INTRODUCTION

This contribution aims to draw attention to the relationships between business models and innovation. This topic has not been widely discussed in the Czech Republic, in spite of the growing importance of both issues. There is no generally agreement even about the Czech term for “business model” so that often it is not translated at all.

In the first section we attempt to present the review of business models based on the available literature. 19 pieces by leading scholars on the nature of business models was published in the Special Issue on Business Models in the journal Long Range Planning, vol. 43, April 2010. Other sources of information are listed at the end of this contribution. We describe here some approaches to the business model creation and an example of a failure of the Kodak business model caused by advent of digital photography.

The second section deals with two possible relationships between business model and innovation – creation of business model for innovation and innovation of the business model itself. Special attention is given to the open business models suitable for technologically advanced companies.

1 WHAT IS A BUSINESS MODEL

There are many definitions of the term “business model”. Nine of them can be found in [2, Table 1]. We will adopt here the definition of D.J. Teece [13]:

“Whenever a business is established, it either explicitly or implicitly employs a particular business model that describes the architecture of the value creation, delivery, and capture mechanisms employed by the business enterprise. The essence of a business model is that it defines the manner by which the business enterprise delivers value to customers, entices customers to pay for value, and converts those payments to profit: it thus reflects management’s hypothesis about what customers want, how they want it, and how an enterprise can organize to best meet those needs, get paid for doing so, and make a profit.”

Afuah [1] writes about “value creation” and “value appropriation”. While value creation means creating customer value: to make money, customers must prefer the company’s product over those of competitors, value appropriation than means “earn a profit commensurate with the value created” and is vital for the company survival.

Both of these aspects must be taken onto account. Yes, the marketing slogan “Customer is our boss” is important, but we must not forget that our value chain must also deliver value to the company.

Afuah definition of business model is as follows [1, p.9]:

“A business model is the set of which activities a firm performs, how it performs them, and when it performs them as it uses resources to perform activities, given its industry, to create superior customer value (low-cost or differentiated products) and put itself in a position to appropriate the value.

Osterwalder and Pigneur [12] interprete the Business Model as the blueprint of how a company does business: “A business model describes the rationale of how an organization creates, delivers and captures value.”. Their approach is based on the business model canvas with 9 building blocks:

1. CS - Customer segments: An organization serves one or more customer segments.
2. VP - Value propositions: It seeks to solve customer problems and satisfy customer needs with value propositions.
3. CH - Channels: Value propositions are delivered to customers through communication, distribution and sales channels.
4. CR - Customer relationships: Customer relationships are established and maintained with each Customer segment.
5. RS - Revenue streams: Result from value propositions successfully offered to customers.
6. KR - Key resources: The assets required to offer and deliver the previously described elements ...
7. KA - Key activities: ... by performing a number of Key activities.
8. KP - Key partnerships: Some activities are outsourced and some resources are acquired outside the enterprise.
9. CS - Cost structure: the business model elements result in the cost structure.
The tool for the business model is the graphical canvas illustrated in Figure 1. For the brief introduction see [4]. The business model canvas template can be downloaded from [15].

**Fig. 1: The business model canvas**

<table>
<thead>
<tr>
<th>Key partnerships</th>
<th>Key activities</th>
<th>Value propositions</th>
<th>Customer relationships</th>
<th>Customer segments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Key resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Channels</td>
<td></td>
</tr>
</tbody>
</table>

Cost structure | Revenue streams

*Source: adapted from [12, p.44]*

The business model can be created in the following steps:

- Formulate **value proposition**, i.e. the value delivered to the customer by the product based on specific technology.
- Identify **market segment**, i.e. users to whom the technology brings value and performs the job to be done.
- Define structure of the **value chain**, required for the product creation and distribution. Value creation is necessary, however not sufficient condition of profitability; value creation is conditioned by:
  - balance of forces among our business, suppliers and competitors
  - presence of complementary assets (e.g. in production, distribution, etc.) necessary for supporting the company position in the value chain.
- Specify the mechanism of profit creation and evaluate product **cost structure** and **target margin**.
- Describe the company position in the **value network** that connects suppliers and customers, including identification of potential alternative producers and competitors.
- Formulate **competitive strategy** enabling to the **innovative** company to gain and keep competitive advantage.

The concept of the business model is nothing new. While in the past the business model was mainly implicit, in the 20-th century it started to be formulated explicitly and became an issue of academic research.

Baden-Fuller and Morgan in [2, p. 160] present survey of business models from economic history (see Table 1):

**Tab. 1: Business Models from Economic History**

<table>
<thead>
<tr>
<th>Cohort label (and arrival)</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guild system (mediaeval)</td>
<td>Goldsmith’s workshop</td>
</tr>
<tr>
<td>Factory system (18th/19th centuries)</td>
<td>Textiles factory with automatic loom &amp; Spinning Jenny</td>
</tr>
<tr>
<td>American system of manufactures (19th/20th centuries)</td>
<td>Model-T Ford production line system;</td>
</tr>
<tr>
<td>Network firms (20th/21st centuries)</td>
<td>Benetton; Nike;</td>
</tr>
<tr>
<td>Chinese Low Cost (21st Century)</td>
<td>Shanghai Zhenzua Port Machinery Company</td>
</tr>
</tbody>
</table>

*Source: [2, p.160]*

The authors distinguish between three classes of business models:

- **principles** – dealing with general theory;
- **recipes** – used to demonstrate or give advice about how to do something so that the results will come out right, often depending on considerable tacit knowledge, and
- **templates** – exact and exhaustive rules.

**Wikipedia** [3] provides an overview for various business model types with references to more detailed information:

- Bricks and clicks business model
Business model by which a company integrates both offline (bricks) and online (clicks) presences, e.g. when a chain of stores allows the user to order products online, but lets them pick up their order at a local store.

- Collective business models
  Pooling resources, sharing information or providing other benefits for the network; for example, a science park or high-tech campus provides shared resources (e.g. cleanrooms and other lab facilities) to the firms located on its premises, and in addition seeks to create an innovation community among these firms and their employees.

- Cutting out the middleman model
  The removal of intermediaries in a supply chain: companies may now deal with every customer directly, for example via the Internet.

- Direct sales model
  Direct selling is marketing and selling products to consumers directly, away from a fixed retail location.

- Franchise
  Franchising is the practice of using another firm’s successful business model. For the franchisor, the franchise is an alternative to building 'chain stores' to distribute goods and avoid investment and liability over a chain. The franchisee has a greater incentive than a direct employee because he or she has a direct stake in the business.

- Freemium business model
  Business model that works by offering basic Web services, or a basic downloadable digital product, for free, while charging a premium for advanced or special features.

  The Freemium business model is a variant of the quite frequent Razor-Razorblade Model, what is a business tactic involving the sale of dependent goods for different prices - one good is sold at a discount, while the second dependent good is sold with substantial profit margin.

  If you’ve ever purchased razors and their replacement blades, you know this business method well. The razors are practically free, but the replacement blades are expensive.

  The video game industry is another user of this pricing strategy. They sell the game consoles at a relatively low price, recouping the lost profits on the high-priced games. Similarly, the manufacturers of printers and copiers offer them quite cheaply and create profit from selling consumables. Mobile operators offer discounted mobile phones if you sign a contract about using their services.

  Kodak business model was based on the repeatable sales of consumption materials (films, chemicals, photo papers, etc.). And when Kodak invented digital camera and licensed its production to other companies, this business model failed: if somebody bought digital camera, he/she did not need anything more from Kodak: pictures were processed by computers [14].

**Fig. 2: Kodak’s value-chain pre-digital age**

![Diagram showing the Kodak's value-chain pre-digital age.](image_url)
Fig. 3: Kodak’s value-chain post-digital age

Many more examples of business models of concrete businesses can be found in articles published in [5].

Chan and Mauborgne in [6] formulate their belief what is the best organizational strategy to generate growth and profits. Blue Ocean Strategy suggests that an organization should create new demand in an uncontested market space, or a “Blue Ocean”, rather than compete head-to-head with other suppliers in an existing industry (Red ocean). A blue ocean is created when a company achieves value innovation that creates value simultaneously for both the buyer and the company. The authors introduce the concept of the Strategy Canvas as a tool of the Blue ocean strategy development. The strategic canvas example for discount Southwest airlines is presented in Figure 4. The horizontal axis captures the range of factors the industry competes on and invests in, the vertical axis represent the score, i.e. level of importance assigned to each factor in the respective business model.
2 BUSINESS MODEL FOR INNOVATION AND BUSINESS MODEL INNOVATION

The relationship between business model and innovation can be two-sided:

- we need to create a business model for product innovation;
- we need to innovate the business model itself (process or organizational innovation).

As says Teece in [13, p.183-184], „Every new product development effort should be coupled with the development of a business model which defines its ‘go to market’ and ‘capturing value’ strategies. Clearly technological innovation by itself does not automatically guarantee business or economic success – far from it. … When executives think of innovation, they all too often neglect the proper analysis and development of business models which can translate technical success into commercial success."

Technological, or - more generally - product innovation is today considered a necessity for the company competitiveness and even survival. However, “the process innovation, especially the creation of new organizational forms (like the Skunk Works and the multidivisional organizational structure), organizational methods (like the moving assembly line), and in particular new business models are of equal - if not greater - importance to society, and to the business enterprise. While such innovation may seem less heroic to many citizens - even to many scientists and engineers – without it technological innovation may be bereft of reward for pioneering individuals, as well as for pioneering enterprises and nations.” [13, p. 186].

One of the business model innovations can consist in creation of open business models. Chesbrough, the author and promotor of the open innovation concept [9], in [7, 8] brings arguments in favour of such models. More details analysis of business model innovation can be found in [11].

As a result of rising development costs and shorter product life cycles companies are finding it increasingly difficult to justify investments in innovation, as expected revenues far exceed the development costs (Figure 5A). Open business models address both effects. The cost side is attacked by leveraging external research-and-development resources to save time and money in the innovation process and the revenues are increased by creating new products by licensing external technologies and by getting additional money from licensing its technologies to other firms, including spin-offs of the mother company. The combination of leveraged cost and time savings with new revenue opportunities brings powerful advantages for companies willing to open their business models (Figure 5B).
Only rarely the first version of the newly created business model is perfect. Usually the tuning of the business model requires experimentation and only after several iterations your new model will bring expected outcomes. Such approach is only possible if the organizational culture tolerates the “fair” failures that cannot be avoided in any new, creative activity. And this kind of tolerance is unfortunately quite low in continental Europe.

I cannot resist concluding by a short poem of Samuel Beckett:

Ever tried
Ever failed
No matter.
Try again
Fail again
Fail better.

CONCLUSION

In this contribution we tried to introduce the reader to importance of business models and different approaches and tools that can be employed in their creation. In the second part we describe the relationships between business models and innovations.

As we hope, the presented survey could serve as an introduction to the business modelling and as an impulse to its broader discussion in the Czech Republic environment.

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LITERATURE

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**Key words**

business models; innovation; blue ocean strategy; business model canvas; strategy canvas

**JEL Classification**

L21, M10, O31

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