

Zdenko Stacho  
Marek Potkány<sup>1</sup>  
Katarína Stachová  
Katarína  
Marcineková

## THE ORGANIZATIONAL CULTURE AS A SUPPORT OF INNOVATION PROCESSES' MANAGEMENT: A CASE STUDY

**Article info:**  
Received 20.03.2016  
Accepted 11.09.2016

UDC – 332.05  
DOI – 10.18421/IJQR10.04-08

**Abstract:** *There is no doubt that the innovation behaviour is a key of the sustainable competitiveness because it makes the enterprises more flexible. The culture values supporting of innovation behaviour are really important aspect of the business development. The aim of this paper is the analysis of the organizational culture impact and potential within innovation processes in organization. The most important part is a partial research result presentation concerning state of innovation organizational culture in the Slovak medium sized enterprises from 2010 to 2014. A considerable reserve of the adequate background for encouragement of an employee's innovation behaviour was discovered. Therefore a general proposal of step by step methodology with point evaluation of an orientation rate of the organizational culture to the innovation was created during the formation of the adequate organizational culture. A case study of the level of an attribute in the three monitored enterprises endorsing innovations was applied for the identification of the barriers to innovation process improvement.*

**Keywords:** *organizational culture, innovation, processes*

### 1. Introduction

Currently, the top priority of every enterprise is to get a place in the global market characterized by a high competitiveness. An orientation to the innovation is a means of ensuring the advantage of a competitive edge. Therefore managerial work has to be focused on the innovation processes. It is necessary to understand a competitive advantage in the sense of ability to the product development as well as product sale for the better prices, in a bigger quantity and in a higher quality. A retrieving the competitive advantage depends on the managers' responsiveness to the

external changes (Slávik, 2013).

### 2. Innovation process and organizational culture supporting creativity and innovations

The creation of the balanced and time-matched plan is necessary during the implementation of the innovation. Different fields of the innovation application and its intensity should produce a consistent and harmonious innovation process giving a dynamics and motion of the enterprise

---

<sup>1</sup> Corresponding author: Marek Potkány  
email: [potkany@tuzvo.sk](mailto:potkany@tuzvo.sk)

development (Uriga, 2009). Čimo and Mariaš (2006) describes innovation process as a procedure consisting of the six steps. The first step is innovation idea defining new needs of the future users. The second one is transformation of the examined innovation idea into the innovation opportunity. In a case of the favourable conditions the new product, service or enterprise could be developed. Following steps represent the phase of the innovation of the materialization. Final phases are related to get the innovation into the market. On the other hand interpretation in the Table 1 is much more different because consecutiveness of the steps is broken down.

**Table 1.** Phases of the Innovation Process

<b>Opportunity</b>	feasibility, effectiveness
<b>Idea</b>	necessity, idea definition, way of the solution
<b>Production preparation</b>	technology, production sources
<b>Development</b>	design, prototype, examination
<b>Business Plan</b>	marketing, finance
<b>Implementation</b>	manufacture, access to the market, production growth

Source: (Čimo and Mariaš, 2006)

Tidd *et al.* (2007) represent simplified innovation process consisting of four stages, namely:

- Investigation represents continuous environmental monitoring (internal and external) as well as looking for the relevant signals, opportunities and threats and its processing.
- Selection represents decision on the preference of the signals which will be used Decision depends on the strategic point of view to the enterprise development.
- Innovation implementation represents process of transformation of the potential implied in the new idea (signal) to the something new and implementation of the novelty in the internal and external market.
- Learning represents an interception of obtained information and

knowledge for a future utilization. This phase is not a necessity and many businesses don't care about that. Managers and project solvers just pay their attention to the other project. Therefore they ran a risk that they will fall into a same mistake occurring in the previous project.

Same description of the linear model of the innovation process could be idea-invention-development-product-market-profit. The innovation process could be defined as set of the activities. It means that the innovation is generated and developed and it is subsequently implemented and financially exploited. Employees have learned new knowledge for the future utilization continuously during this process.

A term "Innovative Culture" is closely attendant on the innovation process, because a base of every innovation is a reasoning and volition of the persons. This is affected by the employee skills and abilities as well as by the enterprise environment. The innovative organizational culture is important for a future success of enterprises deciding for the innovation strategy. These enterprises want to achieve a success by offering better, different and absolutely new products and services (Kampf *et al.*, 2016; Ližbetinová, *et al.*, 2016; Sedliačiková, *et al.*, 2016; Hroník, 2007). The organization management has to support the relationships and the creativity within the organization as well as in its interaction with the external environment. A utilization of the individuals is not way to gain the best knowledge and skills. It is necessary to get together a team of employees from different locations and divisions with a different type of the skills and knowledge (Baumgartner, 2009). Currently, under the market condition, enterprises are oriented to the customer, innovation, results and quality, team work, market and products. There are another more particular orientations focusing on the specific sector. Currently the most preferable challenges are transformations product performance orientation to the market orientation including customer orientation

and orientation to the ensuring of the enterprise adaptability and flexibility (Belás, *et al.*, 2014). The innovation orientation includes same type of the orientations (Závadský, *et al.*, 2016; Stacho *et al.*, 2015; Papula and Volná, 2012; Remišová, 2012). The innovation orientation is challenge to the Slovak enterprises facing a globalization, internationalization and a growing competitiveness. There are no doubts that innovation behaviour is a key of the sustainable competitive advantage, because it brings that the enterprises are more flexible and adaptable to the market changes. Therefore culture values supporting innovation behaviour are important for the business development (Manzanares, 2016). Appropriate adjustment of the organizational culture could simplify a management of the innovation processes in every enterprise (Wei *et al.*, 2013). The innovative organizations developing aspects of the organizational culture are represented by the high level of the performance during the innovation development and implementation (Quandt *et al.*, 2015). It is precisely these factors such as leadership and improvement of the skills and abilities of the human resources, that identify enterprise innovative direction in a great measure as well as an ability of the setting up the sustainability (Carvaja *et al.*, 2015). Based on Nikolić and Nastasić (2010) the theory has also confirmed the view that the appropriate organizational culture enables success in implementation of Total Quality Management (TQM). This also confirm Yusr *et al.* (2014). Khazanachi *et al.* (2006) assign an informedness, targeted motivation and surplus of the skills, knowledge and supporting infrastructure to the features of the innovative organization. Favourable environment for the innovations is provided if the organization has highly participative structure and culture. According to the Herbig and Dunphy (1998) a bureaucracy curbs creative activity. On the other hand innovations are stimulated by an open communication, a decentralization and a confidence between hierarchical levels in the

organization and, in addition, by a chance to communicate own ideas and share knowledge within the organization structures (Willems, 2007). It follows that the task for the enterprise management is a creation of the environment supporting formalization of the thoughts and new ideas. That means giving inputs (time, materials, information, etc.) to the employee inasmuch that they have sufficient space for innovative behaviour.

The contents of the organizational culture and its performance are the most important factors affecting encouraging or suppression of the creative and innovative employee behaviour. The organizational culture brings considerable advantages such as a creation of the consistency in the employee thinking. On the other hand, it brings disadvantages in implementation of the innovation. Strong organizational culture guides the enterprise to the past because it creates feeling in heads of the employees and managers that “what was performed well in the past it will be performed well in the future” (Lukášová, 2010). It can be concluded that strong organizational culture could act as a major barrier during the change implementation, because if a strategic orientation of the enterprise is focused on the innovations a certain level of non-compliance between the individual and organizational values is necessary. In other words an existence of the dynamic duality as well as its support are needed (Stachová, 2015). Following activities fall under the main dynamic dualities of the innovative culture (Lukášová *et al.*, 2004): coordination versus freedom of action, planning versus taking an advantage of the opportunity, analysis versus intuition, individuality versus team work.

### 3. Methodology

Research presented in the paper was conducted each year between 2010 and 2014 at School of Economics and Management in Public Administration in Bratislava. Its objective was to find out the present state of human resources management and

organisational culture in organisations operating in Slovakia. The organisations were interviewed by a questionnaire delivered personally to a person responsible for the human resources management in the organisation.

In order to determine a suitable research sample, two stratification criteria were used. The first criterion was a minimum number of employees in the organisation, which was determined at 50 employees. The given stratification criterion excluded micro and small enterprises from the research on the one hand, however, on the other hand, the justness and need to focus on the formal system of the

human resource management in companies with more than 50 employees were observed and especially declared by means of this criterion. The second stratification criterion was a region of organisation's operation, while the structural composition of the research sample was based on the data of the Statistical Office of the Slovak Republic.

According to the Statistical Office of the Slovak Republic the number of companies with 50 and more employees was between 3,261 and 3,359 over the monitored period. The regional structure of those companies in the monitored years is shown Table 2.

**Table 2.** Regional structure of companies with more than 50 employees

Region	Whole Slovakia	Western Slovakia	Central Slovakia	Eastern Slovakia
<b>Year</b>	<b>Number of companies</b>			
<b>2010</b>	3,308	2,031	655	622
<b>2011</b>	3,359	2,061	666	632
<b>2012</b>	3,295	2,025	652	618
<b>2013</b>	3,268	2,017	645	606
<b>2014</b>	3,261	2,005	644	612

Source: (Data processed according to the Statistical Office of the Slovak Republic)

Determining an optimal research sample of the basic group of the companies, Confidence Level of the research was set at 95%, and Confidence Interval of the research was set at

$H = +/- 0.10$ . On the grounds of the selected criteria relevant research samples for individual regions of Slovakia were set out (Table 3).

**Table 3.** Size of the research sample for individual regions of Slovakia

Region	Western Slovakia	Central Slovakia	Eastern Slovakia
<b>Number of companies over 2010 - 2014</b>	2,005 – 2,061	644 - 666	606 - 632
<b>Size of the research sample</b>	92	84	83

Approximately 500 organisations were included in the research each year, however due to a great extent and the form of data collection only approximately 65% of questionnaires used to be returned comprehensively completed. Subsequently, 259 organisations, corresponding to the optimal research sample determined on the grounds of stratification criteria, were selected from these organisations. Key methods used in the conducted research include logical methods, adopting the

principles of logic and logical thinking. Particularly the methods of analysis, synthesis, deduction and comparison were applied from this group of methods. Mathematical and statistical methods were also applied in the paper.

#### 4. Results

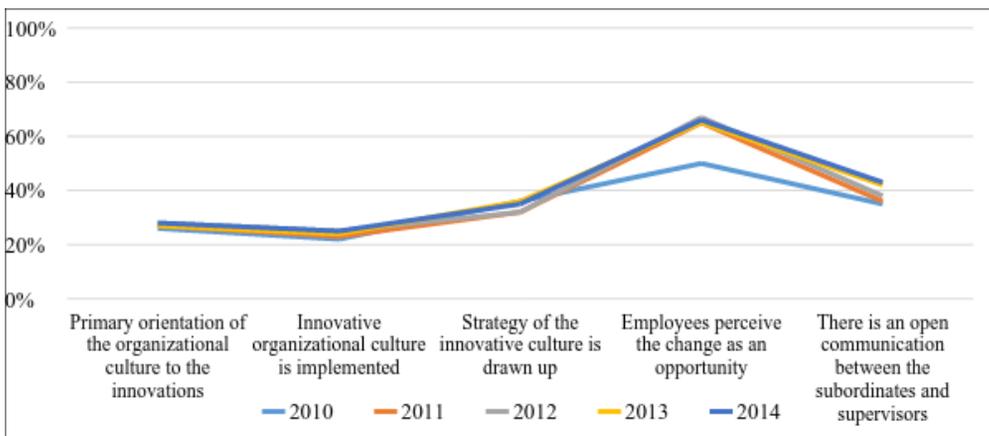
It is necessity that every innovative enterprise develops a culture supporting innovative behaviour of the employees. An enterprise

culture can encourage as well as stifle the innovations. It was reason for finding answer on the question, whether the executive staff is aware of the necessity of taking into the consideration innovative culture in the practice. Our questions were focused on the finding whether the organizational culture in the analysed enterprise is oriented on the innovations. In other words, does the enterprise have processed a strategy of the

organizational culture (Table 4 and Figure 1)? In addition, factors determining existence of the enterprise culture were analysed. For example, open communication between subordinates and supervisors and employee perception of the changes belong to the analysed factors. Employee perception of the changes is affected by the innovative culture in positive way.

**Table 4.** Creation and keeping innovative organizational culture alive

Enterprise focus on the innovative culture	Share of the enterprises				
	2010	2011	2012	2013	2014
Primary focusing of the organizational culture on the innovations	26%	27%	28%	27%	28%
Innovative organizational culture is implemented	22%	23%	25%	24%	25%
Strategy of the innovative culture is drawn up	36%	32%	32%	36%	35%
Employees perceive the change as an opportunity	50%	65%	67%	65%	66%
There is an open communication between the subordinates and supervisors	35%	36%	38%	42%	43%



**Figure 1.** Research results- Enterprise focusing on the organizational culture

A third of the respondents said that the strategy of the organizational culture is drawn up. It means that not only behaviour values and standards are shared but staff also know the way of the future development. However, share of the companies having the organizational culture focused on the innovations is lower. It follows that more than 70% of the enterprises does not create appropriate conditions for the support of the employee innovative behaviour. If this trend

continue most of the Slovak enterprises will be unable to react promptly to changes of the global market and furthermore it will cause decreasing of the enterprise competitiveness. Despite the adverse conditions in the Slovak enterprises the employees' attitude to changes is positive. Most employees of the Slovak enterprises perceived the changes as a negative feature during the Global Economic Crisis. Currently, during the time of the economic growth, two thirds of them perceive

the changes rather as the opportunities than the threats. During the analysis of the employee suggestions the most important factor was their confidence in supervisors and furthermore their openness about the suggestions towards the supervisors. Only 35% - 43% of the employees in the sample submits the comments to the supervisor directly and even 15% of the employees doesn't submit the comments or they only discuss with each other.

## 5. Discussion

It is necessary to manage the innovation processes effectively. Therefore Slovak enterprises have to pay their attention to the change of the organizational culture. In literary sources, it is possible to find a several different methodologies and schemes for the creation of the organizational culture differing in a scope, but on the other hand it can be found certain parallel in the three levels of the process of the creating the organizational culture. There are level of the acknowledgement, direction level and level of the implementation. Creation process of the appropriate organizational culture has been divided to the three levels and it has been described through the 14 steps such as (Stachová, 2015):

**I. level** – Gain the information necessary for the objective formulation of the present conditions of the organizational culture its production and assimilation:

- gain the information about the strategic aims of the enterprise,
- gain the essential information about the actual organizational culture,
- defining analysis objective of the actual organizational culture,
- identification of the tools for the gaining information about the second and the third level of the organizational culture,
- analysis of the actual state of the organizational culture,

- processing of the analysis results of the actual state of the organizational culture.

**II. level** – Comparison of the present conditions of the organizational culture with the optimal conditions and creating plan of the appropriate organizational culture implementation:

- defining appropriate conditions of the organizational culture,
- comparison of the analysis results and appropriate state of the organizational culture,
- outlining the changes to make the appropriate organizational culture,
- planning the implementation process of the appropriate organizational culture.

**III. level** – Implementation, support and examination of the appropriate organizational culture:

- implementation and support of the appropriate organizational culture,
- operational checkout of the implementation level and supporting the appropriate organizational culture,
- tactical checkout of the implementation level (once a year) and supporting the appropriate organizational culture,
- strategic checkout of the implementation level of the appropriate organizational culture (every three years or in a case of major change in the organization).

Simplex method for gaining the basic information about the actual organizational culture was proposed. This method appreciates a level of the innovation orientation of the actual organizational culture. Proposal method is divided into the three main parts:

- Questionnaire analysis of the actual organizational culture.

- Evaluation of the actual organizational culture.
- Identification of the bottlenecks obstructing the increase of the innovative potential and level of the novelty in the organizational culture.

Following the execution of the main steps of the method it is appropriate to evaluate achieved results by the executive staff and furthermore it is necessary to execute the

remedies for the removing identified the barriers obstructing the increase of the innovative potential and level of the novelty in the organizational culture.

Questions focusing on the analysis of “the organizational culture supporting creativity and innovations” with a point evaluation of the answers respectively are shown in a Table 5.

**Table 5.** Questions analysing the implementation of the organizational culture

Questions and answers	Points
<b>1) What is the employee attitude to the innovations in your company?</b>	
a) All employees identify innovations as an inevitable part of successful business and therefore innovations are considered positive.	10
b) The employees identify innovations as a managerial decision and therefore it is necessary to accept them.	5
c) The employees disregard innovations as an importance. They are afraid of them even they feel aversion to them.	0
<b>2) What are the feelings on the innovation creation in your company?</b>	
a) The fellowship and the feeling of security are created. This atmosphere supports creative and innovative behaviour of the employees.	10
b) The feeling of security is created, however space for the employee initiative in the innovation is not created.	5
c) Creative and innovative atmosphere supporting feeling of security and initiative is not created (atmosphere of uncertainty).	0
<b>3) Are the employees rewarded for their innovative ideas?</b>	
a) Yes, they are. All successful innovative ideas are rewarded properly.	10
b) Yes, they are, but it is only symbolic.	5
c) No, they are not.	0
<b>4) Have employees got enough space for innovative behaviour?</b>	
a) Yes, they have. The working inputs for the innovations are provided for the employees and therefore enough space for the innovative behaviour is created.	10
b) The working inputs for the innovations are provided for the employees only partially and therefore minimal space for the innovative behaviour is created.	5
c) The employees have an inadequate space for the innovative behaviour, because the working inputs are provided only for meeting the workload.	0
<b>5) What is the approach of the upholding the innovative decisions in your company?</b>	
a) Innovative decisions are upheld quickly furthermore a careful analysis has to be carried out.	10
b) Innovative decisions are upheld circuitously, because of the carrying out an ineffective environment analysis.	5
c) Innovative decisions are upheld slowly and only if the competitiveness of the company is threatened.	0

Individual values of the respondents’ answers are counted. This grand total and marked level are shown in the summary table. The

point ranges of the individual categories for the enterprise classification are shown in the Table 6.

**Table 6.** Levels of the implementation of the organizational culture

Sign of the innovative enterprise	Your result	Corresponding level
The organizational culture supporting the creativity and innovations	50 – 40	A
	39 – 20	B
	19 - 0	C

Enterprises were divided into the three groups:

**A.** Your company creates procreative and pro-innovative atmosphere supporting initiative and safety. The employee confidence of the managerial decision is reinforced because of the active support of the employees by the management. It allows them undertake the risk without the apprehension for the inequitable sanction or mistakes. The stimulative system is default so that positively affects the growth of the innovative activities. Successful innovations are rewarded and therefore the employees are disposed to be engaged in the innovative activities.

**B.** Your company supports safety and it is base for procreative a pro-innovative culture, however it does not create the initiative area for the employees in the innovations. The management creates safety atmosphere partially, so it allows undertake the risk without apprehension for the inequitable sanction or mistakes. The stimulative system is not built to be able to support increase in the innovative activities positively. It support meet the working task, not innovative behaviour. The innovations could be rewarded at low level or neither. It causes that the employees are not disposed to be engaged in the innovation activities.

Your company does not create procreative and pro-innovative atmosphere supporting initiative and safety. There is no the employee support by the management so the employees are not disposed to undertake the risk without apprehension for the inequitable sanction or mistakes. The stimulative system is not built to be able to support increase in the innovative activities. It supports meeting the working tasks and space for innovative behaviour does not exist. Innovations are not

rewarded and so the employees are not disposed to be engaged in the innovative activities.

Table 7 was created for the finding the bottlenecks in “the organizational culture supporting creativity and innovations”. The respondent could identify the sphere of the interest within the obligatory engagement of the enterprise management in the innovations for the achievement of the higher level in this field.

**Table 7.** Detection of the bottlenecks

Question number/ Answer	1	2	3	4	5
<b>Excellent</b>	a	a	a	a	a
<b>At an average</b>	b	b	b	b	b
<b>Not sufficient</b>	c	c	c	c	c

Based on the results of the proposed method, the real level of the enterprise novelty within the organizational culture could be established. Furthermore the bottlenecks obstructing the increase of the innovation potential could be detected. Subsequently, the second and the third level of the creating the innovative organizational culture could be realized. It is possible to make innovative processes more effective in three years through compliance with the methodology.

## 6. Case Study

The general proposal of the necessary steps of the creating the appropriate organizational culture was defined. This sequence is a logical flow specified by the analysis of the innovative enterprise attributes and by the proposal of the point evaluation of the real level of the organizational innovative orientation focusing on the innovation and bottlenecks and corrective measures for its elimination. Case studies of the three

industrial enterprises supporting the innovations were made. The levels of the attribute for the barrier identification were classified. Method verification takes place in the selected Slovak enterprises. Our proposal was sent with a covering letter including methodology of its realization. Second part of the attachment was the verification questionnaire focusing on the functional attestation and finding the potential changes

and improvement. A consistent approach to the attribute level evaluation was used within the presentation of the case study. The attributes represent different levels of the innovative process barrier identification. Three industrial enterprises differ in the location within the Slovak republic, the number of the employees, the capital structure and the sales in a last three years.

**Table 8.** Questions analysing the attribute of the organizational

Questions and answers	E1	E2	E3
<b>1) What is the employee attitude to the innovations in your company?</b>			
a) All employees identify innovations as an inevitable part of successful business and therefore innovations are considered positive.	X		
b) The employees identify innovations as a managerial decision and therefore it is necessary to accept them.		X	
c) The employees disregard innovations as an importance. They are afraid of them even they feel aversion to them.			X
<b>2) What are the feelings on the innovation creation in your company?</b>			
a) The fellowship and the feeling of security are created. This atmosphere supports creative and innovative behaviour of the employees.		X	
b) The feeling of security is created, however space for the employee initiative in the innovation is not created.			
c) Creative and innovative atmosphere supporting feeling of security and initiative is not created (atmosphere of uncertainty).	X		X
<b>3) Are the employees rewarded for their innovative ideas?</b>			
a) Yes, they are. All successful innovative ideas are rewarded properly.			X
b) Yes, they are, but it is only symbolic.			
c) No, they are not.	X	X	
<b>4) Have employees got enough space for innovative behaviour?</b>			
a) Yes, they have. The working inputs (time, material, information etc.) for the innovations are provided for the employees and therefore enough space for the innovative behaviour is created.	X		
b) The working inputs (time, material, information etc.) for the innovations are provided for the employees only partially and therefore minimal space for the innovative behaviour is created.		X	X
c) The employees have an inadequate space for the innovative behaviour, because the working inputs are provided only for meeting the workload.			
<b>5) What is the approach of the upholding the innovative decisions in your company?</b>			
a) Innovative decisions are upheld quickly furthermore a careful analysis has to be carried out.		X	
b) Innovative decisions are upheld circuitously, because of the carrying out an ineffective environment analysis.	X		
c) Innovative decisions are upheld slowly and only if the competitiveness of the company is threatened.			X

**Enterprise 1 (E1):** has its head office in the middle of the Slovak republic, branch of industry: mechanical engineering, number of

the employees: 223, target group: foreign market, foreign capital structure, revenues in the last three years have exceeded expenses

sufficiently.

The success of the enterprise is highly dependent on the quantity and quality of the production and therefore the management of the enterprise has to be focused on the innovative culture and its permanent attachment into the innovation processes. The managers of the enterprise 1 mention that our methodology helped them detect bottlenecks and in addition the opportunities of the improving the enterprise innovative potential were discovered.

**Enterprise 2 (E2):** has its head office in the western Slovakia, branch of industry: transport sector, number of the employees: 115, target group: home and foreign market, home capital structure, revenues in the last three years have been on the adequate level for the creating small profit.

The enterprise management has perceived necessity of the focusing on the innovations for two years. There is mentioned in the verification questionnaire that our methodology helped the enterprise 2 to detect bottlenecks and in addition the opportunities of the improving its innovative potential were discovered.

**Enterprise 3 (E3):** has its head office in the southern Slovakia, branch of industry: agriculture, number of the employees: 87, target group: home and foreign market, home capital structure, revenues in the last three years have been on the unsuitable level for the creating the profit.

Currently, the enterprise management has not perceived necessity of the focusing on the innovations. However verification questionnaire was completed. There is mentioned in the verification questionnaire that our methodology helped the enterprise 3 to detect bottlenecks and in addition the opportunities of the improving its innovative potential were discovered. Therefore in a case of changing the enterprise strategy they will consider a focus on the bottlenecks.

The current conditions of the organizational culture implementation in the analysed enterprises are shown in Table 8 and Table 9.

**Table 9.** Detection of the bottlenecks within the implementation of the organizational culture supporting the creativity and innovations in the analysed enterprises

Answer	Enterprise	Question number				
		1	2	3	4	5
Excellent	E1	Yellow	Red	Red	Yellow	Orange
At an average	E2	Orange	Yellow	Red	Orange	Yellow
Not sufficient	E3	Red	Red	Yellow	Orange	Red

**The analysis of the actual state and proposals for the Enterprise 1:**

The enterprise 1 focuses on the innovations. All employees consider the innovations and they think that it is necessary to implement them for the assurance the future success of the enterprise. The enterprise management creates space for the innovative employee behaviour, because they possess work inputs at required level for the creating the adequate space for the innovative behaviour. Certain support is apparent because of the enterprise attitude to the implementation of the innovative decisions. The bottlenecks were identified according to the answers to the questions 2 and 3, because the enterprise is in the red area and therefore proactive and pro-innovative atmosphere supporting the initiative is not created and in addition pro-innovative employee behaviour is not overpaid. It is necessary to implement the innovative culture absolutely within the improvement of the current conditions. Therefore, it is necessary to focus on the creating the atmosphere supporting the change what means the implementation of the confidence value in the context of the implementation the innovative culture. The confidence value is the essential condition for the engagement, commitment (affecting the external environment) and empowerment (engaging individuals or team with the common objective). Additional bottleneck is the cohesion of the required innovative culture and personnel activities with an emphasis placed on the reward, because it affects employees through a motivation. The

motivation is important predictor of the future behaviour of the employees. Therefore it is necessary to identify employee needs for example, through the utilization of the questionnaire focusing on the finding their interest and value orientation. System of the financial and non-financial reward encourages required behaviour of the employees within the innovative culture. The employee needs are base for the creation of the enterprise reward system.

**The analysis of the actual state and proposals for the Enterprise 2:** Based on the questionnaire results, it could be stated that management of the enterprise 2 is persuaded that the innovations are necessary, however employees are not absolutely identified with this statement and they perceive it as a necessity which has to be accepted because it is enforced by the management. The enterprise management creates the atmosphere of the fellowship and safety supporting the procreative and pro-innovative behaviour and the effective process of the affirmation of the innovative decisions. However, employee innovative behaviour is not supported through the reward system as well as adequate space for innovative behaviour is not created. It is necessary to focus on the explanation of the necessity of the innovative culture for the employees within the improvement of the actual status. Furthermore, it is necessary to appoint appropriate and open communication across the whole organization. The management of the organization should provide first explanation. Qualified instructors teaching culture change should be hired and subsequently, support and necessity of the innovative change should be communicated with the employees. The reward for the appropriate innovative behaviour is required publicly at the best. At last but not least, it is necessary to create space for the innovative behaviour, because employees cannot be under the time pressure in a case of their volition to the connecting to its creation or alternatively they could create their own developing project.

**The analysis of the actual state and proposals for the Enterprise 3:** The enterprise 3 does not have a need to focus on the implementation of the innovative culture. It follows that enterprise does not pay its attention to the creating the procreative and pro-innovative atmosphere. However the management does not defend against this atmosphere and the inputs (time, material, information) supporting innovative behaviour are provided although at a low level. The innovative behaviour of the enterprise employees is rewarded, however the innovative decisions are affirmed only in a case of a direct threat of the losing the competitive advantage. Regarding the environment dynamics and globalization trend it is necessary to realize that it is not possible to conceptualize the innovation as a voluntary improvement of the products, services and processes. It is necessary to conceptualize it as a necessary part of the enterprise dynamics. Regarding the running environment changes, the utilization of the own resources within the financing of the innovation process is ineffective and demanding. We recommend to the enterprise 3 to focus on the open innovations, because the external partners participate in them. The universities and the scientific institutions should participate in them preferentially in a context of the analysed enterprise. Currently it is the creation of the clusters what seems to be the most effective choice within the business environment in the Slovak republic. The clusters allow the utilization of higher innovation capacity and flexibility on the market and the risk could be diversified (preferentially in small and medium sized enterprises). Therefore the innovation costs could be reduced.

## 7. Conclusions

It is necessary to focus on the human resources in the management of the innovation processes, because they are the most important resource. They are holders of the skills, experiences, knowledge and

abilities (Blašková, 2015; Urbancová, 2015; Gubíniová, 2014; Hitka *et al.*, 2014; Mura *et al.*, 2014; Závadský, Hladlovský, 2014; Slávik, 2013; Cagáňová, 2012; Horňák, 2012; Ulrich, 2009; Hroník, 2007; Tidd, 2007). Most of the contemporary authors dealing with the issue of the innovation management or management of the innovation processes, state that existence of the specific human resources in their own right does not bring the competitive advantage. The important role plays the organizational culture enforced in the enterprise in order to its effective utilization and the reaching of the enterprise objectives (Blašková, 2016; Hitka *et al.*, 2015; Majerčáková, 2015; Pilková *et al.*, 2013; Slávik, 2013; Stasiak–Betlejewska, 2011). The reason is that the values and rules of the enterprise management define way of the decision affirmation as well as the reward system for the employees. The enterprises with the innovative culture are a space for the dualities and they need a strong organizational system formally and informally. This systems run in a dynamic balance and they compensate the changes in the internal and external environment sensitively. If the balance was deeply upset and it was not restored in a due time, the organization would be subverted (Lukášová, 2004). Stacho *et al.* (2015) point out that the creation of the working environment supporting the employee positive attitude to the innovations is one of the most important managerial tasks within the process of the support and keeping the innovative culture. If the managers want to create innovative culture meaningfully, it is necessary to create procreative and pro-innovative atmosphere preferentially. It follows that they should pay their attention to the creating the social-

psychological atmosphere supporting the initiative and safety (Lukášová, 2004). Ideal tool used for the support of the creation this environment is the reward system for the employees connecting to the reform innovative proposals of the enterprise employees. It is necessary to pay the attention to the right design of this system with the reference to the profitability of the costs relating to its implementation as well as the real profit of the innovative proposals for the enterprise. If the management creates the pro-innovative environment it is possible to make innovative decisions very quickly. Currently, it is considered the most important factor of the competitiveness. It follows that it is necessary for the enterprise to possess the appropriate resources (mainly human resources) in order to get a place into the market. On the other hand it is necessary to devise the methods and procedures of the management allowing their utilization in maximal possible way. Our research demonstrate that in the Slovak republic is very few of the enterprises with the implemented innovative culture and therefore we recommend to keep the attention to the issue of the creating the innovative organizational culture. The specific tools simplifying the change of the process of the organizational culture have been introduced within the discussion.

**Acknowledgement:** The article is related to VEGA 1/0890/14 Stochastic Modeling of Decision-making Processes in Motivating Human Potential; Grant Agencies of VSEMs project No 4/2011 - Human Potential Development in Central and Eastern EU States

## References:

Baumgartner, J. (2009). *The Corporate Innovation Machine – A Model for Implementing an Idea Management Based Innovation Strategy in Your Firm*. Retrieved from: [http://www.creativejeffrey.com/creative/innovationMachine\\_us.pdf](http://www.creativejeffrey.com/creative/innovationMachine_us.pdf). Accessed: 12 Aug. 2016.

- Belás, J., Bartoš, P., Habánik, J., Novák, P. (2014). Significant attributes of the business environment in small and medium-sized enterprises. *Economics and Sociology*, 7(3), 22-39.
- Blaskova, M., Bizik, M., & Jankal, R. (2015). Model of decision making in motivating employees and managers. *Engineering Economics*, 26(5), 517-529.
- Blaskova, M., Blasko, R., Borkowski, S., & Rosak-Szyrocka, J. (2016). Searching correlations between communication and motivation. *Komunikacie*, 18(1), 28-35.
- Cagáňová, D., Čambál, M., Šujanová, J., & Woolliscroft, P. (2012). The Multicultural Aspects and Human Capital Management within Slovak Industrial Enterprises, *ECIC 2012: Proceedings Academic Publishing International*, Helsinki, 106-117 Retrieved from: <http://www.scientific.net/AMR.482-484.136>. Accessed: 12 Aug. 2016.
- Carvaja, S.A., Pérez, M. D., Cabello, R. V., & Espinosa, C. C. (2015). Identifying key factors affecting culture of innovation: A case study of Chilean medium mining sector. *Journal of Technology Management and Innovation*, 10(1), 132-145.
- Čimo, J., & Mariaš, M. (2006). *Inovačný manažment*. p. 219. Bratislava: GeoPARNAS.
- Gubíniová, K., & Pajtinková-Bartáková, G. (2014). Customer Experience Management as a New Source of Competitive Advantage for Companies. *Trade, International Business and Tourism „Application of Knowledge in Process of Business Dynamization in Central Europe“*. 162-168.
- Herbig, P., & Duphy, S. (1998). Culture and Innovation. *Cross cultural Management: An International Journal*. 5 (4), 13-21.
- Hitka, M., Hajduková, A., & Balážová, Ž. (2014). Impact of the economic crisis on the change in motivation of employees of woodworking industry enterprise. 1/2014. *Drvna industria*. 65 (1), 21-26.
- Hitka, M., Balážová, Ž. (2015). The impact of age, education and seniority on motivation of employees. *Business: Theory and Practice*, 16(1), 113-120
- Horňák, F., Cagáňová, D., & Čambál, M. (2012). Development of Managerial Creativity. *Advanced Materials Research*, 482-484, 996-999.
- Hroník, F. (2007). *Rozvoj a vzdelávaní pracovníků*. Praha: Grada Publishing, 240.
- Kampf, R., Lorincová, S., Hitka, M., Čaha, Z. (2016). The Application of ABC Analysis to Inventories in the Automatic Industry Utilizing the Cost Saving Effect. *Nase More*, 6(3), 120-125,
- Khazanchi, S., Lewis, W.M., & Boyer, K.K. (2006). Innovation-Supportive Culture: The Impact of Organizational Values on Process Innovation. *Journal of Operations Management*, 25(4), 871-884.
- Ližbetinová, L., Lorincová, S., & Čaha, Z. (2016). The application of the organizational culture assessment instrument (OCAI) to logistics enterprises. *Nase More*, 63(3), 170-176,
- Lukášová, R. (2010). *Organizační kultura a její změna* Praha: Grada Publishing, 240.
- Lukášová, R., & Nový, I. (2004). *Organizační kultura*. 175. Praha: Grada Publishing.
- Majerčáková, D. (2015). The impact of social enterprises in the terms of social innovations. *Innovation management and sustainable economic competitive advantage: from regional development to global growth*. Norristown, PA: IBIMA, 2015. 1585-1593.
- Manzanares, F.V. (2016). The impact of the commitment to quality and entrepreneurial culture on the innovative behavior of manufacturing SME under a participatory management approach, *Dirección y Organización*, 58, 4-15.

- Mura, L., Žul'ová, J., Madleňák, A. (2016). Strategic management and management of personnel costs: employing young people in the Slovak Republic. *Problems and Perspectives in Management*, 14(1), 79-84.
- Nikolić, V., & Nastasić, A. (2010). Organizational culture as significant factor in implementation of TQM – experience in Serbian economy. *International Journal for Quality research*, 4(1), 59-69.
- Papula, J., & Volná, J. (2012). A Descriptive Analysis of Intellectual Capital Concept Implementation within Slovak Companies. In *Driving the Economy through Innovation and Entrepreneurship: Emerging Agenda for Technology Management*. Springer, India. 443-451.
- Pilková, A., Papula, J., Volná, J., & Holienka, M. (2013). The influence of intellectual capital on firm performance among Slovak SMEs. *International Conference on Intellectual Capital, Knowledge Management and Organisational Learning. ACPI*. 329-338.
- Quandt, C.O., Bezerra, C.A., & Ferraresi, A.A. (2015). *Dimensions of organizational innovativeness and its impact on innovation performance: Proposition and evaluation of a model Gestao e Producao*, 22(4). 873-886.
- Remišová, A., & Búciová, Z. (2012). Measuring corporate social responsibility towards employees. *Journal for East European Management Studies*, 17(3). 273-29.
- Sedliačiková, M., Hajdúchová, I., Krištofik, P., Vizslai, I., & Gaff, M. (2016). Improving the performance of small and medium wood-processing enterprises. *BioResources*, 11(1), 439-450.
- Slávik, Š. (2013). *Strategický manažment*. Bratislava: Sprint 2, 390.
- Stacho, Z., Stachová, K., & Pajtinková Bartáková, G. (2015). Influencing organisational culture by means of employee remuneration. *Business: Theory and Practice*. 16(3), 264-270.
- Stachová, K. (2015). *Návrh súboru funkcií riadenia ľudských zdrojov ako nástroja pre tvorbu organizačnej kultúry v kontexte udržateľného rozvoja*. Bratislava: UK Bratislava. 157.
- Stasiak–Betlejewska, R., & Piasecki, P. (2011). Analysis of workers satisfaction in company logistic operator. *Human potential management in a company - Knowledge increase*. Trnava: Alumni Press, 33–42.
- Tidd, J., Bessant, J., & Pavitt, K. (2007). *Řízení inovací*. Brno: ComputerPress, 550.
- Urbancová, H., & Hudáková, M. (2015). Employee development in small and medium enterprises in the light of demographic evolution. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*. 63(3), 1043-1050.
- Uriga, J. (2009). Plánovanie a riadenie kariéry. *Personálny manažment nielen pre personalistov*. Bratislava: IURA EDITION, 2009/08, 350-356.
- Wei, Y., O'Neill, H., Lee, R.P., & Zhou, N. (2013). The impact of innovative culture on individual employees: The moderating role of market information sharing. *Journal of Product Innovation Management* 30(5), 1027-1041.
- Willems, M.J.T. (2007). *The Influence on Social Capital and Cultural Dimensions of Innovation*, Master's Thesis, Universiteit Maastricht. 2007. Retrieved from: <http://arno.unimaas.nl/show.cgi?fid=11419>
- Yusr, M.M., Mokhtar, S.S.M., & Othman, A.R. (2014). The effect of tqm practices on technological innovation capabilities: Applying on Malaysian manufacturing sector. *International Journal for Quality research*, 8(2), 197-216.

Zavadsky, J., Zavadská, Z., & Veselovská, L. (2016). Performance indicators of the logistic processes and its consistent definition in the selected manufacturing company. *Carpathian Logistics Congress 2015*. pp. 27-38.

Zavadsky, J., & Hladlovsky, V. (2014). The consistency of performance management system based on attributes of the performance indicator: An empirical study. *Quality Innovation Prosperity*, 18(1), 93-106.

---

**Zdenko Stacho**

School of Economics and Management,  
Public Administration in Bratislava  
16 Furdekov Str.  
851 04 Bratislava 5  
Slovak Republic

**Marek Potkány**

Technical University in Zvolen,  
Masarykova 24  
960 53 Zvolen  
Slovak Republic  
[potkany@tuzvo.sk](mailto:potkany@tuzvo.sk)

**Katarína Stachová**

School of Economics and Management,  
Public Administration in Bratislava  
16 Furdekov Str.  
851 04 Bratislava 5  
Slovak Republic

**Katarína Marcineková**

Technical University in Zvolen,  
Masarykova 24  
960 53 Zvolen  
Slovak Republic

---

