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# ANTECEDENTS OF MANAGEMENT INNOVATION - A CASE OF COMPANIES FROM WESTERN BALKAN COUNTRIES

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### **Abstract**

*The focus of the study is to test the relationship between some key internal antecedents and management innovation, in companies from Western Balkan Countries. In this study management innovation is conceptualized as the introduction of new management and organizational practices that are new to the company. Using a large data sample, from Business Environment Enterprise Performance Surveys (BEEPS) and through binary logistic regression, a positive relationship was confirmed between three internal antecedents and management innovation. Findings indicate that giving time to employees to try a new approach or new ideas, providing training to employees and the size of the company, are positively related to management innovation. Surprisingly and conversely to results of some previous studies, the relationship between the level of education of the workforce and management innovation was not confirmed. Also, the expected inverse relationship between the inadequate level of education as an obstacle in company work and the level of adoption of management innovation was not confirmed. Findings from this research study can help management practitioners, scholars and policy-makers, to better understand key drivers of management innovation in transition economies from the Western Balkan Region.*

**Key words:** management innovation, time to innovate, training, level of education, company size.

**JEL Classification:** O30, O32, M10, L20.

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## 1. Introduction

The concept of innovation has always been associated with economic growth, prosperity and firm performance. Joseph Schumpeter in his book *Capitalism, Socialism and Democracy* originally published in 1942 has recognized the value of “creative destruction” as a revolutionary economic force and economic innovation as a key factor for economic growth. Recently Daron Acemoglu and James Robinson in their book: *Why Nations Fail: The Origins of Power, Prosperity, and Poverty* published in 2012 emphasized again the importance of “creative destruction” and inclusive institutions as key drivers for economic growth and national prosperity separating successful from failed nations. Organizational success highly depends on the organizational capacity to generate and adopt technological and non-technological innovations. Several scholars in the past have confirmed the positive impact of technological and non-technological innovation on firm performance (Exposito and Sanchis-Llopis, 2018; Camisón and Villar-López, 2010).

However, most of the studies in the past have been investigating the concept of innovation predominantly as a technology-based phenomenon (Godin, 2008) and were focused on the ways how organizations can develop technological innovation (Crossan and Apaydin, 2010). Aside from the studies mainly focused on technological innovation, this study is similar to previous studies (Damanpour et al., 2018, Khosravi et al., 2019, Mol and Birkinshaw, 2009) focusing on the adoption of managerial innovation, as a type of non-technological innovation. Following the approach of Mol and Birkinshaw (2009) this study defines management innovation as the introduction of management and organizational practices that are new to the firm and intend to enhance firm performance.

Cvetanovic et al., (2014) investigated the relation between innovation outputs and innovation inputs, and the relationship between the GII (Global Innovation Index) and GCI (Global Competitiveness Index) of Western Balkan Countries, and a group of six selected European Union (EU) countries. Cvetanovic et al. (2014) focused on innovation inputs and outputs on a country level, while this study contributes towards covering the geographical research gap, by investigation of the key internal antecedents of management innovation on a company level. The Western Balkan Countries have very similar political and economic conditions and it would be interesting to explore the relationship between some of the key internal antecedents of management innovation in companies from that specific region. The investigation within this region is even more important because the process of political and economic convergence between the countries from the Western Balkan region and EU is very important for the future process of EU enlargement.

Underpinning arguments supporting the need for this type of research covering the specific region of WB countries are derived from the inconsistent findings in previous studies related to the direction of the relationship between key drivers and management innovation. For instance, Ganter and Hecker (2013) in their research study of reassessment of Mol and Birkinshaw (2009) model on a large sample of German firms did not confirm the previously supported model on UK firms. This misfit in innovative firm behavior points to differences in the underlying institutional environment. Hence, when we test the research hypothesis it is very important to take into consideration the attributes which characterize companies and economies in developed countries from those in transition countries such as Western Balkan countries. The inconsistencies in the results can be noticed in several other studies. The study of Hansen (2010) has found a positive relationship between company size and management innovation, while the study of Vaccaro et al., (2012) showed that the relationship between these two variables is weak to nonexistent.

Therefore the research study addresses this research gap by exploring the relationship between several key internal antecedents and management innovation in companies from WB countries region. For the purpose of this study, five key research questions have been developed: 1) How the available time of employees to try new ideas or things is related to management innovation? 2) How providing training to employees impact management innovation? 3) How the levels of education of employees affect management innovation? 4) What is the relationship between inadequate education of employees and management innovation? 5) What is the relationship between company size and management innovation?

The remainder of the paper is structured as follows. First, in the section of theoretical development, the article focus is on the concept of management innovation and its antecedents. In the third section, the research methodology and the research process followed in the study are explained. In section 4, the findings from the research study are presented and discussed, followed by theoretical and practical implications. In section 6 future trends and improvements are discussed and proposed, while in section 7 a short remark regarding research limitations is given. At the very end of the paper summarization and conclusions are derived.

## 2. THEORETICAL DEVELOPMENT

Scholars from different fields of research have been studied innovation on various levels, using different terminology and research methods. The study of innovation was long time focused only on new product and production process development. This narrow notion of studying exclusively technological innovation is recently criticized by many researchers (Ganter and Hecker, 2013). Therefore there is a growing interest in studying and investigating the phenomenon of non-technological innovation (Damanpour, 2018; Khosravi, 2019). Studies of innovations in organizations include generation and adoption of technological and non-technological innovations (Damanpour et al., 2018). Similar to several studies in the past (Damanpour et al., 2018; Khosravi, 2018; Mol and Birkinshaw, 2009) this study focuses on the adoption of managerial innovation, or more precisely on the introduction of new management and organizational practices.

The fundamental difference between technological innovation and management innovation is comprehensively described and explained in the research study of Damanpour and Aravind (2012). The main difference between technology innovation and management innovation is related generally with the distinction between technology and social structure (Evan, 1966). Management innovation refers to the introduction of management practices, processes, and structures that are intended to further organizational goals (Birkinshaw et al., 2008). Technology innovations are primarily associated with the technical system of an organization, while management innovations are associated with the social structure of the social systems (Damanpour and Evan, 1984).

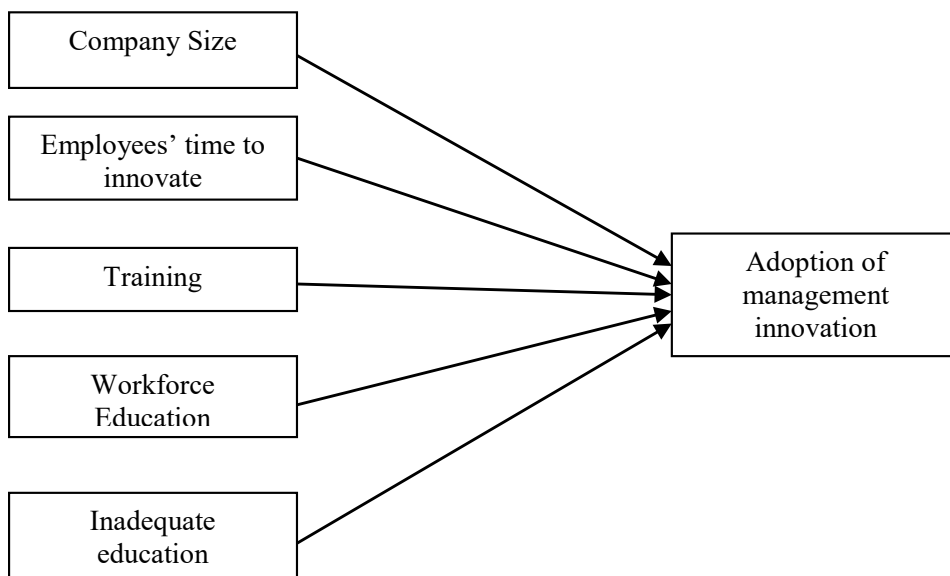
The model of Mol and Birkinshaw, (2009) included two main categories as antecedents of management innovation. The first category refers to the organizational context and its knowledge-based relations. They consider organizational size, level of education of the workforce and geographic scope as firm-level attributes, and they built their hypothesis on the assumption of the positive association between these attributes and management innovation. Ganter and Hecker (2013) reassess the model of Mol and Birkinshaw by additionally accounting for organizational innovation as a source of sustainable competitive advantage. They based their research study on a large sample of German firms drawn from the 2005 "Community Innovation Survey" and the empirical results from their study significantly contrast those by Mol and Birkinshaw. In the study of Ganter and Hecker (2013) competitive environment was identified as a significant predictor of adopting management innovation, while reference-group theory and knowledge search perspective were not confirmed as antecedents of management innovation.

Khosravi et al., (2019) in their recent systematic literature review and meta-analysis of management innovation identified a large number of drivers and outcomes of management innovation in a comprehensive framework. Four large groups of organizational, environmental, managerial and attributes of innovation were identified as drivers of management innovation. Within the group of organizational factors, eight subcategories were identified with several factors. The identified organizational subcategories are: 1) organizational structure and strategy 2) knowledge management 3) human resource management 4) dynamic capabilities 5) networks 6) organizational size 7) organizational culture/climate and 8) organizational resources. In the managerial factors as drivers of management innovation three subcategories were identified: 1) leadership behaviors 2) characteristics and attitudes and 3) stewardship. The category of environmental factors includes 1) market dynamics 2) political and legal environment and 3) people and communities. In the group of attributes of innovation three key drivers were identified: 1) relative advantages 2) cost and 3) impact on performance. Apart

from identified categories as explanatory variables or antecedents of management innovation, one group of mediator and moderator variables were also identified. At the end the framework gives three key categories of outcomes: 1) performance outcomes 2) innovation outcomes and capabilities outcomes.

This study is following the categorization established by Khosravi et al., (2019) and only several organizational factors were taken from their framework to be tested as antecedents of management innovation on a data sample for companies from Western Balkan Countries. In this study, the focus is more on the internal sources of management innovation closely related to the employee's capability for management innovation. Figure 1 presents the conceptual model giving the relationships and expected signs, between selected sources of management innovation as organizational factors and management innovation as a response variable.

Fig. 1 Conceptual model



Studies have presented inconsistent findings regarding the relationship between company size and management innovation. For instance, some studies have confirmed the positive relationship between company size and management innovation (Damanpour and Schneider, 2006; Mol and Birkinshaw, 2009; Azar and Ciabuschi, 2017) while other researchers indicated that the relationship between the two variables was weak to non-existent (Vaccaro et al., 2012; Černe et al., 2013). Having in mind the contradictory results from past studies it is valuable to test the relationship between company size and management innovation on a sample of companies from Western Balkan Countries. Large firms typically command a larger pool of knowledge, capabilities, and other resources successful introduction of new organizational practices require (Ganter and Hecker, 2013). Therefore a positive sign is expected between the two variables, although the inconsistency of previous results warns that this relationship might not hold.

H1. The larger the company size, the higher the level of adoption of management innovation.

Having time to experiment or to try new and various ways of doing things is a very important source of management innovation. Stuart and Rogers (2016) published their results from a global survey in Harvard Business Review in which they surveyed nearly 3,500 people from companies in the U.S., Canada, the UK,

Germany, and India. The results from their study showed that executive and management ranks clearly had the right tools at their disposal - encouragement, time, and resources while individual employees seldom felt that they have the right tools. This means that to have time to experiment and to be involved in creative activities, trying new things is considered a valuable source for innovative behavior. It is very interesting to investigate the situation in transition economies regarding this issue because the expected company awareness for giving employees more time for innovation would be usually much lower compared to highly developed countries. Hence, the second relationship tested in this research study is between the available time that employees have on disposal to try new things, to experiment and management innovation, expecting that employees which have more time to try new ways of working would generate more new management and organizational practices in their firm.

H2. The greater the time that employees have to try new things, the higher the adoption of management innovation.

Researchers from the past have examined the relationship between various HRM practices and organizational innovation. Findings from past research have found evidence for a positive relationship between the amount of training that the firm provides to its employees and organizational innovation (Mark and Akhtar, 2003; Jiménez-Jiménez and Raquel Sanz-Valle, 2008). Chang et al., (2011) focused on two specific HRM practices (selection and training) found that training core customer-contact employees for multiple skills enhanced both, incremental and radical innovation among hospitality firms. The framework of Khosravi et al., (2019) identified HRM practices as one of the several important antecedents of management innovation in their systematic review and meta-analysis study. Hence, the next hypothesized relationship is the positive relationship between this particular HRM practice and management innovation.

H3. The higher amount of employees training will be positively associated with higher adoption of management innovation.

Well educated employees are more likely to read widely, which increases the extent to which they are aware of issues beyond their immediate location of employment (Mol and Birkinshaw, 2009). Several studies in the past have confirmed a positive relationship between workforce level of education and management innovation. Mol and Birkinshaw, (2009) confirmed a positive relationship between the level of education of the workforce, measured as a percentage of employees with a degree and management innovation. Ganter and Hecker (2013) who attempted to extend and validate the model of Mol and Birkinshaw confirmed the importance of firm size and workforce education as an important antecedent of management innovation. The study of Damanpour and Schneider (2006) was focused on the level of education of managers and they came to the conclusion that highly educated managers have the ability to resolve unforeseen problems and provide better solutions with the adoption of management innovation.

But, the EBRD transition report for 2014 reported that measures of human capital (including the percentage of the population that has completed secondary or tertiary education, the average number of years of schooling and the average number of years of tertiary education) are not consistently found to be significant determinants of innovation. EBRD in the same report stressed out that weaker correlation may be due to the fact that enrolment ratio-type measures predominantly capture the quantity, rather than the quality of education. This means that if higher education is pursued by students in order to obtain a diploma, rather than skills, this could even waste resources that could have been used to support innovation. Hence, it would be of great importance to test the relationship between the level of education of workforce and management innovation for companies from WB Countries. Although the EBRD report indicates certain caution regarding the relation between quantity vs. quality of education in transition countries, a higher level of education should contribute the inner capability of the employees to try to implement new organizational and management practices in business organizations.

H4. The higher the company workforce education, the greater the adoption of management innovation.

Bartlett (2013) analyzed the results from BEEPS, 2010 (Business Environment and Enterprise Performance Survey) and noted that significant skill mismatches have been reported by employers in many countries and especially in transition countries in the Eastern European neighborhood region. According to Bartlett (2013), the greatest skill mismatches appear in Eastern Europe, while the least severe skill problems appear in the Western Balkan countries. Yet, even in the Western Balkans as a whole, almost one-fifth of firms report major or very severe problems with the education level of the workforce. These considerations support the following hypothesis stating that there is a negative association between inadequate education of the workforce and management innovation.

H5. Inadequate education or skills mismatch will be negatively associated with adoption of management innovation.

### 3. DATA AND METHODS

The research study use data from BEEPS (Business Environment Enterprise Performance Surveys) for the empirical investigation of the previously stated hypotheses. According to the website of EBRD (<https://ebrd-beeps.com/>) EBRD is implementing the Business Environment and Enterprise Performance Survey (BEEPS) in partnership with the World Bank. BEEPS is a firm-level survey based on face-to-face interviews with managers. The survey gathers information from firms in transition economies and for this study BEEPS survey data for 2012-2016 were used. Selected Western Balkan Countries were included in this research: Albania, Bosnia and Hercegovina, Kosovo, Macedonia, Montenegro, and Serbia. The final data sample used in this study provides a large number of independent observations including 1503 individual firms.

The definition of the variables, their coding, and expected signs are presented in table 1. The relationship between the list of explanatory variables and one response variable were tested through binary logistic regression. The binary logistic regression was selected as a method of analysis because in the conceptual model there are relationships between one nominal response variable and several nominal and one measurement variable as independent variables.

**Table 1** Definition of the variables and expected signs

| Variable name                | Variable definition  | Expected sign |
|------------------------------|--|---------------|
| Company size                 | Dummy variable =1 if the size of the company is large and has more than 100 employees.   | +             |
| Time to innovate             | Dummy variable =1 if the establishment gave employees some time to develop or try out a new approach or new idea                     | +             |
| Training                     | Dummy variable = 1 if the establishment over the last fiscal year had formal training programs for its permanent full-time employees | +             |
| Workforce level of education | Percent of the establishment's full-time employees with a university degree at the end of fiscal year                                | +             |
| Inadequate education         | Dummy variable = 1 if the inadequately educated workforce is a very severe obstacle to current operations of this establishment      | -             |
| Management innovation        | Dummy variable = 1 if there are new organizational and management practices or structures introduced over the last three years       | + -           |

1) Company size - this categorical variable in the BEEPS survey includes four categories: 1) micro with less than 5 employees 2) small between 5 and 19 3) medium between 20 and 99 and 4) large above 100 employees. The last group (large size of the company) was used in the regression analysis as a reference group or category, and the results of all other categories were compared with the reference group.

2) Time to innovate –this categorical variable in the BEEPS survey includes two categories meaning that either establishment provide its employees with enough time to try new things, to experiment, to develop new approach or idea or it does not give enough time. Hence, this categorical variable was dummy coded as 1 if the establishment gives enough time to its employees to try something new or 0 if that is not the case.

3) Training – this categorical variable in the BEEPs survey includes two categories, questioning whether the establishment provided its employees with training over the last fiscal year or not. Therefore this variable was dummy coded as 1 if the establishment provided training for its full-time employees in the last fiscal year and 0 if the establishment did not provide such training to its employees.

4) Workforce level of education - is numeric variable and the values for this variable used in the binary logistic regression were percentages of the establishment's full-time employees with university degree at the end of the fiscal year.

5) Inadequate education – this categorical variable in the BEEP's survey includes 7 categories as potential answers on which respondents included in the survey can choose their answer. The seven categories are: 1) No obstacle 2) Minor obstacle 3) Moderate obstacle 4) Major Obstacle 5) Very severe obstacle 6) Don't know and 7) Does not apply. In the data sample used for this study, the companies which answered 6 or 7 were not included in the analysis. For the rest of the 5 categories dummy coding was used where the last group (very severe obstacle) was used as a reference group or category, and the results of all other categories were compared with the reference group.

6) Management innovation – this categorical variable in the BEEP's survey includes two categories meaning that either the employees of the establishment have introduced new organizational and management practices or structures over the last three years, or that was not a case. Hence, this categorical variable was dummy coded as 1 if the employees of the establishment have introduced new management practices or structures and 0 if the employees did not introduce anything new in their working activities.

#### 4. RESULTS AND DISCUSSION

To test the previously stated hypotheses, a data sample for companies from Western Balkan Countries (including Albania, Bosnia and Herzegovina, Kosovo, Macedonia, Montenegro, and Serbia) was derived and preprocessed from BEEPS survey data for 2012-2016. The final data sample included 1503 company data related to the variables of interest of this research study. This study employs binary logistic regression with five (four categorical and one numeric) independent variables and one dichotomous dependent variable. A binary logistic regression is appropriate statistical data analysis when the dependent variable consists two categorical, independent (unrelated) groups and when the model includes two or more independent variables, measured at the continuous or nominal level.

The results showed high statistical significance for the variables in equation ( $p < 0.005$ ;  $p = .000$ ). The R square of the model is 0.324 meaning that 32% from the variance of the dependent variable can be explained by the predictor variables. Hosmer and Lemeshow test which measures the goodness of fit for logistic regression models was non-statistically significant, with a p-value greater than 0.05 ( $p = 0.249$ ) which indicates that the model was correctly specified. The results for the variables in the model are presented below in table 2 including model coefficients, p-values, and the odds ratios.



**Table 2** Model coefficients, p-values and odds ratios

|        |                      | B      | Sig. | Exp(B) |
|--------|----------------------|--------|------|--------|
| Step 1 | Not giving time      | -1.925 | .000 | .146   |
|        | University degree    | -.002  | .443 | .998   |
|        | No training          | -.874  | .000 | .417   |
|        | Inadequate education |        | .036 |        |
|        | No obstacle          | -.435  | .232 | .647   |
|        | Minor obstacle       | -.039  | .921 | .962   |
|        | Moderate obstacle    | -.338  | .397 | .713   |
|        | Major                | .213   | .611 | 1.237  |
|        | Company size         |        | .002 |        |
|        | Micro                | -.486  | .253 | .615   |
|        | Small                | -.831  | .000 | .436   |
|        | Medium               | -.729  | .002 | .482   |
|        | Constant             | 1.484  | .000 | 4.409  |

Note. Variable(s) entered on step 1: time to innovate, university degree, training, inadequate education, company size.

The tested model supports Hypothesis 1 showing that there is statistical significance between the size of the company and management innovation. The p – values respectively for small and medium-sized companies (p=0.000 and p=0.002) were highly significant which means that there is enough strong relationship between the small and medium-sized companies and management innovation in comparison with the reference category. The reference category to which micro, small and medium-sized companies were compared is large companies. The predicted probability Exp (B) is for the membership function of having management innovation. The negative value of the B-coefficients means that the odds for having management innovation decrease for small and medium-sized companies, comparing to the reference category of large companies. Calculating the odds of the reference category (1/0.436; 1/0.482) means that large companies are 2.29 times or 2.07 times more likely to introduce new management and organizational practices comparing to small and medium-sized companies respectively. The relationship between micro companies and management innovation was not significant, comparing to the reference category large companies. The results from the testing are in line with the previous research (Hansen 2010; Mol and Birkinshaw, 2008) who also confirmed that the odds for the adoption of management innovation are higher in larger companies than in smaller companies.

The tested model supports Hypothesis 2 confirming the positive influence of employee's available time to try new things on the level of adoption of management innovation. The p-value for companies which do not give time to employees to experiment and try new things is highly significant p=0.000, meaning that there is a significant relationship between the two variables. The negative value of the B-coefficient means that the odds to have management innovation decreases for companies that do not give employees time to try new things comparing to the companies which give enough time to their employees for experimentation. Calculating the odds (1/0.146) for the companies which give enough time to their employees to try new things indicate that, those companies are 6.8 times more likely to introduce new management and organizational practices, comparing to those companies that do not give enough time to their employees to try new things in their working. The results from the tested model indicate that, having time to try new things and to experiment plays a key role in the adoption of management innovation. The results are in line with the global survey of Stuart and Rogers (2016) that also showed that encouragement, time, and resources are key factors for management innovation.

The results from testing the model support Hypothesis 3 confirming that higher amount of employees training has a positive influence of higher adoption of management innovation. The p-value for companies which provide training to its employees is highly significant  $p=0.000$ , meaning that there is a significant relationship between the two variables. The negative value of the B-coefficient means that the odds to have management innovation decreases for companies that do not provide training to employees, comparing to the companies which provide training. Calculating the odds ( $1/0.417$ ) for the companies which provide training on regular basis for own employees shows that those companies are 2.39 times more likely to introduce new management and organizational practices, comparing to the companies which do not provide such training to their employees. The results from testing the model are in line with previous research studies (Mark and Akhtar, 2003; Jiménez-Jiménez and Raquel Sanz-Valle, 2008) which confirmed the positive relationship between the amount of training and management innovation.

The results from testing the Hypothesis 4 were not significant, meaning that the relationship between the level of education of the workforce and management innovation was not confirmed with a p-value greater than the statistical error of alpha 0.05 ( $p=0.443>0.05$ ). Also, the testing of Hypothesis 5 was not significant regarding the relationship between inadequate education and management innovation. The relationship of all four groups: 1) no obstacle, 2) minor obstacle, 3) moderate obstacle and 4) major obstacle were not significant with p values greater than 0.05, indicating that neither of the tested groups has greater or lower odds of adopting management innovation in comparison to the reference category which in this model are companies where inadequate education is a severe obstacle. The results from the model did not confirm the Hypotheses 4 and 5, although previous research has confirmed a positive relationship between the level of education of the workforce and management innovation, the data sample for Western Balkan Countries did not provide support for this hypothesis in binary logistic regression modeling.

## 5. THEORETICAL AND PRACTICAL IMPLICATIONS

The findings from this research study offer some theoretical implications. The theoretical contribution of this study is in exploring the antecedents of management innovation in a specific region in order to cover the geographical gap and to potentially reconsider generalization of the results from previous studies. The relationship between three antecedents: 1) time to innovate, 2) amount of training, 3) company size and management innovation was confirmed as highly significant. The study discovered that giving time to employees to try a new approach or new ideas significantly contributes in higher adoption of management innovation, in the companies from Western Balkan Countries. The results confirmed that companies which give more time to their employees to try a new way of doing things, new ideas and have time to experiment in their everyday work have higher probability to introduce some management innovation. The amount of training which companies provide to their employees has also proven to be significant antecedent of management innovation. This means that companies which provide more training to their employees have higher probability to adopt management innovation in their working. Also the companies with greater size have a higher probability to introduce management innovation than companies with smaller size.

Conversely to a number of previous studies, the level of education of the workforce was not confirmed as a significant antecedent of management innovation. The contrasting results of this study compared to others regarding the level of education suggest that differences in a country and regional level can exist and the results can be biased towards a certain country or region. Hence, it is important for researchers to be careful when models regarding management innovation are accepted without testing their validity in a specific region or country. What is more surprising is that the expected inverse relationship between the inadequate level of education and management innovation was not confirmed as well. Normally, we would expect that if companies grade inadequate level of education as a major obstacle in their working, would report a lower level of adoption of management innovation. But, this hypothesized inverse relationship between the inadequate level of education and management innovation was not confirmed as well. The study of Bartlett (2013), which raise

attention regarding significant skill mismatches could suggest that the quality of education is more important than the level of education. Hence, maybe the quality of education instead of the level of education should be measured and tested in relationship with management innovation, especially for transition economies. The results shed light on the need for more research exploring the relationship between the education and management innovation in the region of Western Balkan Countries.

Findings from this research study have also some practical implications and can help management practitioners, and policymakers, to better understand key drivers of management innovation in transition economies, especially in the Western Balkan Region. The results can influence business practice by increasing the manager's awareness to give more time to employees to innovate and to provide appropriate training because those two drivers are highly significant as drivers of management innovation. Policymakers can benefit from the results of this study by supporting further research in discovering the complexity of the relationship between the education and management innovation, in order to better understand the factors which undermine the significance of this relationship. The results from this study also indicate for policymakers in Western Balkan Countries to be more cautious in accepting results from studies conducting in other regions and countries because they might not be valid for transition countries. This means that policymakers need to support authentic research valid for their own country or region which will take into consideration the specific research context and attributes for that particular country or region.

## **6. FUTURE TRENDS AND IMPROVEMENTS**

Future research should focus more on exploring the relationship between the level of education and management innovation in the region of Western Balkan Countries. The results from the study did not confirm that the level of education of the workforce is a significant antecedent of management innovation. In the future, more comprehensive studies should delve more deeply into the investigation of the complexity of the relationship between these two variables. Simple transfer of conclusions from studies done in other countries and regions cannot be accepted before their validity is tested on a specific research context. In the future, more studies are needed which involve the collection of new data from primary sources apart from BEEPS survey data. A different approach in research design and modeling can significantly contribute towards a better understanding of key antecedents of management innovation. In the end, studies can be done on a country level and regional level and comparison can be made in order to better understand the phenomenon of management innovation and its key antecedents for transition economies.

## **7. RESEARCH LIMITATIONS**

The focus of this research study is to test the relationship between several organizational factors and the level of adoption of management innovation in companies from WB Countries region. Although the research study contributes to the existing body of knowledge, by covering a specific region of Western Balkan countries, yet it has inherent limitations that warrant caution in the interpretation of the results. First, the regression model for predicting management innovation as response variable does not have a very high explanatory value. Second, the research study includes only a limited set of predictor variables and only a single response variable. Thirdly, most of the measures used in the study rely heavily on the perception of respondents included in the survey. And at the end, the findings from this research study emerge from data collected for specific region, from several countries meaning that the results might be specific to the particular context.

## CONCLUSION

The research paper accounts for the study of the adoption of management innovation in the region of WB Countries. The approach towards management innovation employed in this study treats management innovation as the introduction of new management and organizational practices that are new to the company. Using a large data sample from Business Environment Enterprise Performance Surveys (BEEPS, 2012-2016) and through binary logistic regression, a positive relationship was confirmed between three internal antecedents and management innovation. Findings indicate that giving time to employees to try a new approach or new ideas, providing training to employees and the size of the company are positively related to management innovation. Surprisingly and conversely to results of some previous studies the relationship between the level of education of workforce and management innovation was not confirmed.

Also, the expected inverse relationship between inadequate education of employees as an obstacle in company work and adoption of management innovation was not confirmed. Hence, the findings from this study show that providing training to employees and giving time to employees to experiment and try new things are strongly related to the adoption of management innovation. The findings from this study call for more research in the future regarding the relationship of level of education and management innovation, taking into consideration the companies from Western Balkan countries. However, the results from this paper can help management practitioners and policymakers to better understand the complexity of the relationship between organizational antecedents and management innovation in transition economies and to motivate future scholars to further contribute by investigating the antecedents of management innovation in transition economies.

## References

- Azar, Goudarz, and Francesco Ciabuschi. "Organizational innovation, technological innovation, and export performance: The effects of innovation radicalness and extensiveness." *International Business Review* 26, no. 2 (2017): 324-336.
- Bartlett, Will. "Skill mismatch, education systems, and labour markets in EU Neighbourhood Policy countries." WP5/20, Search Working Papers (2013).
- Birkinshaw, Julian, Gary Hamel, and Michael J. Mol. "Management innovation." *Academy of management Review* 33, no. 4 (2008): 825-845.
- Camisón, César, and Ana Villar-López. "Organizational innovation as an enabler of technological innovation capabilities and firm performance." *Journal of business research* 67, no. 1 (2014): 2891-2902.
- Černe, Matej, Marko Jaklič, and Miha Škerlavaj. "Management innovation in focus: The role of knowledge exchange, organizational size, and IT system development and utilization." *European Management Review* 10, no. 3 (2013): 153-166.
- Chang, Song, Yaping Gong, and Cass Shum. "Promoting innovation in hospitality companies through human resource management practices." *International Journal of Hospitality Management* 30, no. 4 (2011): 812-818.
- Crossan, Mary M., and Marina Apaydin. "A multi-dimensional framework of organizational innovation: A systematic review of the literature." *Journal of management studies* 47, no. 6 (2010): 1154-1191.
- Cvetanovic, Slobodan, Danijela Despotović, Igor Mladenović, and Dušanka Jovović. "The analysis of innovation in Western Balkan countries in 2012." *Economic research-Ekonomska istraživanja* 27, no. 1 (2014): 830-846.
- Damanpour, Fariborz, and William M. Evan. "Organizational innovation and performance: the problem of" organizational lag." *Administrative science quarterly* (1984): 392-409.
- Damanpour, Fariborz, and Marguerite Schneider. "Phases of the adoption of innovation in organizations: effects of environment, organization and top managers 1." *British journal of Management* 17, no. 3 (2006): 215-236.
- Damanpour, Fariborz, and Deepa Aravind. "Managerial innovation: Conceptions, processes and antecedents." *Management and organization review* 8, no. 2 (2012): 423-454.
- Damanpour, Fariborz, Fernando Sanchez-Henriquez, and Holly H. Chiu. "Internal and external sources and the adoption of innovations in organizations." *British Journal of Management* 29, no. 4 (2018): 712-730.
- Evan, William M. "Organizational lag." *Human organization* 25, no. 1 (1966): 51-53.
- Exposito, Alfonso, and Juan A. Sanchis-Llopis. "Innovation and business performance for Spanish SMEs: new evidence from a multi-dimensional approach." *International Small Business Journal* 36, no. 8 (2018): 911-931.
- Ganter, Alois, and Achim Hecker. "Deciphering antecedents of organizational innovation." *Journal of business research* 66, no. 5 (2013): 575-584.
- Godin, Benoît. "In the shadow of Schumpeter: W. Rupert Maclaurin and the study of technological innovation." *Minerva* 46, no. 3 (2008): 343-360.
- Hansen, Morten Balle. "Antecedents of organizational innovation: The diffusion of new public management into Danish local government." *Public Administration* 89, no. 2 (2011): 285-306.
- Jimenez-Jimenez, Daniel, Raquel Sanz Valle, and Miguel Hernandez-Espallardo. "Fostering innovation: the role of market orientation and organizational learning." *European Journal of innovation management* 11, no. 3 (2008): 389-412.
- Khosravi, Pouria, Cameron Newton, and Azadeh Rezvani. "Management innovation: A systematic review and meta-analysis of past decades of research." *European Management Journal* (2019).
- Mark, Simon KM, and S. Akhtar. "Human resources management practices, strategic orientations, and company performance: a correlation study of publicly listed companies," *Journal of American Academy of Business* 2, no. 2 (2003): 510-515.

Michael J. Mol, Julian Birkinshaw, The sources of management innovation: When firms introduce new management practices, *Journal of Business Research*, Volume 62, Issue 12, 2009, Pages 1269-1280

Robinson, James, and R. Acemoglu. *Why nations fail*. Crown Publishing Group, 2012.

Schumpeter, Joseph A. *Capitalism, socialism and democracy*. routledge, 2010.

Sturt, David, and Jordan Rogers. "A global survey explains why your employees don't innovate." *Harvard Business Review* (2016): 426-437.

Vaccaro, Ignacio G., Justin JP Jansen, Frans AJ Van Den Bosch, and Henk W. Volberda. "Management innovation and leadership: The moderating role of organizational size." *Journal of management studies* 49, no. 1 (2012): 28-51.

<https://www.ebrd.com/downloads/research/transition/tr14.pdf> (Accessed, 13 January 2019)

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