



A CONCEPT OF TECHNOLOGY ENTREPRENEURSHIP BUSINESS MODEL IN BULGARIA

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Abstract: *This paper presents a concept of a technology entrepreneurship business model which contributes to the realization of accelerated growth based on knowledge, skills and innovation in technology-based Bulgarian entrepreneurial enterprises.*

The aim of the study is to propose a concept for business model adapted for Bulgarian SMEs developing technological entrepreneurship. Our model is organized into five main blocks based on Osterwalder's ontology having added an extra block, to meet the needs of technology-based entrepreneurial companies in Bulgaria.

Keywords: *Technological Entrepreneurship, Business Model, Conception, SMEs*

INTRODUCTION

Due to the intensive development of technologies worldwide, the open markets, globalisation, the "lagging behind" in entrepreneurial thinking in the field of technologies in Bulgaria, because of the historical development (the socialist regime for the period of 1945-1989), it is necessary, in our opinion, to give intensive training to employees and entrepreneurs towards a culture of creative and innovative thinking, and change the way how constant changes are perceived[11]. It is necessary to do so in order to facilitate employees' adaptation, to stimulate their receptivity of and willingness to learn about technological changes, which occur fast in industrial enterprises.

Technologies invade our personal and professional lives so rapidly, and if we can choose and decide when, how and what to accept and make use of in our personal lives, in our professional development we are often forced to work with something new and unknown, which inevitably adds to stress, and the lack of understanding of what is new demotivates us. At the same time with age and experience people resist changes even more and this fact further complicates their introduction.[10] Be it a new machine, which you need to operate, new technological process or a change in business processes when employees do not manage to realise the reasons for such a need to arise, they lose their motivation to work and work ineffectively. The case is similar with the perception of the technological



entrepreneurs themselves, who realise the need for it, but very often human psyche cannot make sense of the innovation with the same tempo at which it arrives and is often perplexed by the constantly arising novelties.

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Changes caused by the “lagging behind“ occurred even faster as entrepreneurs realised what competition they had and that they had to catch up with it. If the culture of perception and way of thinking of Bulgarians changes, it will be easier for them to accept new technological changes. How is it to happen?

- Through stimulation of initiative and involvement – when someone creates something, it is much more valuable to them and they will accept it much easier. If we manage to persuade employees and entrepreneurs to work together and “to participate” together in the discovery and creation of something new, be it a technology, a product/a service, a process or a way of working, they will feel part of it, will realise the need for change and will be motivated to learn.
- By acquainting and informing human resources in technology-based entrepreneurial firms about the motives for change and the factors, which necessitate it. Employees need to be well acquainted with the need for change. They have to be aware of the prime cause for it and to know the process well.
- Through systematic acquisition of knowledge and skills, stimulation of the employees to learn, to seek for new information, which they can use successfully.

ELEMENTS OF THE BUSINESS MODEL FOR TECHNOLOGICAL ENTREPRENEURSHIP

The concept of a business model for technological entrepreneurship, which is applicable in small and medium-sized Bulgarian technological entrepreneurial firms, was created on the basis of the ontology for the business model of Osterwalder[1] and Byers, Al Debei, Føleide, Johnson, Lindgardt theories. [2, 3, 4, 5, 6]. In this business model is uses four basic blocks and nine elements. Different scientists combine these blocks in other ways, but at the base all elements are included.

In addition to these four blocks another one, which the author has named “Impact on the human resources”, is needed for Bulgarian SMEs. It includes four basic elements that aim to enhance the competitiveness of Bulgarian small and medium-sized technology-based



entrepreneurial firms, to make them more flexible to changes and more successful in the rapidly developing economy of our highly technological epoch.

As it can be seen in Table 1 the first four pillars, namely: product, consumer impact, management structure and finance, together with their elements are part of the concept of a business model of Osterwalder[1]. The author of this paper has added a fifth pillar, which is directly related to human resources in technology-based entrepreneurial firms and the impact of the technological changes these organisations are subject to. It includes, on the one hand, stimulation of the creativity [2] and raising the degree of adaptivity of human resources, innovations and knowledge management.

TABLE 1. ELEMENTS OF THE BUSINESS MODEL OF TECHNOLOGICAL ENTREPRENEURSHIP INCLUDED BY THE AUTHOR

Technology Business Model Ontology	Elements
Product	Value Proposition
Customer Influence	Target Customer
	Chanel
	Customers relationship
Management Structure	Key Activities
	Key Resources
	Key Partners
Finance	Cost Structure
	Revenue Model
<i>Human Recourse Influence</i>	<i>Creation</i>
	<i>Innovations</i>
	<i>Adaptability</i>
	<i>Knowledge Management</i>

MECHANISM OF INTERACTION OF THE ELEMENTS OF THE BUSINESS MODEL OF TECHNOLOGICAL ENTREPRENEURSHIP

It is extremely difficult to come up with a single business model, which will be of use for every technology-based entrepreneurial firm. Which competitive advantage should the technological entrepreneur choose so that the organization can grow depends on a number of factors of the business environment and the characteristics of the sector itself. They can be quite varied and each of them can be of considerable importance for the business. The concept of a business model of technology-based business proposed by the author includes

the basic pillars of the model, as well as all their elements, and the choice of the pillar or particular element to focus on lies entirely with the technological entrepreneur. It is the link between the different pillars of the business model and the interactions among them that is important.

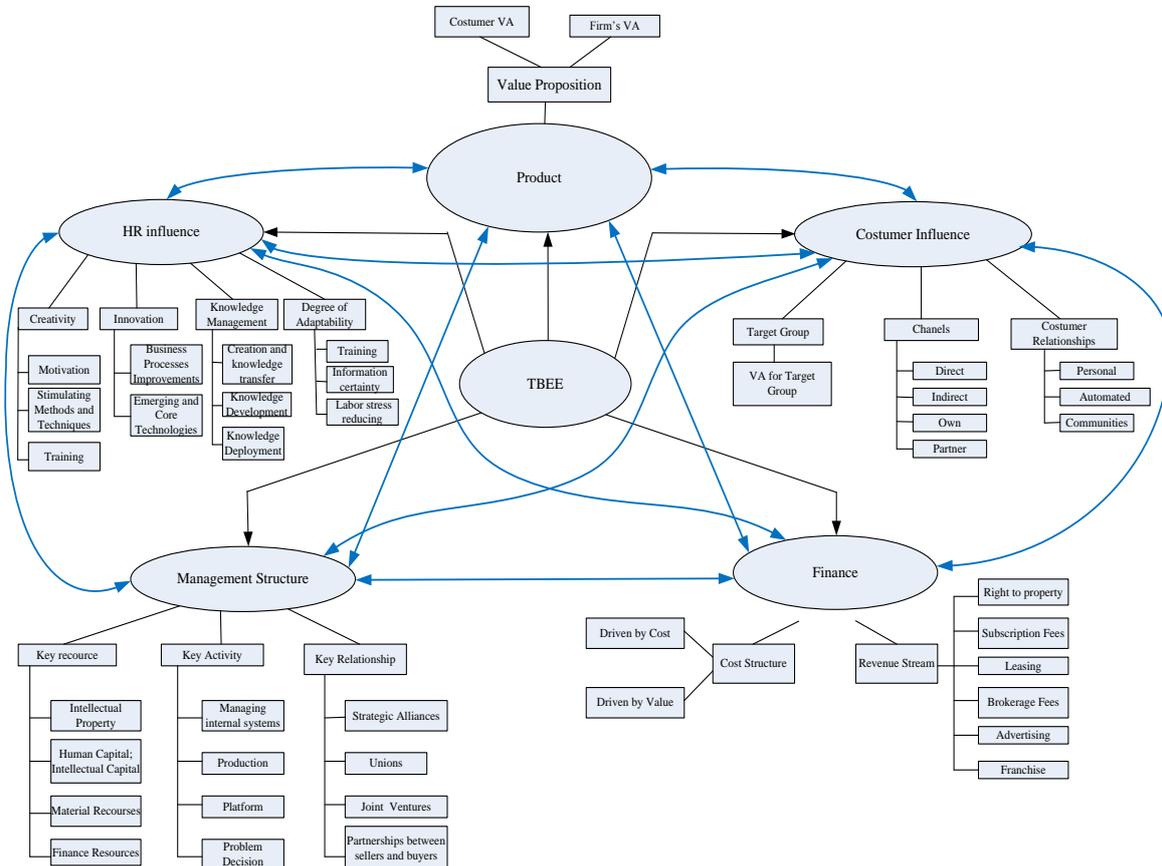


Fig. 1. Mechanism of interaction of the elements of BM of technological entrepreneurship according to the author

The mechanism of interaction of the elements of BM of technological entrepreneurship presented in Fig. 1 shows the links between the pillars. Irrespective of the focus of the technological entrepreneur in their business model, the presence of constant interaction with the other four pillars is obligatory in order for the firm to be successful. Thus, for example, the interaction between the management structure and the other four pillars is of vital importance. This interaction could take the form of a well-functioning information system, exchange of knowledge, information and experience, allocating financial resources to a specific element, special attention to particular parts of the structure and even building a management policy regarding human resources, technologies, innovations or new products. By their nature each of the pillars is directly related to the other four, and it is a



matter of strategy and a point of view on which of these five pillars or on which combination of different elements the company should focus on.

CONCLUSION

The present paper frames a concept for a business model of technological entrepreneurship adapted to the specific conditions of doing business in Bulgaria.

It has also presented in a graphical form the interrelations between the five basic pillars of the business model of technological entrepreneurship and all their elements.

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