

# BUSINESS MODEL AS AN INTERFACE BETWEEN THE ORGANIZATION STRATEGY AND E-BUSINESS APPLICATIONS

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## **Abstract**

This article explains what is already known about business model concept and why and in what way it is different from more established concept of business strategy. Then we define the place and role of business model concept in an organization in such a way that we make delimitation between organizational models and business models and between process models and business models. In continuation we present views on strategy and competitive position of organization. To connect business strategy and e-business applications business model has been treated as a tacit component of strategy and as a conceptual tool to decompose strategy from abstract level to operative level of e-business application.

## **1 INTRODUCTION**

Information technology systems enable several opportunities for organizations to take advantage of their own essential business competences by transform business-technological architecture and infrastructure of business into e-business application. Doing that any information technology system may be applied with different degrees of success, which depends on the purpose for its usage and on the modus how it is used and managed. The common premise for success of the information technology systems, especially e-business applications, is that organizations define the right strategy, adapt adequate business models, which bring the advantage, and wisely choose the appropriate system within several different possibilities. Within the high complexities of e-business applications it is necessary to build the connection between the business strategy and information technology systems.

Business models, which are really the base for e-business application, are being used as the interface between business strategy and information technology systems. Because the concept of business model is "relatively young", its place and role in organization are being very subjectively determined. That is the reason why the concept needs intensive theoretical

discussion and empirical test. While many authors agree on unambiguously determined difference between the organization model and the business model and on differences between business models and processes models (Morris et al., 2005; Pateli and Giaglis, 2003; Wirtz, 2001; Gordijn, et al., 2000), the debate on the difference between strategy and business model is less and less clear and distinct and it is more the result of subjective interpretation of an author (Mahadevan, 2000; Porter, 2001; Stähler, 2002). It can be proven with the use of the concepts used in technology sociology that extensive and flexible interpretations accompany development of information technology systems.

The purpose of this article is to present the relationship between business strategy and business model and also decompose business strategy in process of development of e-business applications. The approach is based upon the cognition that business models are the abstraction of business strategy of an organization. To surmount the gap between business strategy, which is on high level of an abstraction and information technology systems, which are on an operative level, we use the process of strategy decomposition. To capture and decomposition business strategy we used diagram of problem and modeling business goals, reasoned in Jackson, (2001). To present business model we used Jackson's context diagram. Following this we start from the hypothesis that business model is the tacit component of organization's business strategy.

The organization of this paper is as follows. Firstly we determine business model concept and its purpose. Then we define place and role of business model in organization in such a way that we make delimitation between organizational models and business models and between process models and business models. Followed by presentation of relationship between business strategy and business model and its usage to connect business strategy and e-business applications.

## **2 THE POSITION OF BUSINESS MODEL IN ORGANIZATION**

### **2.1 The review of literature and the synthesis of business model determination**

Good organization's business is being defined with business model, environment, in which this business performing, and ability of an organization to react on changes (Deshmukh, 2000). It is open question how business model should be defined and specified. The term business model is being used in various contexts. This is the main reason why it is hard to precise and unequivocally determine what business model actually is (Timmers, 1999). As the first step to determine the nature of business model concept it is useful to go through the definition presented in literature. After reviewing the accessible literature it can be established that commonly accepted definition of business model does not exist or as pointed out Morris et al., (2005) – there is little consensus on attributes of the term business model. Language used to describe business models leaves the reader righteous by astonished what business model is. Rappa,(2003), Afuah and Tucci, (2001), Turban et al., (2002), Gordijn et al., (2000), treat business models as "methods", with whose help organizations execute business. Timmers, (1999) and Dubosson-Torbay et al., (2002) treat business models as "architecture", while Krishnamurthy, (2003) proves " that business model is a path towards organization's profitability". Österle, (2001) defends the term "method of information era". Individual authors do not even mention definitions but they do classification of other authors. Determination of business model is in the best case foggy. It often appears that quoting

obligatory concepts as, for example, how organizations execute business and how they make profit, satisfies for determination of business model. Making profits is far away from making economic value. Although many definitions do not even mention business model concept, they are being installed within business context and for start they use Timmers, (1998) model.

In this article we treat business model as a conceptual tool, which contains entity of concepts and their relationships for expressing abstract presentation of certain aspect of business strategy, which at the same time is also its tacit component and it enables organization to organize and use different resources in cooperation with its partners. Business model therefore is not a description of a complex social system with all his participants, relationships and processes, but rather a description of "business system" logic for making value, which lies at the back of current transactions of e-business applications.

## 2.2 The purpose of business model

Business model assures a conformable frame, which offers technological characteristics and potentials as entrance, which is being transformed with the help of partners and market into economical output with the emphasis on urgent usage of information technology systems. It is interface between a degree of information technology development and a degree of creating economical value. Besides that, the purpose of business model is to:

- help in understanding, capturing, visualizing and distributing business strategy of organization,
- contribute to analysis of business strategy of organization,
- improve managing business strategy and organization logic,
- describe expectations of organization, because it actually presents future way of organizational functioning, which can be simulated,
- be patented; business model is by itself a product.

Very useful property of business model is that it helps management to simulate e-business and to learn about it. This is the way to lower the risks arisen during experimenting, and studying possible consequences of reached decisions without exposing organization in danger (Sterman, 2000). Combining information at this phase assures many possibilities for management of business and it eases information demand modeling for it, needed for e-business application (Gordijn et al., 2000; Persson and Sterna, 2000). If an organization chooses a business model, for which she cannot gather needed resources, it has to go through variations of business models, to find a business model, which is compatible with its resources. Instantly when that happens the organization must consider introduction of business model, defined with strategy. During this process organization might ascertain that certain strategic decisions change required resources, what might change original business model into questionable. And that is iterative of simulation process.

From information system's point of view, the function of business model is very important: contained data about/in business models, accompanied with resources specifications and defined strategy, they provide precious input for development of e-business application and information system of the organization.

## **2.3 The position of business model in organization**

Business strategy, business model, standard operative procedures, business rules and hardware, software and telecommunication of information system become more and more dependent from each other, which necessarily leads into increasing the complexity of information system.

Organization model and business model differ without a doubt from each other conceptually. Organization modeling is organization engineering and its functioning through organization structure and management model. Business models need to be understood as look of organization business logic for creating and commercialize value; meanwhile business process models are being more like a description how this is actually going to function. The confusion is partially result of "semantic game".

The most authors agree that business strategy and business models are connected but are different concepts (Porter, 2001; Stähler, 2002), although the terms have been used exchangeable in practice. The essence is as followed: strategy deals with competitive position and positioning organization in the marketplace, business models deal with business logic and creating value.

## **3 BUSINESS MODEL AS TACIT COMPONENT OF ORGANIZATION BUSINESS STRATEGY**

### **3.1 Competitive position of organization**

Competitive advantage is the benefit derived from something that organization has or it has something that customers need and its competitors do not have. Competitive advantage of an organization gives customers reasons to buy its products and services rather than those of competitors. As a result organizations try constantly to create and protect their own competitive advantage and neutralize competitors' advantages by improving their own business practise. Innovation usage of information technology is common source of improvements. The success of e-business is not the adjustment of information technology for itself. Adjustment is a result of opportunities which enable competitive advantages.

Dynamic of economical environment changes of economical principals, policies and also management and functioning of business practice and by that it causes troubles being different. How to be different globally, when several billion people compete with you. The competition is in a phase of seethe. Preposition to exit from this kind of situation is, "Do something else. At a different way. Innovate", in that way you will be for just one moment something special and without any competitors. But how to be different, when all services and products are similar. For example – nowadays there are not any automobiles of inferior quality. BMW, Audi, Peugeot or Renault – those are all high quality and effective producers because they successfully manage automobile production technology. Besides that they all more or less know everything about each other. Where is the place for competition? Mostly in people, strategies, business models and information technology systems.

### 3.2 Business model as tacit component of organization strategy

Strategy includes defining long-term organization positions on the market, creating distinct labels on what kind of values organization offers to its client and which it does not (Porter, 2001). Based on extensive presentation Oliver,(2001) defines business strategy as "understanding economic structure and dynamic, determining relative organization positions in economy and executing actions to change economic structures or organizational positions to improve organizational results".

To realise business strategy organizations develop business models. Business model actually presents specified demands of business strategy, what is presented in figure 1. To comprehend figure the fact that strategy of organization is constantly anchored in its own competitive environment needs to be accepted. If not business model could be comprehended (in conceptual and not in operative meaning) as an abstraction of organization strategy, which is hidden from competitors.

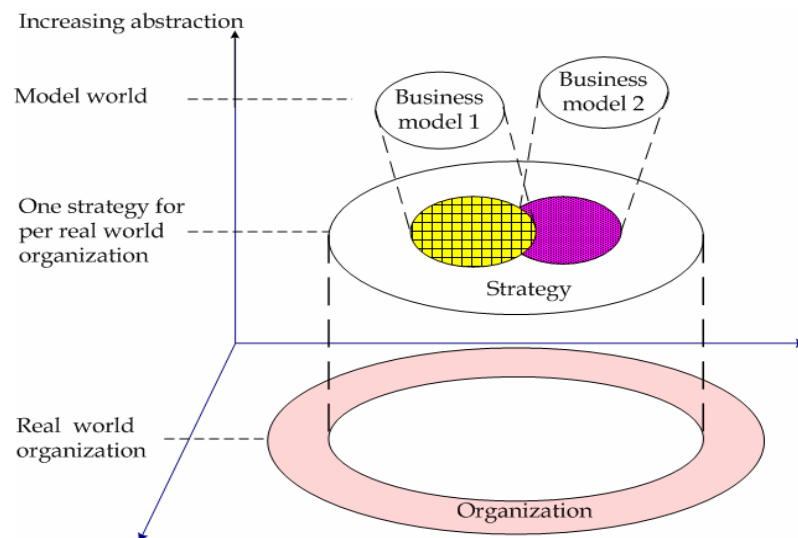


Figure 1.: The relationship between strategy and business model

Business model is treated as conceptual and architectural implemented business strategy or as base to execute differentiated organization business that presents its tacit potential to reach competitive advantages. It is an interface between a degree of development of information technology systems and a degree of creating economic value through e-business. Implementing business strategy includes "translation" of business model – as plan – in more concrete functional elements like business structures (organization department), business transactions (managing working flow or responsibility for them), infrastructure and information technology systems (Brews and Tucci, 2003). Furthermore business model has to contain internal and external model of financing (financing model). All this sounds very well. It is easier to write this than to put all this into functioning. For e-business application to enable functioning business processes internal physical processes have to be renewed in a way that their participation lowers and participation of digital processes arises. This could be accomplished with development of new e-business applications.

## 4 BUSINESS MODEL AS INTERFACE BETWEEN STRATEGY AND E-BUSINESS APPLICATIONS

Information system applications are essential for organization and they present usefulness and value of information system. Descriptions of applications explain how information system affects working systems of organization and participant's work. Applications can be determined as an appropriate way in which values are being created and competitive advantages reached with the help of information technology systems. Business strategy and information system application both joined is the essential long-term solution of managing the information resources, especially e-business application, which is actually based on business models. We can treat a business model as a plan of future functioning of e-business application, by that also organizations and all other participants. We believe that the business model concept attributes towards building common comprehension of connection between business and information technology systems, which lead to strategic and functional integration of e-business applications.

Industry of software is cable to develop and offer solutions for many business strategies. But how to overcome an enormous gap between "abstract" and high-level declarative business strategy and pass over to operative level where procedural software functions? Problems of e-business applications are "furthered" from business strategy, which is on high level of abstraction and information technology systems, which are on the operative level. That is why business model is interface between strategy and e-business applications of organization. Complexity of e-business application and the need to overcome the gap from high level of abstraction to operative level of information technology systems can be simplified with the problem diagrams (Jackson, 2001) or to his mind "a tool to insight to depth of real world", as shown in figure 2. The figure shows the essential elements of problem situation. Business strategy is presented with the help of business goals and business models. The context of real world problem (business models) ensures information about structures, transactions, artefacts and participants, which are the real problem of treated area. The requirements (business goals) reflect parts of problem area, which are limited factor of changing, accordant to defined goals. Information technology systems are systems of software solutions which need to be developed. Connection between context of the real world problem (business model) and information technology systems (for example e-business applications) is being presented with the help of divided borders phenomena between problems and solutions.

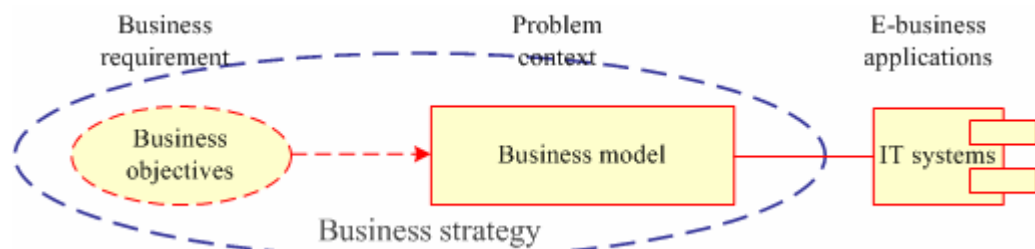


Figure 2.: Business strategy as problem diagram

Problem diagrams assure context for indicated business problems (business model), which can be projected down to system requirements. Modeling goals capture wanted requirements, which suit context of a problem. Every goal projects to sublevels in hierarchy of goals, which

present entity of requirements to define the context. As a means for bind abstract, high-level business requirement to low-level system requirements a power of parallel projection is being used in problem diagrams and in goals model. While the advancement of solving the problems is sufficient frame to decompose e-business strategy to requirements levels of information technology systems. To assure truly harmonic system of requirements with business strategy, which it really supports explicit traceableness and stable from the lower to the highest level of requirements is needed. Every aimed entity quotes special interested field within determined area, during which contains harmony between business goals and business model. Goals model allows explicit connection to requirements of the next level with the help from over and under goals.

## 5 CONCLUSION

According to fast advancement of e-business it is high time that explorers and practitioners of information systems and within them e-business applications rethink the role and meaning of business models in e-business applications and organizations its self. The origin point has to be the purpose and strategy of organization and not media burned and lobbying information technology. Based upon that suitable business model/s is/are going to develop. Suitable business model is the one which differentiates organization is business from other organizations' business and contributes some value to every participant of the value chain. During e-business applications develop in accordance with developed business model with the ability of disposable information technology and other resources with which organization disposes need to be examined.

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