.itesco.sk)), purchase and print tickets through online retailers ([www.ticketportal.sk](http://www.ticketportal.sk)), purchase of books not only in bookstores, newsstands but also on internet ([www.martinus.sk](http://www.martinus.sk), [www.amazon.com](http://www.amazon.com)), where customers can buy book or download in PDF format and read it in the e-reader, tablet or smart-phone. One-fifth of enterprises use Internet as a sales channel, but in the near future 20 % of firms plan to create this channel. We also think, that internet sale will change its structure. Websites will be used in less extent and companies will invest more to applications in smart-phones and tablets. The advantage of this type is simplicity and in comparison of sales through website, the speed is from five to six times higher. User difficulty is minimized and the whole process from identification of the product, through order to purchase is limited to the few clicks and companies discard unnecessary steps, such as account log in, enter data for payment or delivery.

Future business models will be created by **communities** which connect the customer and the supplier. The advantage of this tool is that companies can be more interactive and create really personal connection with the customers. Usually it is a specialized blog or social network. The main aim is to establish a personal relationship with customers and learn more about their habits and purchasing behavior. Some companies use a community for creating revenue. Communities could be used as a group of people to provide their expertise to potential clients (Trim Brokers), other ones earn commissions of sales of products ([zlavadna.sk](http://zlavadna.sk)) or sell place for advertising ([zoznam.sk](http://zoznam.sk)). Strong community has for example Apple, whose customers have own blogs and forums and change their advices and experiences. Some newspapers and magazines provide space for bloggers who create strong relationship with the periodical ([sme.sk](http://sme.sk), [etrend.sk](http://etrend.sk)) and their relationships results later into a purchase. Progressive type of relationship with the customer is a **co-creation**. It is the concept of non-traditional relationship and business cooperation with customers, which is used to develop a new product. Enterprises perceive this new type as a very costly and time-consuming, but those one, who tried this relationship, are very satisfied (4.3 %). Lego Factory offers a online program to create own puzzles and then the company sends all the components, which are necessary for the creating a building, TA3 news broadcaster gets from TV viewers tips on stories and encyclopedia Wikipedia is based on collecting knowledge from different users from around the world.

In terms of **added value**, the analysis indicated that the emphasis is on properties whose owners are the product itself (brand and quality) and on those that make easier the purchase (access to distribution channels). Values after purchasing (service) are not so important for customers. The combination of price and quality is a matter of course, but in the comparison of the past, it is well complemented by the need to adapt to the needs of a each customer. Thus prepared customer value is logically linked to the complexity of some, especially industrial products.

We found out few paradoxes during analysis of the resources, capabilities and costs. Companies identified non-material sources (brand, reputation, knowledge and experience) as the least expensive items, but according to VRIO, these sources have the high importance for enterprises and are rated from the national to the Central European level. On the other hand, the quality of workers was ranked at a low regional level, but their costs are among the highest. Companies are investing less and less to workers and rate them as a less important, because investments to workers do not bring the expected effect. This fact may lead in the future to the absolute elimination of human resources, especially in manufacturing. The capabilities alert similar fact, the social atmosphere is one of the weakest and companies rate it as the least important. Enterprises saved money in the last two years on “business trips, corporate events, conferences and events for their employees and clients (Horváthová, 2010)”. There was the social environment “in the zone of break up in Slovakia. It was because of the absence of a functioning civil society, citizens’ lack of interest in public affairs, high levels of corruption, lack of interest in the needs of deprived people and faith that only strong individuals have the right to live in dignity and value fragmentation of society (Korošová & Synek, 2011)”. All these factors had a significant impact on reducing the social atmosphere in the country, which inevitably impacted on the social atmosphere in enterprises. Stable political engagement and sophisticated legislation would help people from skepticism and improvement of this situation would be helpful to encourage the relationships between companies and employees and stimulated interest to invest to them.

Representation of **key activities** (production and sales) reflects division of industries on production and trade ones. Up to 80 % of manufacturing companies engaged in the research and development, what can create top companies in the future. Companies engaged in logistics in the least extent, which is outsourced. Activities that help directly create value are left in business models and in specific, expert activities, such as education, logistics, IS / IT, marketing and legal services, are bought from the partners.

The most used motive of creating partnerships is purchasing of resources and activities. Companies want to aim their energy to the core business and that is why they want to find quality partner, who would provide all the necessary processes or resources. There are three trends, which result from our research. The first one is a grouping of companies to alliances, especially in manufacturing and building industry, but also in marketing and PR sector. The advantage is bigger negotiating power with government, courageous lobbying, sustaining of selling prices and negotiation of better purchase prices. Some associations create own product to promote brand and prevent competition. The second trend is a return to purchase materials from producers in home country, or from suppliers of EU. Dominant supplier in recent years was China, where because of comparable quality and low price, many companies went to buy materials, semi-finished or finished products. This trend is on the decline. “Era of rapid economic growth, based on low production costs, based mainly on the cheap labor prices in China, is finishing. The price of work is rising up in the private and state sector by tens of percent. Let us add the strengthening of the exchange rate of the Chinese currency and the wave of re-evaluating of China comparative advantages begins to get a real sense (Pressburg, 2010)”. The third trend is the return from outsourcing to own production, which starts to be cheaper and better than buying from a supplier. For example, “Czech producer of alcoholic drinks Stock Plzeň, because of the high cost

of eggs, cancelled supply of eggs and opened project of material self-sufficiency. For production one of the key products 30 tons of egg yolks are consumed per month about. The average price of eggs in the Czech Republic in February 2012 jumped by 10.4 % up and compared with the same month of last year jumped up by almost 40% (Stock stratil trpezlivost' s drahými vajíčkami, 2012)". From an analysis of key actions, it results that, the companies are not in all procurement processes independent and some activities outsourced from the partners. They are not just small firms that do not have the capacity to cover all the processes, but also large companies that cooperate with partners because of saving costs.

Most companies consider for their core business activities sales, marketing and product improvement hence customer oriented processes. Input processes (input logistics, procurement and warehousing) are attributed much less importance and are passed on to suppliers. Industrial producers have the majority of activities within the company, because the value is created in production. Input logistics is outsourced and that is why that they are heavily dependent on raw material suppliers, limited by location (transport) and mining (speed, capacity) of raw materials. Mobile operators focus on sales and marketing to address their product to customer as effective as it is possible. They outsource resources and processes and are depended on the development and innovation which bring mobile device producers (new technologies and service) and transmitters (quick data transfer). The industry is greatly influenced by the telecommunications authority.

## 6. CONCLUSION

Dynamics and evolution of the current business environment push companies to fundamental contemplation on the causes and conditions of its existence. Visualization, analysis and reconstruction of the business model are strategic processes that should be created before the formulation of strategy. Defining the business model is condition of order and system of each business. A key theme is the value offered to the customer, which helps him to solve his problem. The solution is realized on the basis of resources and business processes and is delivered to the customer through the channels and relationships. The model is functional and attractive for the company, if it can appropriate a part of the produced value.

The research of the business models showed several key findings that characterize the mainstream of business. Customer segmentation is determined by industry and by type of product. Customer value is always a set of several interrelated values, but generally one of them is the most important. Personal contact as a distribution channel is one of the most effective, but the web site is the cheapest. In the customer relationship there are dominated personal relationships between traders and customers. Choice of the relationship is affected by the complexity of the product and value added. Revenue streams are usually multi-source and type of income is affected by kind of business. Key sources are mainly those that are formed and grown for a long time and have a non-material nature, such as knowledge, experience, workers and managers. Key capacities are characterized by the evident discrepancy between the importance and quality of capabilities. There are important communication, speed, managerial system and innovation. The business model is built on the key activities, which are sales, marketing, production (operation) and is supported by human resource management, infrastructure and procurement. Key



partners serve for the procurement of resources and activities and for the formation of business alliances. Most businesses are located between cost and value driven model, with inclination to cost-driven model. The most costly resources (2/3 of costs) are machines, technologies and workers. The most costly activities (2/3 of costs) are production, input logistics, warehousing and marketing.

Development of new technologies constantly brings fundamental changes to the stagnant forms of business models, which operate on long-term stable principles and went through slight modification only. Further research should be aimed to finding of new features, deviations, extremes and trends in each block of the business model. It should be developed new research handling about innovative business models and explore conditions, places and ways of innovation.

## References

1. Afuah, A. (2003). *Business Models: A Strategic Management Approach*. New York: McGraw-Hill/Irwin.
2. Baden-Fuller, CH. & Morgan, M. S. (2010). Business Models as Models. *Long Range Planning*, 43(2), 156-171. <http://dx.doi.org/10.1016/j.lrp.2010.02.005>
3. Biel, M. & Czwitkowicz, T. (2012). Z webu do kameňa a naopak. *Trend*, No. 4.
4. Chesbrough, H. (2006). *Open Business Models: How to Thrive in the New Innovation Landscape*. Boston: Harvard Business School Press.
5. Debelak, D. (2006). *Business model made easy*. Wisconsin: CWL Publishing Enterprises.
6. HNonline.sk. (2012). *Nové trendy v internetovom nakupovaní*. Retrieved February 12, 2012, from <http://hnonline.sk/c1-55287930-nove-trendy-v-internetovom-nakupovani/>.
7. Horváthová, J. (2010). Firmy na cestách šetrili. *Trend*, No. 18.
8. Hunger, D. L. & Wheelen, T. L. (2008). *Concepts: Strategic Management and Business Policy*. New Jersey: Prentice Hall.
9. Johnson, W. M., Christensen, C. M. & Kagerman, H. (2008). Reinventing Your Business Model. *Harvard business review*, 86(12), 57-68.
10. Korošová, V. & Synek, V. (2011). Grécky oikos a nevalný val. *Trend*, No. 29
11. Magretta, J. (2010). Why Business Models Matter. *Harvard Business Review on Business Model Innovation*. USA: HBR Publishing Corporation.
12. Mullins, J. & Komisar, R. (2009). *Getting to Plan B: Breaking Through to a Better Business Model*. USA: Harvard Business Press.
13. Osterwalder, A. & Pigneur, Y. (2009). *Business Model Generation*. Self Published.
14. Pressburg, A. P. (2010). Čína prestáva byť ultralacnou dielňou sveta. *Trend*, No. 30
15. Rappa, M. (2010). *Business Models on the Web*. Retrieved May 17, 2010, from <http://digitalenterprise.org/models/models.html>

16. Slávik, Š. (2011). Komparatívna analýza podnikateľských modelov. *Ekonomika a manažment*, 11(3), 23-43.
17. Teece, J. D. (2010). Business Models, Business Strategy and Innovation. *Long Range Planning*, 43(2), 172-194. <http://dx.doi.org/10.1016/j.lrp.2009.07.003>
18. Trend.sk. (2012, March 21). Stock stratil trpezlivosť s drahými vajíčkami. *eTrend.sk*. Retrieved May 1, 2012, from <http://firmy.etrend.sk/firmy-nefinancny-sektor/stock-stratil-trpezlivosť-s-drahými-vajíčkami.html>
19. Watson, D. (2005). *Business Models*. Petersfield: Harriman House Ltd.

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