ACHIEVING COMPETITIVE ADVANTAGE THROUGH INNOVATIVENESS

Jasmina Pavlin\textsuperscript{a}, Matej Černe\textsuperscript{b}

\textsuperscript{a}University of Maribor, Faculty of Organizational Sciences, \textsuperscript{b}University of Ljubljana Center of Excellence for Biosensors, Instrumentation and Process control

Abstract: Innovativeness is becoming an increasingly important factor in the development of company’s competitive advantage. The purpose of this article is to present the role played by innovativeness in Slovenian companies. To this end, we conducted a survey on 68 medium and large Slovenian companies. The results showed that both means of enhancing innovativeness, investments in innovation and promoting employee innovativeness, lead to improved competitive advantage of Slovenian companies.

Keywords: innovativeness, competitive advantage, promoting employee innovativeness, investments in innovation

1. Introduction

Many authors suggest that innovativeness is directly or indirectly linked to achieving sustainable competitive advantage [DENTON, 1999; COTTAM, ENSOR, BAND, 2001; KUCZMARSKI, 2003; HUMPHREYS, MCADAM, LECKEY, 2005; DIMOVSKI, PENER, 2008; MILLER, LE BRETON MILLER, SCHOLNICK, 2008; BASTIČ, LESKOVAR-ŠPACAPAN, 2006; JOHANNESSEN, OLSSEN, 2009; LIAO, PRICE, 2010]. Innovativeness is one key means for companies to achieve and sustain an appropriate level of profit [FINK BABIČ, 2006] and has gained the vast importance among senior managers in the last couple of years [COTTAM, ENSOR, BAND, 2001]. The concerns companies have are either how to fit innovativeness into their business or the lack of skills to encourage and foster innovativeness in order to achieve sustainable competitive advantage.

Slovenian economy was not generally thought to be very innovative. The culture of innovativeness is not yet fully developed and the Slovenian economy is based predominantly on traditional industries [FINK BABIČ, 2006]. The purpose of this paper is to examine if and to what extend that assumption has recently changed and learn about the importance of innovativeness in Slovenian economy. This paper examines the role that innovativeness plays in Slovenian middle and large sized companies and how innovativeness influences the company’s competitive advantage.

The present work is organized in three sections. In the first place, we proceed to the review of literature referred to the discussed subjects. For this purpose, we first look into means companies have to enhance innovativeness. Second, we examine different organizational innovative efforts; literature suggests investing in innovation and promoting employee innovativeness as two groups of companies' efforts to stimulate innovativeness; further we examine relationship between innovativeness and competitive advantage and as last we review previous data and research about innovativeness in Slovenian economy. Part two presents research hypotheses, methodological framework for the study and provides results of data analysis. Last part of this paper is the discussion of findings from theoretical and practical standpoints and conclusion with a summary of main findings and directions for future research together with the limitations of the study.
2. Theoretical platform

2.1. Innovation and its facilitating

Innovation is defined as the process of discovery and development that creates new products, production processes, organizations, technologies, institutional or systemic arrangements [VAN KLEEF, ROOME, 2007]. It is a process of discovery, learning and application of new technologies and techniques from many sources [TANG, 2006]. Innovation is the first successful application of a product or process [CUMMING, 1998]. It is a process of turning knowledge into economic activity [TANG, 2006]. There are different types of innovation that can be distinguished in the literature [SONG, DI BENEDETTO, ZHAO, 1999; MCFADZEAN, O’LOUGHLIN, SHAW, 2005; OKE, 2007]: incremental, radical, technological, process, product, organizational, operational, managerial, social, or institutional innovation.

Massa and Testa [2008] warn about different perspectives concerning innovation by three main innovation stakeholders: entrepreneurs, academics and policy makers. Haggman [2009] as well as Humphreys, McAdam and Leckey [2005] conclude that the perception of innovativeness can be subjective. This is relevant for our article because of the similar perception based measuring of innovativeness we will use in our survey. The perspectives differ all from the definition of innovation to effective means of promoting it [MCFADZEAN, O’LOUGHLIN, SHAW, 2005]. Perceived attributes of innovation are related to actor characteristics [MASSA, TESTA, 2008].

Innovation is often a result of interaction of various subjects, technologies, people and organizations [MITRA, 2000]. In order to understand innovation processes one must take into account all the important factors that influence innovating. The innovative capabilities of a company may be enlarged through co-production of knowledge with partners at all levels and strengthen their competence to innovate by developing the capabilities of employees within the organization [VAN KLEEF, EOOME, 2007]. Similar, Hausman [2005] argues that innovation is a social process and that the effects of other firms or individuals on innovativeness are important. Network effects reflect the capability of other firms to provide valuable information necessary to stimulate innovativeness. The agility and ability of an organization to respond to the changing marketplace is driven by its propensity to innovate [STEELE, MURRAY, 2004]. Therefore, a major issue is how can a company enhance innovativeness? Innovation implementation has received a lot less attention in the literature than innovation itself [MCADAM, 2005].

The firm activity dimension of innovation performance captured in the EIS [European Innovation Scoreboard, 2008] consists of firm investments, linkages and entrepreneurship and throughput. These are innovation efforts that firms undertake, which recognizes the fundamental importance of firms’ activities in the innovation process. Other, external dimensions of innovation performance are human resources and finance and support [European Innovation Scoreboard, 2008].

Loewe and Dominiquini [2006] propose four keys, four categories of factors to systemic innovation capability: (1) leadership and organization; (2) processes and tools; (3) people and skills and; (4) culture and values. Martins and Terblanche [2003] on the other side developed a different framework, with the four key dimensions in facilitating innovativeness and creativity being: (1) strategy; (2) support mechanisms; (3) structure and; (4) behavior. We can, however, find that key factors of both frameworks are overlapping and conclude that creative innovative organizational culture is implicitly (support mechanisms and behavior) or explicitly the content
of both frameworks. An organization can enhance its innovativeness by developing a creative culture within the company [MCFADZEAN, 1998].

Innovation is a mindset, an attitude, a feeling, an emotional state, a set of values, a commitment to newness [KUCZMARSKI, 2003]. These organizational, sociological and psychological changes can only be achieved through a long period of time, needed to develop an innovative organizational culture. An innovative company must be embedded of a strong culture that stimulates the engagement in innovative behavior [SANTOS-VIJANDE, ÁLVAREZ-GONZÁLEZ, 2007]. Hurley's [1995] research showed that higher level of culture innovativeness is associated with greater innovative productivity. He confirmed that emphasizing people and career development and participative decision making leads to higher levels of cultural innovativeness.

Based on the research from various authors, we will divide the companies' efforts to stimulate innovativeness into two groups for the purpose of our research: promotion of employee innovativeness (organizational efforts to enhance innovation) and investments in innovation.

### 2.2. Promotion of employee innovativeness

One way for organizations to become more innovative is to capitalize on their employees' ability to innovate [de JONG, den HARTOG, 2007], because innovations start with the inventiveness of creative people [NIJHOF, KRABBENDAM, LOOISE, 2002]. The important questions remain why employees engage in innovation activity and how to increase innovativeness among them. Cheng, Lai and Wu [2010] argue that an employee will engage in innovating only if those innovation activities can maximize his/her utility or satisfaction. Specifically, if the innovation activities are able to stimulate the employee’s job satisfaction, the employees will be inclined to devote themselves to innovation. To this end it is important that manager of the company understands the importance of innovations to enhance employee innovation activities. Implementing an innovative idea depends to a large extent on the motivation and management capabilities of the employee who got the idea, because only ideas, where both the employee and the management are convinced of their potential, are developed [NIJHOF, KRABBENDAM, LOOISE, 2002].

Managers need to focus not only on products, technology and processes, but also on the culture of the organization, its norms, values and beliefs [HUMPHREYS, MCADAM, LECKEY, 2005]. When managers treat employees as valuable assets, employees can become innovative thinkers and improve the innovativeness of the company. The successful efforts of satisfied, motivated, and committed human resources generate innovative ideas for new products or services and improve quality performance, operating performances, and also customer satisfaction [SADIKOGLU, ZEHIR, 2010]. Managers influence employees' innovative behavior through their deliberate actions aiming to stimulate idea generation and application as well as by their more general, daily behavior [de JONG, den HARTOG, 2007].

Marcati, Guido and Peluso [2008] found that entrepreneurs’ personality traits, such as openness to experience and conscientiousness correlate significantly with both general and specific innovation of those SMEs. This shows great importance of the psychological foundations of human capital in relation to innovation and, in particular, the key role of the personality-related variables. Irani and Sharp [1997] view individual characteristics of leaders or managers on higher hierarchical levels as essential in encouraging innovation. Hyland and Beckett [2005] and von Stamm [2009] also emphasize the support of creative leadership in
building innovating organizational culture. The organization must continually show commitment to the process of innovation [HUMPHREYS, MCADAM, LECKEY, 2005].

A sound and innovative strategy and good stakeholder management that is innovation-oriented is therefore necessary in organizations if they are to be innovative. Successful companies, such as Google or Virgin, have done just that, reinforcing the importance of innovation by creating an environment where employees feel it is expected of them to innovate or by letting them work on their own ideas [LOEWE, DOMINQUIINI, 2006]. Companies use three structural mechanisms to support innovation [IRELAND, WEBB, 2007]: (1) the degree of centralization of authority (the amount of autonomy individuals have to make decisions), (2) standardization of procedures (standardized behaviors) and (3) the formalization of processes (codified and written instructions about following procedures). Innovators prefer less tightly structured situations, as they may have trouble applying themselves to managing change within ongoing organizational structures [MCFADZEAN, O’LOUGHLIN, SHAW, 2005].

The organizational climate and culture often play an important role in achieving high innovative behavior of employees. Interfunctional coordination, for example, may serve as an impetus to innovativeness because increases in communications and teamwork are likely to generate new ideas and technology explorations [WOODSIDE, 2005]. The organization’s culture favorable to the adoption of innovations allows recognizing the need to innovate in a more active way, the new ideas that appear within the organization and the information that must be shared for their development. The organization’s climate influences organizational processes, such as decision making, communication, coordination, employees’ learning, motivation, creating and commitment. In a supportive climate, ideas and suggestions are received in an attentive and supportive way and that stimulates inventiveness of employees [EKVALL, 1996]. A positive and safe atmosphere that encourages openness and risk taking often encourages idea generation and application [de JONG, den HARTOG, 2007].

The process of developing an organizational culture that stimulates innovation is therefore necessarily fostered by strategic management: organizational mission statement, vision, goals and strategy. Such strategy needs to be installed to ensure that [STEELE, MURRAY, 2004]: (1) the amount of creative ability at all levels of the organization is adequate; (2) the creative potential of staff is identified; (3) the opportunity for the exercise of creativity on all projects is analyzed; (4) tasks and people are matched on the basis of this; (5) an environment is created in which: (a) unplanned creative ideas are received with an open mind and are not rejected out of hand because they do not accord with current plans or conventional practice and; (b) creative solutions within ongoing projects are encouraged, especially in the early stages when comprehensive searches should be made to ensure that the subsequent investment of time and effort is well placed.

2.3. Investments in innovation

Firm investments consist of a range of different investments firms make in order to generate innovations. They usually represent the investments in new or improved technology, product characteristics or optimized processes. It is common to measure the investments by variables such as number of patents granted or R&D expenditures. Investment transactions are believed to take place in four major areas [GHOSAL, NAIR-REICHERT, 2009]: (1) mechanical; (2) chemical; (3) monitoring devices and; (4) information technology. But firms are somewhat reserved when it comes to investing in innovation; 21% of European companies in the sample stated that innovation costs are too high relative to the expected returns and the economic risk of failure is too great [PENEDER, 2008].
One of the important decisions at the company level is that of investing in new or improved equipment and facilities. The difficulty concerning the technology investment decision in practice is that in the future better technologies than now available will be invented [HUISMAN, KORT, 2003]. Liao and Rice [2010] argue that firm investments in innovation have a statistically significant effect on company's performance, but only when supported by change oriented environment and organizational culture, not by itself alone.

Investments in innovation are even more important in capital intensive industries [GHOSAL, NAIR-REICHERT, 2009]. Ghosal and Nair-Reichert found that firms which implemented a greater number of investment transactions in modernization achieved higher productivity. These estimated quantitative effects are greater than the impact of standard innovation variables such as patents and R&D, which shows a greater role of investing in innovation than previously studied variables that are not as effective, especially in the traditional industries [GHOSAL, NAIR-REICHERT, 2009]. Similar, Parisi, Schiantarelli and Sembenelli [2006] argue that R&D spending is strongly and positively associated with the probability of introducing a new product, whereas fixed capital spending increases the likelihood of introducing a process innovation.

Human capital can be seen as an enabling factor in profitable innovation. Investments in employees’ skills help expand the group of firms in the economy that have the potential to innovate successfully [LEIPONEN, 2005]. Yusuf [2009] point out that translating creativity into innovation is a function of multiple incentives, and that sustaining innovation is inseparable from heavy investment in research. Researches indicate interdependence between investments in innovation and employee skills and innovation output [LEIPONEN, 2005].

2.4. Innovativeness and competitive advantage

Competitive advantage is commonly measured by short term performance measures, such as growth in sales, market share or firm productivity. Liao and Price [2010] add expected sales growth to these measures, as it evidence of a growth orientation regarding future investment initiatives that are necessary to continue historical performance sustainably.

Kjellberg and Wernerman [2000] argue that the increase of innovativeness among company’s employees is one of the most fundamental bases for competitive advantage. In a highly competitive environment, innovation is critical to an organization obtaining a dominant position and gaining higher profits [CHENG, LAI, WU, 2010]. Companies that are successful in this competitive environment are those offering new products and developing and utilizing new processes on an ongoing basis [BALDWIN, JOHNSON, 1996]. Wide variation existed across firms in the number and complexity of innovations developed and adopted by them, noting that innovation reflects the newness of the product to the adopting unit, not absolute newness of the product [HAUSMAN, 2005].

Cheng, Lai and Wu [2010] argue that product innovation and process innovation are significantly and positively related to the organizational performance. They suggest that company can influence the organizational performance by enhancing product innovation and process innovation. Similar, Sadikoglu and Zehir [2010] argue that employee performance, innovation performance and company performance are strongly positively related. Innovation of new products or services improves firm performance by reducing quality and operating costs. The faster the company introduces new products or services into the market, the higher performance the company obtains. Employee performance therefore improves company’s performance indirectly through innovation performance as employees generate ideas for new products or services to improve competitiveness of the company.
The importance of innovativeness stresses the statement of Jucevičienė and Cesevičiūtė [2009], who noted that the challenges of the emerging knowledge economy, globalization and competitiveness require innovative responses not only on the level of organizations, but on the level of society as a whole.

2.5. Innovativeness in Slovenia

To assess the innovative efforts in the Slovenian economy, we first state the survey of The European Innovation Scoreboard (EIS), which provides a comparative assessment of the innovation performance of EU Member States under the EU Lisbon Strategy. Based on their innovation performance across 29 indicators, EU Member States are divided into four groups of countries. Slovenia is in 3rd group called Moderate innovators with innovation performance below the EU average. The average innovation growth for this group is 3.6% [European Innovation Scoreboard, 2008].

For Slovenia, one of the Moderate innovators, innovation performance is just below the EU27 average, but the rate of improvement is above that of the EU27. Relative strengths, compared to the country’s average performance, are only in drivers of innovation that are external to the firm: human resources and finance and support. There are no strengths in firm activities; moreover, there are relative weaknesses in throughputs.

In terms of the rate of improvement, over the past 5 years, finance and support and throughputs have been the main drivers of the improvement in innovation performance, in particular as a result from strong growth in private credit (17.3%), community trademarks (7.5%) and community designs (8.6%). Performance in firm investments, linkages & entrepreneurship and economic effects has increased at a lower pace [European Innovation Scoreboard, 2008]. Krammer [2009] stress the important role of universities and existing national knowledge base in enabling national innovation, complemented by R&D commitments from both public and private sources. Bastič and Leskovar-Špacapan [2006] carried out a survey on the sample of 214 Slovenian organizations and found that lack of innovative organizational culture and poor market orientation have been the most important missing factors preventing the organizations from being innovative and thus achieving the sustainable competitive advantage.

Comparison of the Slovenian economy with those of more developed EU countries shows the Slovenian economy is still based predominantly on traditional industries and the proportion of innovation is small [FINK BABIČ, 2006]. The reasons for only moderate innovation in Slovenia can therefore be found in smaller number of innovative SMEs, which are generally the dynamos of an economy's innovation [BEAVER, PRINCE, 2002]. We do, however, have the potential of innovation, although we cannot yet talk about a culture of creative and innovative organizations in Slovenia [FINK BABIČ, 2006; BASTIČ, LESKOVAR-ŠPACAPAN, 2006]. Moreover, the cooperation between research institutions and industry is very weak. In addition to that, in the past, the majority of managers of these firms did not see the need to encourage their employees to be creative and innovative, to work in inter-disciplinary teams, or to recognize them for their creative work with financial or non-financial rewards [BASTIČ, LESKOVAR-ŠPACAPAN, 2006].

Nevertheless, we made a step forward during the last few years because the awareness of government departments on the problem is growing. The link between research institutions and industry should improve with the establishment of EU-funded centers of excellence in 2009 and 2010 that will be active in various sectors of economy. A vision of Slovenia as an innovative and enterprising economy has been created in Slovenia's development strategy
3. Research

3.1. Hypotheses

Through the research we wanted to test the following hypotheses:

H1: Investing in innovation influences the competitive advantage of the organization

H2: Promotion of innovativeness of employees influences the competitive advantage of the organization.

H3: There is a positive correlation between the investing in innovation and competitive advantage of the organization.

H4: There is a positive correlation between the promotion of innovativeness of employees and competitive advantage of the organization.

H5: The high level of innovativeness and competitive advantage of firms are positively related.

3.2. Instrument

We tested the validity of the hypotheses through an e-questionnaire in middle sized and large companies in Slovenia. The survey was carried out in January and February 2010. Sampling was random. We received 68 responses. The sample consisted of 44 (64.71%) middle sized and 24 (35.29%) large companies (n=68). 23 (33.82%) were production companies, 34 (50%) service, 10 (14.71%) sales companies and 1 (1.47%) other.

The questionnaire comprised 14 questions relating to (1) data on the respondent (age, sex, education, function, and years of employment in company) (2) data on the company (branch, size, number of employees) (3) elements related to innovativeness and company’s competitive advantage. The questionnaire was of the closed type. Respondents evaluated certain quality elements related to innovativeness in their company and company’s competitive advantage on a scale from 1 (I absolutely disagree) to 5 (I absolutely agree) in questions 9 to 14.

3.3. Sample

For questions 6 to 11 (where we offered respondents a scale of answers from 1 to 5) we calculated the Cronbach’s alpha coefficient. The value calculated is 0.729 which indicates great reliability of measurement. With regard to the composition and characteristics of the sample, we believe that it is representative.

3.4. Results

Questions 6 to 11 refer to the elements that compose the role of innovativeness in company’s competitive advantage. All evaluations were given on a scale from 1 (I absolutely disagree) to 5 (I absolutely agree). The respondents were asked to evaluate following statements, four of them refer to innovativeness in organization:

S6 - The company takes care of sustainable development

S7 - The company has high level of innovations

S8 – The company invests in innovation

S9 – The company suitably supports/rewards innovativeness of their employees
S10 - Innovations are important for the sustainable development of the company
S11 - The company has competitive advantage compared to equal bidders

**Tab. 1: The company has high level of innovations**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>I absolutely disagree</td>
<td>3</td>
<td>4,4</td>
</tr>
<tr>
<td>I do not agree</td>
<td>7</td>
<td>10,3</td>
</tr>
<tr>
<td>I partly agree,</td>
<td>26</td>
<td>38,2</td>
</tr>
<tr>
<td>I agree</td>
<td>18</td>
<td>26,5</td>
</tr>
<tr>
<td>I absolutely agree</td>
<td>14</td>
<td>20,6</td>
</tr>
</tbody>
</table>

The statement 7 refers to the company’s level of innovations. As it is seen in Tab. 1 4,4% of the respondents absolutely do not agree with the statement think that their company has a high level of innovations, 10,3% do not agree, 38,2% partly agree with the statement and 47,1% of the respondents think that their company has high level of innovations.

**Tab. 2: The organization’s investments in innovation**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>I absolutely disagree</td>
<td>2</td>
<td>2,9</td>
</tr>
<tr>
<td>I do not agree</td>
<td>10</td>
<td>14,7</td>
</tr>
<tr>
<td>I partly agree,</td>
<td>23</td>
<td>33,8</td>
</tr>
<tr>
<td>I agree</td>
<td>16</td>
<td>23,5</td>
</tr>
<tr>
<td>I absolutely agree</td>
<td>17</td>
<td>25,0</td>
</tr>
</tbody>
</table>

We can see in Tab. 2 that only 2,9% absolutely disagree with the statement that company invests in innovation, 17,6% of the respondents do not think that their company invests in innovation. 33,8% partly agree with the statement about investment in innovation. 48,5% think that their company invests in innovation (agree or absolutely agree).
Tab. 3: The organization suitably supports/rewards innovativeness of their employees

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>I absolutely disagree</td>
<td>5</td>
<td>7,4</td>
</tr>
<tr>
<td>I do not agree</td>
<td>16</td>
<td>23,5</td>
</tr>
<tr>
<td>I partly agree,</td>
<td>21</td>
<td>30,9</td>
</tr>
<tr>
<td>I agree</td>
<td>12</td>
<td>17,6</td>
</tr>
<tr>
<td>I absolutely agree</td>
<td>14</td>
<td>20,6</td>
</tr>
</tbody>
</table>

As we can see in Tab. 3, almost 31% of the respondents do not think that their company suitably supports innovativeness of their employees (absolutely disagree or do not agree with the statement), the same percentage (31%) partly agree with the statement that their company suitably supports/rewards innovativeness of their employees and 38,2% think that company’s support/reward of the innovativeness of their employees is suitable (agree or absolutely agree).

Tab. 4: Innovations are important for the sustainable development of the company

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>I absolutely disagree</td>
<td>1</td>
<td>1,5</td>
</tr>
<tr>
<td>I do not agree</td>
<td>4</td>
<td>5,9</td>
</tr>
<tr>
<td>I partly agree,</td>
<td>6</td>
<td>8,8</td>
</tr>
<tr>
<td>I agree</td>
<td>17</td>
<td>25,0</td>
</tr>
<tr>
<td>I absolutely agree</td>
<td>40</td>
<td>58,8</td>
</tr>
</tbody>
</table>

Tab. 4 shows us that only 1,5% of the respondents absolutely disagree and 5,9% of the respondents do not agree with the statement that innovations are important for company’s sustainable development, 8,8% partly agree with the statement and almost 84% of the respondents agree or absolutely agree that innovations are important for the company’s sustainable development.
Tab. 5: The company has competitive advantage compared to equal bidder

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>I do not agree</td>
<td>6</td>
<td>8,8</td>
</tr>
<tr>
<td>I partly agree</td>
<td>13</td>
<td>19,1</td>
</tr>
<tr>
<td>I agree</td>
<td>27</td>
<td>39,7</td>
</tr>
<tr>
<td>I absolutely agree</td>
<td>22</td>
<td>32,4</td>
</tr>
</tbody>
</table>

The last statement refers to the company’s competitive advantage compared to equal bidders. As it is seen in Tab. 5 none absolutely disagree with the statement and only 8,8\% of the respondents do not think that their company has a competitive advantage compared to equal bidders. 19,1\% partly agree with the last statement and more than 72\% of the respondents agree or absolutely agree that their company has a competitive advantage in comparison with equal companies on the market.

In our research we presume that investing in innovation influences the competitive advantage of the organization (H1). We also assumed that promotion of innovativeness of employees influences the competitive advantage of the organization (H2). To test our hypothesis with used linear regression analysis.

Tab. 6: Regression analysis for the dependent variable “The company has competitive advantage before equal bidders” and independent variable “company invests in innovation” (n=68)

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>(R=0,409; R^2=0,167; \text{Adjusted } R^2=0,155)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>\text{Unstandardized Coefficients}</td>
</tr>
<tr>
<td>(Constant)</td>
<td>B 2,739 Std. Error .350 Beta .409</td>
</tr>
<tr>
<td>Company invests in innovations</td>
<td>B .345 Std. Error .095 Beta .409</td>
</tr>
</tbody>
</table>

Dependent Variable: the company has a competitive advantage compared to equal bidders

We conducted the regression analysis to investigate the influence of investment in innovation on the company's competitive advantage. With the predictor “company invests in innovation” 15,5\% variable of the of the company's competitive advantage is explained (Tab. 6). The regression is statistically significant (Sig. 0,001). We can conclude that company’s investment in innovation has an impact on company’s competitive advantage (\(\beta=0, 409\)).
Tab. 7: Regression analysis for the dependent variable “The company has competitive advantage before equal bidders” and independent variable “company suitably supports/rewards innovativeness of their employees” (n=68)

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>2.953</td>
<td>,294</td>
<td>10.051</td>
<td>,000</td>
</tr>
<tr>
<td>Company supports/rewards innovativeness of their employees</td>
<td>,313</td>
<td>,086</td>
<td>,410</td>
<td>3.650</td>
</tr>
</tbody>
</table>

Dependent Variable: the company has a competitive advantage compared to equal bidders

To investigate the influence of company's promotion of innovativeness of their employees on the company's competitive advantage we conducted the regression analysis. By predictor “company suitably supports/rewards innovativeness of their employees” 15.5% variable of the of the company's competitive advantage can be explained (Tab. 7). The regressions are statistically significant. The respondents think that company supporting/rewarding employee innovativeness has an important influence on company’s competitive advantage compared to equal bidders (β=0.410).

In our research we also assumed (H3) that there is a positive correlation between investing in innovation (S8) and competitive advantage of the organization (S11). Our fourth hypothesis (H4) is that there is a positive correlation between the promotion of innovativeness of employees (S9) and competitive advantage of the organization (S11). We tested both hypotheses with Pearson’s correlation coefficient and confirmed both correlations at the 0.01 level (r=0.409 and r=0.410, respectively). We also assumed that the high level of innovativeness (S7) and company’s competitive advantage (S11) are positively related (H5) We tested the hypothesis with Pearson’s correlation coefficient (Table 8) and confirmed the correlation at the 0.00 level (r=0.423).
4. Discussion and conclusion

Many researchers have studied innovation and presented its role in identifying the main factors contributing to organization’s competitive advantage. Based upon the propositions theories in reviewed literature present and based on the results of our research, we can conclude that innovativeness certainly plays an important role in achieving and maintaining company’s development as well as competitive advantage. Research has shown this role is great in companies within Slovenian economy, not known for cultural innovativeness, as well. Innovativeness is a much desired concept for companies as a mean to achieving sustainable competitive advantage over competitors.

Majority of respondents agree that innovativeness is important for company’s development and that it has an influence on competitive advantage. We distinguished two major groups of organizational efforts to stimulate innovativeness; investing in innovation and promotion of employee innovativeness through suitable organizational culture development and reward system set up. From our research and the data collected in our survey we have found that both investments in innovation and promotion of innovativeness of company’s employees influence the company’s competitive advantage. Through regression analysis we verified first two hypotheses (H1 and H2).

Further we tried to find if there is a positive correlation between different factors regarding innovation and company’s competitive advantage. We tested our last three hypotheses (H3, H4 and H5) with Pearson’s correlation coefficient. Based on our research and data collection we can argue that there is a positive correlation between investing in innovation and competitive advantage of the organization as well as between promotion of employee innovativeness and company’s competitive advantage. Both correlations were confirmed at the 0.01 level. The
strongest was the correlation between high level of innovativeness and company’s competitive advantage. We confirm that correlation at 0,00 level (r=0,423).

From our research and the data collected in our survey we can conclude that there is a positive correlation between innovativeness and company’s competitive advantage. Slovenian companies are therefore fully aware of the importance of innovational efforts in achieving better economic results. The insufficient innovativeness accompanying Slovenian economy is therefore not a result of obliviousness of the value innovations bring to company’s success. Consequently, we should look for the reasons elsewhere. It is possible that managers don’t have the knowledge and skills required to successfully implement innovative culture. The companies may not be fully aware of how to promote innovativeness, especially how to stimulate the employees to be innovative.

Data gathered from the sample of Slovenian middle sized and large companies confirmed all the research hypotheses set up based on literature review. This has important implications for managers striving for success. It means the companies which will have put more effort in stimulating innovation will more likely improve their market positions and performance by achieving sustainable competitive advantage over competitors. Both investing in innovation and promotion of employee innovativeness were found to be appropriate ways to enhance innovation in order to achieve competitive advantage over their equal bidders. If organizations are to be successful they should increase the efforts to stimulate innovativeness. They can do that by following guidelines for enhancing innovation provided in Section 2. A very important part of promoting innovativeness is setting up an innovation-stimulating reward system. If this is supported by structural mechanisms, creative organizational culture development and leaders’ innovation encouragement company can expect more and better innovations and thus, as confirmed with our survey, building a basis for achieving sustainable competitive advantage.

The first methodological limitation is measuring innovativeness with perceptions of responding organizations' employees. A better, more accurate measurement for establishing a degree of a company's innovativeness would be the number of patents granted or innovations successfully brought to market. But for the purpose of this paper we established that the estimation of company's innovativeness through employee perceptions is sufficient, as we were merely aiming to confirm the unelaborated link between innovativeness and competitive advantage. Similar methodological problem can be found in measuring investments in innovation with the perceptions of that variable by companies' employees. This would be measured more accurately with actual accounting data of company’s investments.

The confirmed thesis of this paper, that innovativeness influences company's competitive advantage, is based solely on a Slovenian sample and requires further research in order to be able to make direct comparison between firms in Slovenia and firms elsewhere. To establish an adequate representativeness of Slovenian economy, small Slovenian firms should also be included in the sample. The current sample overrepresents not only medium and large companies, but also service-sector companies.

The first direction for future research we suggest is including better measures for innovativeness and investments in innovation as opposed to estimating these values for companies by their employees. Exploratory analyses examining the factors influencing innovativeness are also required. It should also be researched which factors have higher impact on facilitating innovativeness than others. Managers would therefore be able to put more significance on implementing those factors. Organizational culture that stimulates company's innovativeness is heavily intertwined with national culture and other contextual variables [HOFSTEDE, 1980]. This will need to be considered in future research confirming the link...
between promotion of employee innovativeness, which includes creative organizational culture development, and competitive advantage.

We also propose that future research explores the link between innovativeness and competitive advantage based on a sample of companies from different countries. This would allow comparisons between Slovenian and other economies. Furthermore, it would validate the research model this paper used on a bigger and diverse sample. Additionally, we suggest longitudinal studies examining the link between innovativeness and competitive advantage. This would show the improvement or regression of companies’ innovative performance. If such studies would include the factors influencing innovativeness, we would be able to understand the efforts on fostering innovativeness in more detail and also be aware which of these factors are more important than others.

References:


[54] YUSUF, S. From creativity to innovation. *Technology in Society*, 2009, is. 31, pp. 1–8. ISSN 0160-791X.
Contact address:
Jasmina Pavlin, MA
University of Maribor, Faculty of Organizational Sciences
Kidričeva cesta 55a, 4000 Kranj
Slovenia
Email: jasmina.pavlin@fov.uni-mb.si
+38642374353

Matej Černe, BA Econ
University of Ljubljana
Center of Excellence for Biosensors
Instrumentation and Process kontrol
Velika pot 22, 5250 Solkan
Slovenia
Email: matej.cerne.ef@gmail.com
+38631570835