# Bottom-up decentralized approach to innovation strategy

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Abstract. New conditions contributes the emergence of new concepts of innovation strategies in the enterprise. The study conducted by The Economist Intelligence Unit shows a new approach to innovation. Future innovations will be enforced and invented by users (clients) and they will be a key element of competitive advantage. The company will therefore be forced to turn their customers to its information system. It is therefore important to carefully "listening" customers and capture the information about their needs and innovative solutions to current processes and the creation of new products and services. Among innovation strategies the most important will become the open innovation strategy. The IT department is in this situation before a huge challenge. Will it have to open all channels of communication, collect huge amounts of data, analyze them and present innovative solutions. Continuous development of new technologies should help in this task. Innovative decisions in an era of decentralization will be undertaken by the regular employees giving impetus to the rapid development of companies. In order to these decisions were correct the company should focus more on employees, supporting them by training system, suggesting ethical standards and give freedom in making decisions and carrying responsibility for them. This forces a different approach to the management of the company in which the staff will set goals and a variable innovation strategy.

**Keywords:** innovation strategies, decentralization, technological innovations, bottom-up innovations

#### 1 Introduction

In theory and practice of strategic management, innovation (change) is considered as one of the main conditions for success and competitive advantage and innovation strategy is an important part of long-term strategy for development. It is a thesis that can be found in all modern books dedicated to strategic management. Especially sector of small and medium enterprises in the current difficult economic situation, desperately needs a strategy oriented at innovate using new system and financial solutions. Meanwhile, according to studies and publications from various centers, only a few companies use the chances given by the introduction and implementation of modern innovation strategy.

Innovation strategies, as an essential part of competitive strategy adopted by the company, represent area of interest representatives of the main schools of strategic

management, such as P. Drucker, M. Porter, G. Yi-pa, J. Kay. In the twenty-first century, it was noted that the globalization of economic activities, dissemination of information networks and the growing concerns and risks associated with changes in the global market reinforcing the importance of innovation strategies. Strategies for innovation, both strictly related to the development of technology and with the creation of new solutions in the management, are becoming increasingly important for the company and give it the possibility of obtaining a competitive advantage. Particularly important becomes the types of strategies that facilitate the rapid changes in business, and adapt to market changes [1]. Under these conditions, it is crucial not only the object of strategy of innovation, but also conditions for the rapid implementation of the strategy and achieve anticipated benefits associated with it. As is emphasized in a number of companies it is created a kind of pressure to innovate, leading to the building internal culture of innovation-oriented [2].

New conditions also contributed to the emergence of new concepts of innovation strategies in the enterprise. They can be adapted not only to large international corporations on their own, developed hinterland of research and development, but also in small and medium enterprises that innovation are based on creativity of entrepreneur and his colleagues [3].

### 2 The era of decentralization

The study, conducted by The Economist Intelligence Unit [14], shows that until 2020, the impact of new technologies on location and method of the work will make that the company will enter into a new era of decentralization. 63 percent. business leaders expected a shift towards decentralized business structures, and the responsibility for business decisions will belong not to the central administration, but to individual employees. The new era will be characterized by a typical structure that functioned in the past that have been criticized for inefficiency, duplication and lack of a coherent strategy for action. Instead, the company will implement a process-oriented strategy. Key information will remain centralized, so that employees can more easily receive, store and retrieve them. This will ensure more effective and efficient data processing, which in turn will increase workers' rights to search for information needed for direct cooperation with customers and to make important business decisions, avoiding unnecessary delays. Decentralization will cause a delegation of power to down, until the regular employees.

Promoting better cooperation with customers is extremely important, because business leaders predict that by 2020 customers will be the main source of ideas for new products and services. In addition, 86% of business leaders share the view that customers will become an integral part of the internal decision-making process, and project teams will include people outside the organization, as customers and business partners [14].

In the new era of decentralization would be very important that business leaders choose right partners who can help in the optimization of key business processes, they remain under control, and data are integrated and secured. Employees and teams

should have easy access to information to be able to use them for the benefit of the organization. Only such an approach will prevent duplication, ensure consistency and, more importantly, will provide a precise analysis of the costs incurred by the company.

Marketing managers should work with the IT managers, to enable customers to create innovation. Better cooperation between them is essential to enable future innovations inspired by customers.

According to research until 2020 for 30 percent of business leaders from the financial, educational, IT, manufacturing and public sectors [4], the main source of ideas for new products will be customers, then the Internet community, at the end research and development. This contrasts with the present state of things, where customers are in second place, and the first generator of ideas are the teams for research and development. However, the main source of ideas for improving business processes, there will still be employees - 34 percent of business leaders just lists employees and provides that this state of affairs until 2020 will not change [4].

It is also envisaged increase in the amount of data generated each year by 40 percent [5]. Still a large amount of printed materials will be used in key business processes. 43 percent of European organizations still manually processing key business transactions [6]. Managing that much data would be a big challenge for companies. Therefore, competitive advantage will be gained through better co-operation of IT directors and marketing directors. To benefit from the time of customer-driven innovation, this cooperation is necessary to facilitate company data processing.

To some extent, the required technology is already used in most organizations. Implementing a document management service (who manage the flow of information within the organization), related software and equipment are becoming part of the communications "hub" that connects to ERP systems and manage information that is stored and distributed inside and outside the organization. Through these devices can digitize the key paper documents to send information directly to a central server or a file, recognize text documents to easy find them, and even convert them easily to other formats - for example a PDF file to an Excel spreadsheet. Confidential data is safe, with the possibility of tracking, retention or control of any created copy.

As a result:

- We get a modern and effective information management process that effectively supports the introduction of innovative products inspired by customer needs and innovative processes co-written by staff;
- Customers have an impact on future products, and organizations can better manage the large amount of information;
- Companies will be able to better respond to customer needs and market and focus on generating business value.

The majority (70 percent) business leaders from around the world recognizes that there are still many benefits that may result from the use of technology to improve operational efficiency. They also expect technological progress to be able to quickly respond to customer needs and, through increasingly sophisticated data analysis, customize products and services to individual needs on an unprecedented scale.

The way in which management can make the technology lived up to expectations and business operations are efficient enough to ensure the organization's competitiveness in the future can be divided into three stages:

- Start in the right place to examine the way it goes critical business information before is transformed into knowledge, or before it will be added value. Information is one of the most important assets of the organization;
- Find its bottleneck assess the effectiveness of key processes, by challenging the traditional way of working. Without a doubt, processes were efficient when implemented, but are they relevant to today, in an environment of "great collections of data"?;
- Focus on the goal a place of work will still change, but if the key business processes are optimized and their performance is continuously monitored, the organization will be able to focus on their business.

Without a doubt, organizations that succeed in the future will be those who will use the change and the benefits of innovative technologies and to maximize these benefits in order to prepare for the future of their information structures and create competitive advantage

# 3 Innovation strategies

Research results clearly suggest that the companies to be competitive must apply innovation strategies. Can conclude that the dominant innovation strategies will be the strategies:

- Open innovation;
- Blue Ocean Strategy;
- Niche innovation;
- Innovation networks;
- Innovation cluster.

Open innovation strategy - generally consists in finding and using innovations ideas emerging among both consumers (users) as well as engineering environment, not formally associated with the enterprise [7]. The company is looking for solutions among a wide group specialists of an open competition organized in the network. It is also the way of innovation development and implementation of innovation [7]. Open innovation allows the company to broad cooperation of specialists from different professional backgrounds, it gives a chance for selection of the latest and most effective solutions. A necessary condition for the use of open innovation strategies is widespread cooperation in the network [8]. More generally, the concept of open innovation also includes a collaboration the company with a group of users of intervening in the design and evaluation of innovation [9]. Open innovation strategies launched by the IT companies are increasingly spread in other sectors as shown by numerous examples [7].

Blue Ocean Strategy - proposed by W. Chan Kim and R. Mauborgne is based on the assumption that selecting the company's strategy can bypass the area of most intense competition by the authors called "red ocean" and find the "blue ocean", where you can find a place for the strategy company [4]. The novelty of this strategy results from the use of the concept of innovation delineating the area of market space for new products. In the area of innovation, the strategic objectives include both lower costs and increase customer value [5].

Strategy of niche innovation - is one type of market niche strategy [6]. Company creates a niche that is able to gain a competitive advantage through innovation protected by a unique technology and patents, and therefore difficult to quickly follow. Niche innovation strategies use small and medium-sized companies focused on generating constant product innovation and technology [7].

Strategies of innovation networks. The formation of different types of networks (enterprises, trade organizations, logistics, social) has become an inseparable part of the modern, global economy. Network structures in different systems represent the basis for the implementation of complex business tasks. A special form of network structures have become virtual organizations, which are characterized by periodic, informal nature and use of information technologies (ICT) [10]. The essence and foundation of network organizations is the need for implementation of comprehensive strategic goals. With regard to the innovation network organization can be helpful for the harmonization of many sub-strategies for innovation and subordinate them to implement a comprehensive strategic goal. Creating an innovation strategy for network systems require coordinating actions of various companies and organizations for the creation of common values, taking into account the principle of mutual benefits arising from the synergistic relationship of the participants [11].

Strategies for innovation cluster - Clustering is a strategy of leveraging the competitive advantages for the construction of structured cooperation between companies and related institutions in a specific field and in the immediate vicinity. This definition based on the definition formulated by M. Porter [12] are extended to a structure consisting also of other actors (companies, research organizations, local authorities) cooperating to achieve a common goal through the links in the network. If this goal is an innovation, created cluster structure can be called innovative cluster [13]. The basic tasks of the innovation cluster is to use the opportunities offered by membership in the structure and creation of network connections for the implementation of a comprehensive innovation strategy.

# 4 Technological innovations

Over the last twenty years in business we have experienced more changes related to technology than any other factor caused. The Economist Intelligence Unit conducted a survey among 567 managers of companies operating in 20 sectors on a global scale, asking them about what their expectations for the future impact of technology on business. The results show that respondents expect further radical changes to 2020.

Many business leaders look with optimism to the future. They believe that technology will enable great progress in terms of innovation, productivity and relationships with clients and in many other areas of competition. On the other hand, over one third (37 percent) of leaders believe their organizations will not be able to keep pace with technology and lose their competitive edge. One-third of IT industry leaders believe that their company will stop functioning entirely, while six in ten respondents said that many industries in which they operate will change significantly by 2020 and slightly extent, will retain its current character [14].

Success will refer to these companies which will put more emphasis on process innovations. The key to creating a more flexible company, able to embrace the coming change, is to have adequate infrastructure for effective management. Business leaders must ask ourselves the following question: Is the information infrastructure in our companies are resistant to changes that the future will bring? Understanding the nature of the linkages between key business information collected throughout the organization, can rebuild functioning in its processes to ensure the maximization of knowledge sharing between employees, and thus an effective response to customer requirements.

# 5 Conclusion

Projected in the research changes will revolutionize the approach to innovation. Bottom-up innovation enforced and invented by the users themselves will be a key element of competitive advantage. The company will therefore be forced to turn their customers to its information system. It is therefore important to carefully "listening" to their customers and capture the wealth of information on their new needs and innovative solutions to current processes and the creation of products. Among innovation strategies the most important will become the open innovation strategy. The IT department is in this situation before a huge challenge. On the one hand has to open all channels of communication which will cause a huge flow of new data. On the other hand, must handle this enormity of the data and choose from them the information forming the basis for innovation for new processes, products and services. Continuous development of new technologies should help in this task. Companies need to pay continuous attention to technical innovations. Too late their implementation or lack thereof can lead even to the collapse of the company. The development of IT is becoming more dynamic, so it will be a big challenge for managers and IT department.

Innovative decisions in an era of decentralization will be undertaken by the regular employees giving impetus to the rapid development of companies. In order to these decisions were correct the company should focus more on employees, supporting them by training system, suggesting ethical standards and give freedom in making decisions and carrying responsibility for them. This forces a different approach to the management of the company in which the staff will set goals and a variable innovation strategy.

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