

PERCEPTION OF MANAGEMENT INNOVATION AS A KEY FACTOR IN ACHIEVING COMPETITIVE ADVANTAGE IN COMPANIES IN BOSNIA AND HERZEGOVINA

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Abstract

Every company strives to achieve competitive advantage, which is why managers constantly seek new ways of reaching that goal. One of the best ways to gain competitive advantage is through innovation. In theory, innovation can be classified in numerous ways. Some of them include management innovation, which can simply be defined as the process of innovating what managers do. Despite the power of management innovation to propel a company to the level of excellence no other company can compete with, this research has showed that managers in Bosnia and Herzegovina (BiH) are not fully aware of its importance.

Keywords: management innovation, competitive advantage, Bosnia and Herzegovina

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1. Introduction

The term "innovation" is derived from the Latin word "innovare", which describes a certain novelty, renewal, or change, as defined by Selimović and Simić (2017, p. 258). There is no singular, universal definition of the term. Instead, the definition has evolved over time through various authors giving their own interpretations, each one adding a new dimension to the word's meaning.

One of the first to define innovation was Schumpeter, describing it as carrying out new combinations of production means. In 1934, he took a more economic approach and defined it as the creation of a new product, the creation of new methods of production, opening new markets and developing new market structures, and the introduction of new

materials, sources, and other inputs used in the production process (Bessant & Tidd, 2015, p. 11). Amabile *et al.* (1996, p. 1155) consider innovation to be an implementation of a creative idea within an organization.

Garcia and Calantone (2002, p. 112) simply define it as an activity that is new or different compared to the existing ones.

Similar to the fact that there is no universal definition of innovation, theoretical and empirical research implies that there is also no such thing as a universal typology of innovation within a company. As a result, there are a lot of different approaches when it comes to the classification of innovation.

Most of them include product/service innovation, while other types are sometimes simply labeled differently, and sometimes they refer to a different area of innovation altogether (Zakić *et al.*, 2009, p. 74).

According to Urbancova (2013, p. 83), innovation represents a product, process and organizational changes that do not necessarily originate from new scientific discoveries, but may arise from a combination of already existing technologies and their application in a new context.

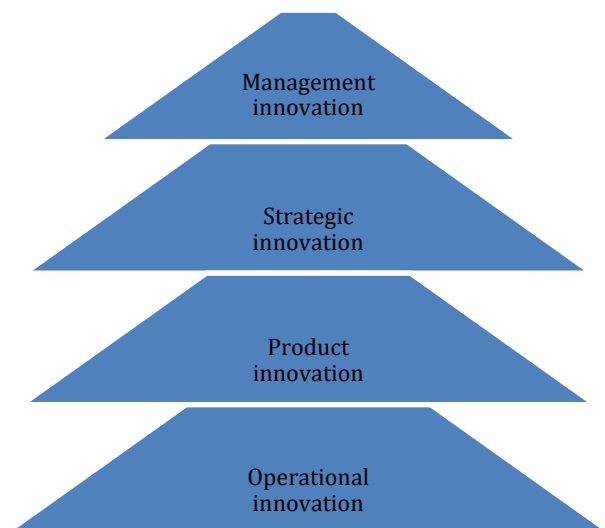
Innovation is the result of employees' creativity in an organization and must be always targeted at customers and bring added value.

Hamel (2009, p. 33) presented an innovation pyramid which includes four types of innovation, as showed on Graph 1.

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Graph 1. *The innovation pyramid*
Source: Hamel, 2009, p. 32

At the base of the pyramid lies operational innovation, and it is suggested that operational excellence is key in a world of highly intense competition. However, when not accompanied by other types of innovation, operational innovation rarely leads to crucial and long-term advantages, due to a few reasons:

- The first reason lies in the fact that operational superiority frequently depends on the quality of the IT infrastructure within a company. Considering how fast the information technology evolves, such an advantage can be very easily emulated.
- The second reason relates to the global expansion of outsourcing and offshoring, where service vendors often cater to several companies within a single industry. As a result, the management of the competing companies within a certain segment is leveled out, which makes it harder to achieve competitive advantage.
- The third reason why operational innovation appears to be less valuable than the other ones is that the best practices of highly successful companies are often transferred to companies that are not nearly as successful.

The following innovation type is product innovation. While it is true that an exceptional product can help a certain company become a market leader in a short period of time, without enforceable patent protection, most products quickly get copied. Likewise, rapid

technological advancements have made it possible for new companies to easily emerge and effortlessly overtake the existing ones. Therefore, revolutionary, breakthrough products rarely secure long-lasting leadership within the industry.

The third row of the pyramid includes strategic innovation. This type of innovation entails brave new business models from which current industry leaders need to defend. Despite the fact that a new business model can drastically improve an innovator's market value, it is still easier to decode and respond to, compared to an unconventional management system, situated at the very top of the innovation pyramid.

When it comes to vast and complicated problems, management innovation has the unique ability to create advantages that are hard to replicate. The difficulty in changing a manager's conviction on a certain subject offers the simplest explanation for the uniqueness of this type of innovation. For example, most people would find it a lot easier to change their fashion sense rather than their religious beliefs. In the same way, managers would find it less challenging to give credit to a business model that changes a company's competitive position in the market, rather than let go of their core values in regard to management (Hamel, 2009, p. 33).

Apart from the listed examples, notable management innovations, according to Hamel (2006, p. 21), also include the following: cost accounting and variance analysis, commercial research laboratories, ROI analysis and capital budgeting, brand management, large-scale project management, divisionalization, leadership development, decentralization, formalized strategic analysis, employee-driven problem solving, knowledge management, business process reengineering, account management, employee stock ownership plans, open source development, internal markets, etc. On the other hand, competitive advantage is a phenomenon that both theoreticians and management practitioners have been putting their main focus on for a very long time. It is an indicator of a company's overall business success, which can be affected by a number of internal and external factors. Such factors

include the market, competition, government policies, country's development and infrastructure, as well as company's material and non-material resources, employees' competence, skills and attitudes, company values and policies, management attitudes, and so forth.

Competitive advantage lies at the core of business operations in competitive markets and, if sustainable, represents the most significant requirement for attaining long-term, above-average results. It serves as the foundation for achieving business results and essentially, comes from the added value that the company is capable of creating for its customers.

Added value can be acquired in two ways, either by offering equal value at a lower price, or by offering unique value which nullifies the high price point. These two basic forms of competitive advantage, along with the company's efforts to realize them through various activities, lead to three generic strategies for achieving above-average results in a certain economic segment: cost leadership, differentiation, and focus strategy. Each generic strategy entails an entirely different approach to generating competitive advantage, i.e., a combination of choices for a certain type of competitive advantage to which it aspires, and the extent of the strategic goal within which the given competitive advantage needs to be accomplished (Porter, 1998, pp. 3-11). These three generic strategies are showed in Table 1.

Table 1. *Three generic strategies*

Competitive scope	Competitive advantage		
		Lower costs	Differentiation
Broad target	Cost leadership	Differentiation	
Narrow target	Cost focus	Differentiation focus	

Source: Porter, 1998, p. 12.

Porter (1998, p. 12) states that in order to achieve competitive advantage, a company has to make a choice in regard to the type of competitive advantage it wants to achieve and the scope within which it wants to achieve it. Trying to apply many different strategies all at

once can lead to subpar results and poor performance.

According to Vrdoljak and Tolušić (2012, p. 384), cost leadership appears to be the clearest of the three generic strategies, seeing that it is a strategy in which a company strives to be the manufacturer with the lowest costs in its industry. A company that wishes to become a cost leader must have a broad scope of activities, include many of the industry's segments, and seek to utilize every source of cost advantage. Most commonly, such companies sell no-frills products and rely specifically on the scale of production. However, even a company in the position of a cost leader cannot ignore the basic elements of differentiation, seeing that the customer must deem its product comparable to the one of its competitors. As a result, the company must create "parity" or "proximity" in regard to its competitors. Such action requires offering products that are identical to competing ones, or different, but equally appreciated by the customers (Porter, 1998, pp. 12-13).

Once achieved, competitive advantage does not guarantee that a company will be successful in the long run, which makes building competitive advantage a continuous process. Competitive advantage can be based on favorable circumstances in the industry environment and on the company's specific strengths and capabilities. Seeing that the favorable circumstances in the industry environment are also available to the competition, it is evident that such advantages cannot constitute the basis for achieving long-term success.

Consequently, building long-term, sustainable competitive advantage is possible only if based on core competence. Core competence refers to a combination of skills and resources, both tangible and intangible, which make it possible for a company to acquire and maintain competitive advantage. Core competence serves as a basis for defining and selecting the correct building block of competitive advantage. There are four building blocks of competitive advantage, namely efficiency, quality, innovation, and customer responsiveness (Rahimić, 2006, pp. 251-252). In the past, it was sufficient for a company to be better, faster, to produce cheaper products or

to produce in greater quantities than its competitors in order to have competitive advantage. However, modern companies also have to be innovative in order to sustain or improve their competitive position in domestic and international markets. As a result, innovation also represents one of the building blocks of competitive advantage. Innovative companies are the ones that are able to respond to sudden changes in the industry environment, as well as induce changes themselves (Rahimić, 2006, p. 275).

The aim of this research paper is twofold. First, the goal of the theoretical framework is to recapitulate the relevant theoretical knowledge regarding competitive advantage on the one hand, and innovation in general, typology of innovation, and management innovation on the other, as well as to discuss the impact of management innovation on competitive advantage of a company. Second, the empirical aspect of this paper has the goal to analyze how open Bosnian-Herzegovinian companies and the public are towards management innovation and what is their perception of its impact on competitive advantage of a company.

2. Previous research

There are many investigations in the area of management innovation and competitive advantage. Urbancova (2013, pp. 87-88) showed that innovation in the current competitive environment is important in 96% of the private sector and in 90% of public sector organizations. Only 3 organizations in private (4%) and 3 in public sectors (10%) do not consider innovation important. The research was conducted via a questionnaire in 109 organizations in private and public sectors in the Czech Republic, according to the Czech Statistical Office in the period from 10/2011 to 06/2012.

Dereli (2015, p. 1369) conducted a research on the topic of innovation management in global competition and competitive advantage. This article states that there are principles for organizations to obtain competitive advantage in the global competition. First of all, all the organizations' values systems have to be managed. Besides that, the resources need to

be constantly developed and researched, in order for innovation and change to be sustainable. In order to sustain competitive advantage, global strategies should be formulated and implemented. For innovation management, there must be integrity and coherence in many areas. Factors such as organization culture, existing technology, human factor, team management, productivity, and research and development, should be considered synchronously. Technology is the main driver for change and innovation. Finally, the role of companies acting in global markets is highly important for achieving competitive advantage. To achieve competitive advantage in global markets today, companies need innovative skills in creating, producing, marketing, and managing. Companies should develop and implement strategies to develop and maintain innovative skills.

Lee and Yoo (2019, pp. 10-11) investigated how open innovation leads to competitive advantage. The investigation was conducted in the Korean industry in 2014 by the Korean Innovation Survey (KIS). The KIS is a nationwide survey, recurring every 2 to 3 years, which addresses the innovation activities and financial results for all the registered firms. Product innovation performance included the level of the new product's novelty, the speed of the new product development, the number of new products introduced to the market, and the number of new products that are first-to-market. On the other side, competitive advantage was measured by two indicators: innovative products' sales ratio and innovative products' sales per employee. The results of the investigation showed that product innovation performance will positively affect competitive advantage.

Nuryakin (2018, pp. 8-9) investigated the relationship between competitive advantage and product innovation as a key factor of success in SMEs in Indonesia.

The quantitative approach was used in the investigation, with the total sample of 200 respondents, using purposive sampling. The respondents were the owners or managers of Batik SMEs entrepreneurs in Central Java province. The results showed that product

innovation significantly affects competitive advantage. Specifically, the results of regression between product innovation and competitive advantage showed a t-value 4.585 with significance value ($p=0,00$; $p<0,05$).

Hosseini *et al.* (2018, pp. 7-10) investigated the impact of competitive advantage on new product development strategy in the Toos Nirro technical firm, a leading company in its industry in Iran. The statistical population included 50 experts and top managers at the Toos Nirro technical firm, ranging in age from 25 to 60. Competitive advantage was measured by four factors, efficiency, quality, innovation, and accountability. The hypotheses were tested with the Kolmogorov-Smirnov and parametric tests. The results indicated that the competitive advantage factors, including those previously mentioned, were positively and significantly related to new product development ($p<0.05$).

After showing previous research in innovation and competitive advantage areas, in the next part of this paper we will present the results of the investigation.

3. Research methodology

Innovation in management principles and processes can bring long-term advantage and create dramatic shifts in the competitive position. Nonetheless, managers in companies in Bosnia and Herzegovina (BiH) have yet to realize how tremendously important this type of innovation actually is.

This research was conducted in BiH using a sample of 50 companies from the private sector operating in various industries. Interviews were held with one top or middle manager from each company by using the Likert scale (1-5) questionnaire.

The SPSS statistical software was applied to analyze the collected data. Cronbach alfa test was 0.78.

The structure of the survey respondents is presented in Table 2.

Table 2. *Structure of survey respondents*

Gender	Age group (years)	Education	Net Monthly Income (BAM)
Male	20-29	Bachelor's degree	Under 1000
68%	30%	56%	6%
	30-39		1001-2000
	44%		60%
Female	40-49	Master's degree	2001-3000
32%	16%	44%	24%
	50-59		3001-4000
	10%		4%
			4001-5000
6%			

Source: Authors

As mentioned in Table 2, the survey covered 68% of men and 32% of women. The largest number of men (44%) surveyed were between the ages of 30-39. Regarding the level of education, 56% of the respondents have a Bachelor's degree, while 44% have a Master's degree. Considering the level of income, 60% of the respondents earn between 1001-2000 convertible marks.

After presenting descriptive research statistics, the following section of the paper will show how much the respondents understand the concepts of innovation, innovativeness, and management innovation. The results of the research are showed in Table 3.

Table 3. *Percentage of understanding the general terms*

Terms	Percentage of understanding the terms (%)
Innovation	98
Innovativeness	98
Management innovation	82
Open innovation	66

Source: Authors

Table 3 shows that the first part of the questionnaire was aimed at investigating the general understanding and familiarity with the key terms used in management innovation. It was concluded that the majority of the respondents have a much better understanding of the terms innovation (98%) and innovativeness (98%) rather than

management innovation (82%) and open innovation (66%).

Further research was set to examine the managers' perception of the impact that innovation has on competitive advantage and how important innovation is for their companies. The results of the investigation are showed in Table 4.

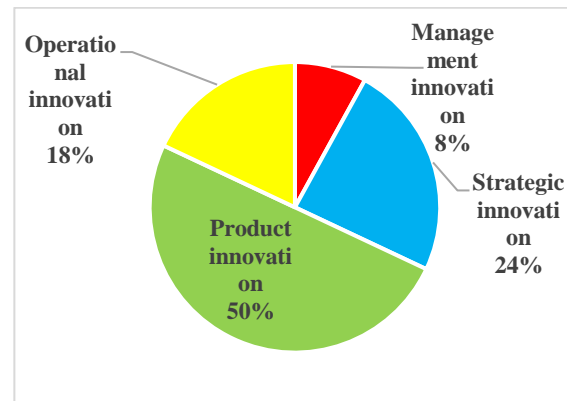
Table 4. *Innovativeness and competitive advantage (the respondents' answers)*

Claim	Percent (%)
Innovativeness has a positive impact on competitive advantage	88
Importance of innovation for the company	94
Including all employees in innovation	90
Encouraging all employees in creating innovations	62
The company's openness to innovation in all segments of business	94

Source: Authors

As showed in Table 4, the responses given were either positive or neutral. Most of the respondents (88%) consider innovativeness to be a positive influence on competitive advantage, while 94% of the managers consider innovation to be of great importance for the company. The respondents also expressed quite a firm stance when asked whose responsibility innovativeness is. Over 90% of the managers believe that not only the managers, but every employee, from top to bottom, needs to be involved in innovation. However, despite voicing such beliefs, a much smaller percentage of the respondents (62%) stated that every employee in their respective company is encouraged to be innovative. When inquired if companies should be open to innovations in every one of their segments, 94% of the managers responded affirmatively. This was also confirmed by the answers given while evaluating openness towards the idea of management innovation. Besides, the majority of the managers (90%) acknowledged that their work methods could be subjected to innovation and believe that it would improve the way the business operates. Moreover, most

of the managers insisted they would be ready to accept the idea of management innovation if such innovation would positively affect their company's success. They would particularly be willing to accept an idea coming from an expert (94%), as well as an idea coming from an employee who occupies a lower-level position in the corporate hierarchy (86%).



Graph 2. *Perception of the type of innovation with the biggest impact on competitive advantage of a company*

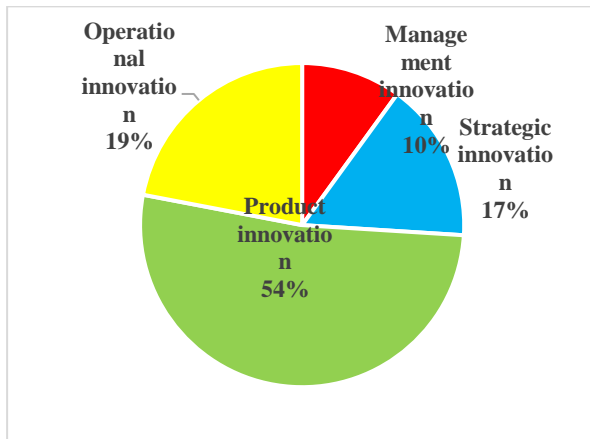
Source: Authors

Graph 2 illustrates in percentages which innovation types were selected by the managers as the most impactful in terms of competitive advantage. Despite being open to potentially apply management innovation practices, it is a defeating fact that the smallest number of the respondents considers management innovation to be the most impactful innovation type, both in general and in regard to their company.

From Graph 2 we see that, according to the general opinion of the respondents, product innovation has the greatest impact (50%) on competitive advantage. The reason is that the product is offered directly to customers who demand the growth of the company's revenue and the growth of the company's competitive advantage by increasing the company's market share. Furthermore, 24% of the respondents see the greatest impact in strategic innovation, 18% in operational innovation, and 8% in management innovation.

After examining the general opinion of the respondents, this research also examined the opinion of the respondents on the level of impact of innovation on their respective

companies' performance. The results of the research are showed in Graph 3.



Graph 3. Perception of the type of innovation with the biggest impact on the company's performance

Source: Authors

As seen in Graph 3, the results of the survey showed that the largest number of the respondents (54%) answered that product innovation that directly increases customer market share has the greatest impact on increasing their companies' performance.

After product innovation, for 19% of the respondents, it is operational innovation that has the greatest impact on their companies' performance, for 17% of them it is strategic innovation, and for 10% it is management innovation.

When this is compared with the results of the research showed in Graph 2, it can be concluded that product innovation is the respondents' first choice when it comes to the impact on the company's performance.

As for the second choice, there is a difference between the charts when it comes to strategic and operational innovation and their impact on the company's performance.

However, on both charts, according to the respondents, management innovation has the smallest impact on the company's performance. In this paper the empirical investigation was conducted also by applying one – sample t - test with the aim of establishing if innovation affects competitive advantage of the investigated companies.

The results of the conducted investigation are given in Table 5.

Table 5. One – sample t -test

Claim	Test Value = 4.6					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
I consider that innovation positive impact on a competitive advantage	-1.000	49	0.322	-0.100	-0.30	0.10

Source: Authors

As already mentioned, by applying a one sample t-test, it was tested whether the average rating of 4.6 can be used for all 50 investigated companies. This result of investigation confirmed the statistical significance test of 0.322 which is greater from 5%. It means that the average rating of 4.6 can be used for all 50 investigated companies in BiH which brings us to the conclusion that innovation has a positive impact on competitive advantage.

5. Discussion and conclusion

Even though management innovation is both, in theory and in practice, globally regarded as the best innovation type for achieving competitive advantage, its importance is not fully recognized in BiH. This is evident in the very small number of local scientific papers published in this field of research.

Additionally, this research has revealed that managers, despite being familiar with management innovation, do not deem it as any more important than other types of innovation. On the contrary, the majority believe that other innovation types have a greater positive impact on competitive advantage.

The results further indicate that the managers have a positive outlook on potentially applying management innovation practices. According

to the present research, they are open to new ideas when it comes to innovating their work regardless of where they come from, if such ideas would make the business more successful.

With reference to the outlined theoretical knowledge, previous empirical observations, and the conducted research, it can be concluded that the topic of management innovation in BiH is very intriguing from both theoretical and practical aspects. Future activities in this field should be directed towards familiarizing the BiH society with the immense impact that management innovation has on competitive advantage. The purpose of such activities should be to raise public awareness on the importance of management innovation, while specifically focusing on managers in BiH companies.

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