INNOVATIONS AND FINANCIAL SUPPORT IN FUNCTION OF IMPROVING THE COMPETITIVENESS OF SMES

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Abstract

Small and medium-sized enterprises (SMEs) are major players in achieving sustainable growth and development of any country in the world regardless of their level of economic development.

In today's business environment, SMEs face with very powerful forces that shape the competitive position and change the rules of the game. Innovations are becoming a necessity for small and medium sized enterprises, in order to remain competitive and maintain growth and development in today's dynamic and uncertain environment. SMEs innovation initiatives are delayed as a result of problems related to the provision of external financing for their business activities.

1 review scientific paper
The aim of the paper is to elaborate the importance of innovations for the development of SMEs in today's complex environment, i.e. to show the need for cooperation and open innovative approach, as well as the opportunities for various external sources of funding for innovative activities in Macedonian enterprises.

**Key words:** innovation, open access, financing, competitiveness, SMEs

INTRODUCTION

Today's turbulent and unpredictable environment changes the pace of work and the behavior of enterprises. They need to be prepared for change and adaptable if they want to survive in their dynamic and competitive environment. Therefore, the acceptance of innovations and thinking about the same is increasingly present in business activities.

Innovations are present everywhere, in the private, public and third sectors. For example: [13] companies place the design at the heart of their practices, online public services, in turn, save people time and money, and social innovations help in the quality care for the elderly people.

Innovations are key to the development of both the enterprise and the overall economy. The main economic drivers of economic growth in the EU are exactly innovations. Taking into account the benefits of innovations for economic growth, the EU creates an innovation union. Numerous benefits arise from the existence of the innovation union for entrepreneurs and the entire business sector. That benefits are the following: improved access to finance, friendly, innovative rules and regulations, accelerated interoperable standard setting, cheaper patents, public sector-supported innovations, partnerships for innovations that will enable EU enterprises a competitive advantage, as well as easier participation in EU research and innovation programs [14].

Small and medium-sized enterprises have a significant part of the country's economy. In order to survive on the market and achieve a competitive advantage, it is necessary to practice innovation, especially the open approach to innovations in their business activities. The existence of an innovative and competitive SME sector allows creation of new jobs, growth of exports, innovation and entrepreneurship skills, which contributes to increasing economic development in any economy.
One of the key factors for increasing and maintaining the competitiveness of SMEs is the process of providing the capital needed for financing their current and development activities. Ata, A., Shukla, M. and Singh M [2] point to the existence of a significant gap between small and medium-sized enterprises and large companies in terms of access to finance. They refer to the research by the Consultative Group to Assist the Poor (CGAP) located in World Bank that only 32% of SMEs received a loan from a financial institution, compared with 56% of large firms. According to these authors, the restrictive approach to the required capital negatively influences on the dynamics of achieving different stages of business development of SMEs. Therefore, some enterprises fail to pass all life cycle steps and become highly competitive and successful businesses.

Innovations and financial support for SMEs is a subject of interest among academic researchers and international institutions for a long time. According to Abdulsaleh, A and Worthington [1], there is no doubt that the access to finances is a key factor for sustained and continued growth of SMEs. Lee, N, et al. [16] emphasize that among the researchers in England, there has been a debate over the existence of certain structural problems in the financial system of the state for a long time, which makes the access to finances for innovative firms more difficult. Namely, they identify three main reasons for the existence of these problems: first, there are no guarantees that investments in research and development will result in the creation of new products. Secondly, the possibility of asymmetric information, which makes it difficult for the banks to implement the process of valuing the value of innovative projects. Thirdly, the intangible capital produced as part of a research process may be useless as collateral outside the company itself. These reasons confirm that innovative MPSs are more difficult to get the required capital compared to other companies.

According to a survey conducted by the European Commission [9], banks are the largest financial intermediaries in all EU countries. Innovative SMEs face with difficulties when applying to banks for the necessary financial resources due to the greater risk that is present in their working. This is due to the specific characteristics of innovative projects, among which are: the uncertainty about the acceptance of new products on the market, the reaction of the competition, the existence of asymmetric information between the company and interested investors, the high costs arising from the realization of these projects.

OECD surveys [18] for innovation barriers confirm that the highest barriers of a financial nature are the high costs of innovation activities (37%) and limited access to internal and external funds (32%). While of non-financial nature, there are legal regulations (19%) and dominance of the
market of certain companies. These findings are complemented by other researches [18] that emphasize the reasons for small innovations in Macedonian enterprises: insufficient financial instruments for innovation support, less cooperation of small and medium enterprises with education, lack of awareness and innovation culture among SMEs, lack of managerial skills, and institutional support. However, with the adoption of the Strategy for Innovations of Republic of Macedonia 2012-2020, the Law for Innovation Activity and the establishment of the Fund for Innovation and Technological Development, certain barriers in the field of innovations are gradually overcome.

OPEN INNOVATIONS AND NETWORKING IN SMALL AND MEDIUM SIZED ENTERPRISES

The companies constantly strive to meet the needs of buyers with different requirements and interests and change under the influence of the factors in the environment. Therefore, they appear on the market with different offer of products/services and with different approach to marketing. This diversity is due to innovations that occur in enterprises.

While many efforts are being made to encourage innovations in enterprises and encourage employees to become innovative, it still depends on a number of factors.

As Gibson and Skarzinski emphasize [12], the innovation does not come only from built-in, individual genius, but from looking at things from a new perspective, or through a different set of ‘objectives’. The four main ‘objectives’ of innovation are the following:

- Challenging common attitudes - changing the rooted dogmas in the company and the industry. For example: Ikea made a change in the way of working, not to deliver ready and fully assembled furniture, but standardized products that consumers will pick up and make up by themselves.

- Reduction of discontinuities - a pattern of trends that has the potential to dramatically change the competition rules or structures of the industry, opening up new essential opportunities. For finding discontinuities it is necessary to look where they do not see competitors; to predict the second and third degree consequences; to understand the trends in their historical context and to look for links between the trends.

- Management of skills and strategic benefits - the existing business is not only seen through the production and sale of products and services, but also as a portfolios of competencies and strategic benefits that can be strengthened and generate new opportunities for development.
Understanding unspoken needs - overcoming the needs that consumers do not even know they have. As a useful technique here can help direct observation, recording of consumer experience and analogies from other industries.

Changes in the environment impose change on the approach of operation and the manner of behavior of the enterprises. In order to achieve long-term results and to come up with new ideas it is necessary to observe the activities, processes, events, etc. from different aspects, but also to take new steps in the past work. For a long time, companies have used closed innovations as a successful way of working. But today, the innovation environment has changed, ideas are rapidly expanding, the product life cycle is shorter, the need for cooperation is greater and more. Therefore number of enterprises focuses on an open, innovative approach, they use both open and closed innovations in order to have a greater competitive position.

Chesbrough [6] defines the open innovation as the use of purposive inflows and outflows of knowledge in order to accelerate internal innovations and expand the markets for external use of innovations. He sees open innovation from two aspects. One is ‘from the outside’ aspect, where external ideas and technologies are brought into the company's own innovative process. This is the most commonly recognized feature of open innovation. Another, more rarely recognized aspect, is ‘to the inside’, where non-insufficiently utilized ideas and technologies in the enterprise are allowed to go out to be incorporated into other innovation processes.

The innovation and networking approach (external links) represents the view that SMEs using external links or networks can have access to resources that are not available for them. Small enterprises are often at a disadvantage compared to large ones due to their lack of access to various resources, including information, knowledge and expertise. One solution to these problems is networks that are created through formal and informal relationships. Small enterprises have numerous networking benefits, such as: innovation opportunities, lower transaction costs, cost sharing, greater efficiency in production, economies of scale, greater access to information, and more[19].

Small and medium-sized enterprises have established reasons for the formation of different partnerships in order to develop and commercialize new business ideas. Innovation in small and medium-sized enterprises is obstructed by a lack of financial resources, poor prospects for recruiting specialized workers, and small portfolios of innovations, so that innovation-related risks can not be spread. SMEs must rely on their innovation networks to find the necessary resources for innovations.
Today, open, innovative activities are more important than ever due to technological complexity and shortening of product life cycle. Characteristic barriers to innovations in SMEs are financial limitations, competitors that quickly replicate innovation, lack of intellectual property protection, absence of complementary assets such as production capacities and access to distribution channels, poorly developed design and production skills, and insufficiently developed technological and managerial skills for commercialization. As a result, it is not surprising that small companies are trying to practice open innovations in one way or another [23].

Some researches [7] emphasize the three key reasons for developing open innovations. The first reason is the business environment that drives businesses to look for alternative strategies to deal with them. The second reason is seen in the potential benefits that are expected from open innovations. And the third reason is changing the thinking about open innovations. A Danish survey of 331 small and medium-sized enterprises confirmed that the main tool to overcome syndromes that hinder open innovations are trainings for them. Through trainings, conditions for open innovations can be created, employees will increase their knowledge about the same and soon will support the Open Innovation Application. Studies [7] of Buchhart.et.al.from 2014 confirm that the adoption of incoming open innovations is increasing with specialized trainings for innovation and creativity. Also, the acceptance of these innovations is also increased by holding trainings for leadership of high potential employees. The open innovation approach requires new processes, new considerations, new structures in the enterprise, and a leader who can lead such changes.

The roots of external connections originated long time ago, Trott [21] in his book emphasized that in 1959 Carter and Williams showed that the key characteristic of technically progressive enterprises was their quality of incoming information. In addition, Allen in 1960 affirmed the importance of good external connections for acquiring information and knowledge outside of the organization. Trott also mentions the innovation model that Rothwell and Zegveld advocated in 1982 that emphasized the need for external links within the innovation process.

There are many reasons for collaboration and networking among organizations, including efficiency and flexibility, market knowledge, technology, and so on. Collaboration can be in various forms such as: simple licensing agreements, strategic alliances, joint investments, networks, and so on. The network can be made up of many positions or nodes that are occupied by individuals, enterprises, business communities, universities, governments, consumers, or other participants and links and interactions between them. Innovative networks can occur at every level: worldwide,
national, regional, sectoral, organizational or individual. The position an organization occupies in the network is of great strategic importance and reflects its power and influence on the network [3].

Numerous benefits arise from membership in innovation networks, access to diverse and complementary knowledge, access to new markets, the acquisition of complementary skills and tools, the emergence of new ideas and creative combinations, the adoption of shared knowledge, the distribution of risk, and so on. Among the most important approaches that provide open collective innovation include: innovation competitions, innovation markets, innovation communities, innovation tools (confiscation, design, software for their own ideas, etc.), innovation technology and more [3]. A typical example [12] for applying the open innovation model is Procter & Gamble company. In 2001, Alan J. Laffley's director of Procter and Gamble opened the company's door to innovators who were not on the payroll of the company, setting the goal for its organization to receive at least 50 percent of the total number of innovations from sources outside the company. Thanks to the new organizational model ‘Connect and Develop’, the company has moved faster with new products on the market that have been developed partially or completely outside the company.

OECD empirical studies [17] confirmed that cooperating firms are more innovative than those who do not cooperate regardless of their size (OECD, 2001a). But they also have shown that the inclination to engage in knowledge-based networks decreases according the size of the enterprise. This is also a reflection and part of the explanation of the fact that the innovation of many SMEs is limited.

Considering the numerous benefits arising from networking and open innovations, SMEs should accept and advocate for them in today's turbulent business environment if they want to achieve business success in a long term.

ACCESS TO FINANCE FOR INNOVATIVE SMALL AND MEDIUM ENTERPRISES IN REPUBLIC OF MACEDONIA

The choice of appropriate financial instruments is one of the key decisions that every company needs to make in order to achieve appropriate growth and development. Finances play a significant role in the innovation process because they allow companies to conduct researches and use the most modern technologies crucial to achieving higher levels of innovation. The decision on how to finance business activities, investments, growth and development of companies has strategic importance to the management of each company. Due to the greater degree of risk that is present in the SME
sector and start up companies, the greatest challenge faced by entrepreneurs is providing financial resources, especially in the early stages of business development.

In Republic of Macedonia, small and medium-sized enterprises face with the challenge of providing financial resources, both in the early stages of their establishment and in the efforts to improve their competitiveness. One of the ways for greater competitiveness is the promotion of innovation in the business processes of the company, or in market differentiation.

According to a survey conducted by the European Commission [10], the biggest challenge faced by Macedonian SMEs is the improvement of research and innovation skills in order to increase the productivity and competitiveness of companies. The data from the survey show that despite the high percentage of SMEs that introduce manufacturing, process, marketing or organizational innovations, in-house innovations are below the EU average.

The percentage of internal innovations in the Macedonian SMEs is 11.3%, compared to the EU average of 28.68%. Republic of Macedonia, in terms of skills and innovations, is also below the EU average. Namely, the percentage of people possessing specialized information and communication (ICT) skills is 11.11%, which is below the EU average of 19.95%. This situation is due to the fact that only 11.13% of Macedonian companies provide trainings for ICT skills for their employees, which is well below the EU average (20.08%).

The access to the appropriate financial instruments of innovative companies allows them to transform their ideas into innovation. The financial instruments available to SMEs can be divided into internal and external sources of funding. Below is an analysis of the various types of external sources of financing available to entrepreneurs in Republic of Macedonia for realizing their innovative business ideas.

**BANK LOANS**

Commercial banks are the largest financial intermediaries on the Macedonian financial market that provide the largest number and different types of loans for small and medium enterprises. Macedonian banks prefer to approve low-risk loans to stable enterprises, rather than high-risk start-ups and innovative businesses. Banks will grant credit to start-up businesses only after they have been assured that the business will generate enough cash inflows to return the debt [4]. Macedonian banks enriched the offer of loans
from their own funds, with numerous favorable credit lines as a result of the cooperation of banks with other financial institutions.

In the report of the European Central Bank [11] are presented the results of a survey on access to finances for EU enterprises. The survey was conducted in the period from October 2016 to March 2017. The results of this survey show that banking products remain the most relevant source of financing for SMEs compared with equity (10%), debt security (3%) and factoring (9%). In the period from October 2016 to March 2017, 54% of the surveyed SMEs in the EU used bank overdrafts, bank loans were used by 51% of SMEs, leasing by 46% from SMEs, while 31% said that they used trade credits. About 25% of SMEs used their own resources to finance their activities, while loans from family, friends or related companies represented a potential source of financing for 20% of SMEs [11].

Banking instruments are the most widely used source of financing for Macedonian small and medium-sized enterprises, above all, because these enterprises, on the one hand, have limited or do not have access to the capital markets. On the other hand, entrepreneurs feel more confident when they are talking to bank officials in the process of applying for loans.

These reasons are also contained in the report of the European Investment Bank [8], which points to the fact that bank lendings will continue to occupy most of the demand for SMEs, especially in the agriculture and tourism sectors. The demand for other types of financial instruments is low, primarily as a result of the fact that entrepreneurs are not informed about their availability and/or benefits. However, the demand for risk capital is high, especially among start up companies in the IT sector, which are in fact the most risky for the financing. It is emphasized that more than 98% of SMEs financing consists of bank loans.

In addition the paper will focus on the analysis of alternative sources of financing because our previous analyzes have shown that the reality in Republic of Macedonia is such that SMEs, mainly rely on bank loans and continue to be dependent on banks in their external financing [4]. The goal is to increase the awareness of entrepreneurs about which financial resources are available to finance businesses and encourage their technological and investment development.

ALTERNATIVE SOURCES FOR FINANCING MACEDONIAN SMALL AND MEDIUM ENTERPRISES

In the recent years, new types of financial sources have emerged that are available to Macedonian entrepreneurs, including: Business Angels, Venture Capital, investment and consulting agencies and funds, EU programs, the
European Bank for Reconstruction and Development, as well as financing for development of SMEs available from other international financial institutions and governments².

In this context, we will keep our focus on crowd financing, factoring, the WB EDIF (Western Balkans Enterprise Development & Innovation Facility) as alternative financial sources that Macedonian SMEs can use to finance their innovative business projects.

Crowdfunding is an alternative way to fund innovative ideas so that financial means are collected by a large number of people through an online platform [22].³ This author makes a division of financing through a group of two basic models: The first model is financing through an investment platform where investors have a monetary benefit.

The second model is financing based on awards and donations. This type of financing does not offer monetary benefits to investors. In this case, investors show interest in coming to a product and/or supporting a certain innovative idea. Kirby, E and Worner, E [15] analyze the benefits arising from financing through a group:

- Provide easier access to finances for innovative SMEs, which are drivers of the economy. Financing through a group plays a significant role in fostering economic growth in each country.
- They fill the gap created by the commercial banks. In fact, they create opportunities for the necessary finances to come to businesses that have been assessed as risky and insolvent by banks.
- It allows to interested investors to make further diversify of their portfolios.
- Platforms for evaluating the creditworthiness of applicants are cost-effective compared to commercial banks. This is due to the fact that the

credit assessment is not carried out by bank officers, but this is done using appropriate algorithms.

Prinsa, K [20] identifies the risks of this type of financing, among which are the following:

- Risk of collapse of the Internet platform for financing through a group that may result in 100% loss of invested funds.
- Liquidity risk arises from the possibility that one of the parties in the financial operations can not provide the necessary liquidity in order to undertake its obligations.
- The risk of cyberattacks is present because of the electronic nature of the platform used for this type of financing.

In addition to the mentioned risks, joint financing includes additional risks including: solvency risk, market risk, operational risk, lack of coordination and regulation and credit risk.

The first platform for financing through a group established in Republic of Macedonia is ‘Let's Fund it’[^1], whose goal is for investors to financially support innovative projects on the platform. This platform enables young entrepreneurs to come up with the necessary financial resources to realize their innovative ideas.

Factoring - is a financial technique by which a company sells its claims from buyers to a specialized financial intermediary (factor) at a reduced value, and then the factor charges the debtors claims. Among the advantages of factoring for companies we can mention the following: improved liquidity, balance between short-term claims and short-term liabilities, opportunity to expand the business, increase the creditworthiness and solvency of companies. Macedonian Bank for Development Promotion, NLB Tutunska Banka AD Skopje, Financial Company ‘EURO MK’ – DOO Skopje and Financial factoring company ‘Faktor Trust’ - DOOEL Skopje are institutions that offer this service to Macedonian companies. To increase the interest of SMEs is necessary for them to become familiar with the

[^1]: Available at: [https://letsfundit.mk](https://letsfundit.mk), last access at May 2018.
advantages of factoring and the opportunities offered to them by the financial institutions in this type of financing.

The Western Balkans Enterprise Development & Innovation Facility (WB EDIF) [24] - financed by the EU, aims to facilitate the access to finances for Western Balkan SMEs. The fund focuses on:
- Increasing the participation of participants from the private sector,
- Meeting the needs of the SME market in the Western Balkan countries,
- Building local venture capital market,
- Extending the scope of financing for SMEs,
- Increasing the available financial assets and financial instruments.

WB EDIF is designed to offer complementary financial instruments that will meet the needs of SMEs in the Western Balkan countries. The fund (instrument) consists of four different pillars:
- First pillar: Ownership financing of SMEs. Entrepreneurial Innovation Fund - supports innovative SMEs from countries in the Western Balkan through the provision of capital. It provides support from the initial to the developmental stage of businesses. The company's expansion fund supports the further expansion of already established SMEs with high developmental growth potential.
- Second pillar: SMEs loan guarantees – Guarantees are provided to financial intermediaries in order to stimulate, i.e. to offer new loans intended for SMEs, which would improve the access of SMEs to bank loans.
- Third pillar: Lending to SMEs – WB EDIF creates a lending pillar in order to offer new financial instruments electronically.
- The fourth pillar offers support services in several areas with measures such as: policy measures, financial instruments, and direct support to SMEs. These services are provided by the government of the users of the countries in order to create a regulatory environment that will be benefit for the innovative SMEs in the region.

The above mentioned financial sources are among existing funds through which Macedonian entrepreneurs can obtain additional capital in order to start a new business or to gain competitive advantage and improve their position in the marketplace.

CONCLUSION

The rapid changes in the environment, the process of globalization, the development of technology, increased competition are forcing small and medium-sized enterprises to search for new, innovative and flexible ways of
work. SMEs to maintain or improve their competitive position on the market must think about reducing costs, introducing new products/services, improving business skills and capabilities, for their greater networking and so on.

Small and medium-sized enterprises should think about systemic incorporation of innovation in their business activities. Starting from the limited resources of small and medium enterprises, their challenge should be networking, the establishment of external links and the application of open innovation systems, which give great benefits for these enterprises. In order to increase the awareness of the employees about this type of work and faster acceptance of it, it is necessary their education, that is, training for increasing creativity and innovation in thinking and working.

One of the key factors for establishing, survival, growth and development of SMEs in Republic of Macedonia is the access to finances. Two entities, financial institutions that provide financial resources and innovative SMEs who are beneficiaries of these funds participate in the process of securing finances. Both entities face with difficulties in assessing the projects and guaranteeing the return of funds on the one hand, as well as the fear of rejection and the risk of implementing the proposed projects, on the other side.

The banking sector in Republic of Macedonia offers a rich offer of external financing sources for the SME business. The survey in this paper showed that bank loans are the most widely used financial instruments of the total banking offer. This situation is due to the fact that the beneficiaries of these sources are not informed and educated about the existence of different types of alternative sources of financing that are offered by other international financial institutions and governments, which occupy a significant place in innovative enterprises and support many innovative projects.

In order to facilitate the access to finances needed to support innovative SME projects in Republic of Macedonia, it is necessary to organize seminars and trainings for SME representatives to raise the level of information and know how to apply for financial resources up to domestic and international financial institutions, especially for alternative sources of financing.

LITERATURE


