PEOPLE IN THE PROCESS OF INNOVATION
AND AS THE FACTOR INCREASING
BUSINESS PERFORMANCE

Marcela Kovaľová
e-mail: marcela.kovalova@umb.sk
Matej Bel University in Banská Bystrica, Slovakia

Abstract. The article deals with the importance of human resources (HR) in the process of innovation. The employees stand for the important component of increasing innovativeness, performance and competitiveness of an enterprise. The aim of the article is to analyse the components of creativity, as well as its barriers and to propose the recommendations for its improvement, as an important prerequisite for creating innovations and increasing the overall business performance. The corporate culture and people in the context of innovation were discussed. The questionnaire with 44 statements was used with the aim to identify the type of the corporate culture, its strengths and weaknesses and its connection with the innovations at particular university department. Two typologies were used, F. Trompenaars’ typology and R. Goffee and G. Jones’ typology. 25 employees were asked and 18 answers were processed. Two predominant types of culture were identified and the main characteristics regarding the innovations were analysed in order to set the potential base for further improvements.

Key words: business performance, creativity, human resources, innovations. people.

Introduction

The employees represent an important element of increasing innovativeness, performance and competitiveness of an enterprise. It is essential to manage people (human resources), as well as to ensure the right environment for people’s creativity which supposes to be the precondition for the innovations. Consequently, the innovations are one of the preconditions for the overall performance of an enterprise. The article is divided into three sections – people (human resources) in the process of innovation, people as a factor increasing business performance and corporate culture in the context of innovations.

1. Literature review

1.1. The importance of human resources in the process of innovation

People (employees) are one of the most important resources of an enterprise creating the innovations. The competitive advantage of an enterprise often lies in the creativity of its human resources producing the right amount of (prop-
er) innovations. As Gupta and Singhal (1993) argue successful companies are innovative and creative not by accident, they effectively manage human resources to create and market new products and services. People are an innovative organization’s most vital resource. Human capital, creativity, and diversity operate jointly in the production of innovation (Lee et al. 2010). The statement that human resources and their management is a key to successful innovation is supported also by Dalotă and Perju (2010) who claim the human element is involved in the whole innovation process. Specialists state that there are no good technologies or good innovations without competent people who can adequately use them and get benefit from them (Dalotă, Perju 2010). It can be stated that employees are one of the preconditions for the overall enterprise’s performance, together with the technologies and the appropriate corporate culture. Based on the opinion of Barrett (2010), there are three drivers of innovation: smart people, smart ideas and the right environment that the government sets for innovation.

This topic has been heterogeneous in the literature. Many authors deal with this issue (e.g. Hsu 2013; Chung 2004; Murray, Lewis 2015; Dalotă and Perju, 2010; Lee et al. 2010; Gupta, Singhal 1993; Thompson 2004; Workman 2009 etc.). As Dalotă and Perju (2010) confirm, human resource management has been scarcely treated in studies on innovation in the enterprises and the conclusions of some empirical studies in recent years are heterogeneous and focus on U.S. firms. Regarding the small and medium-sized enterprises, relatively few studies address innovation-related people management practices because HR practices are still considered to be emerging rather than fully developed and because relatively little focus has actually been placed on people management practices in the small and medium-sized enterprises context (Reid et al. 2002). On the other hand, studies have identified the importance of human capital in economic growth (Lee et al. 2010) but they have not considered the role of human capital in innovation or the relationships among human capital, innovation, and economic growth. The authors argue that the empirical literature has provided little evidence of the whole chain of causal flow from human capital via innovation to economic growth or has failed to specify the causal mechanisms at work among human capital, innovation and economic outcomes.

The role of the management is in managing the creativity of people to produce the innovations. According to Hotho and Champion (2011), the source of innovation resides in the creativity and innovator capability of people. Agreeing with Okpara (2007), all innovation begins with creative ideas. Creativity is the starting point for innovation. Creativity is necessary but not sufficient condition for innovation. Innovation is the implantation of creative inspiration. This idea is supported also by Chak-Keung and Wai-Ling (2003) that it has become of the utmost importance for organizations to address business issues.
People in the process of innovation and as the factor increasing business... creatively. Szczepańska-Woszczyna (2014) writes that at a time when finance is expensive, the firm’s liquidity is bordering on crisis, the need for creativity, and innovation is more pressing than ever and as competitors fall by the way side, the rewards for successful products and process are greater. We should mention that not all employees can be totally creative, thus this is the job of the managers not only to manage the creativity but to recognize the talents as well. It is all right to have a heterogeneous team of people some of them being inventive and the others being uncreative.

The concepts (terms) of creativity and innovation are often used interchangeably in the literature. In the opinion of deSousa et al. (2012), researchers in creativity and in innovation come from different backgrounds and fail to make the necessary convergence. The field of creativity is closer to the behavioural sciences (like psychology and education) while researchers in the field of innovation come from areas related to management, economics, public administration or political science. Therefore, depending on the origins, both terms have been used with similar or different meanings, often contradicting each other. Some authors differentiate between the two concepts and consider creativity as an internal and intellectual process of bringing about new ideas while innovation refers to the practical application of such ideas (Mostafa 2005). It can be argued that this is the reason of the heterogeneity in this field. The idea of interchangeability of the terms is supported also by deSousa et al. (2012) who write creativity and innovation could be used as synonyms, and we can refer to organizational creativity as a system to develop and channel individual creativity, through teams, towards profitable company innovations. The enterprise needs skilled and creative people in order to produce the innovations and to be competitive on the market. The dependence of the performance on the creativity, innovations and other variables is supported by Okpara (2007) who writes people become more creative when they feel motivated primarily by the interest, satisfaction, and challenge of the situation and not by external pressures. Within every individual, creativity is a function of three components: expertise, creative thinking skills, motivation. On the other hand, Horibe (2003) argues people are creative anyway and innovation needs two things: creativity and political savvy but these two skills (qualities) rarely reside in the same person.

1.2. Business performance and its link to innovations, people and creativity

According to Hiadlovský et al. (2014), innovation is a meaningful, dynamic and developing process, resulting in a positive change oriented on improving the transformation process in an enterprise. Based on the opinion of Barrett (2010), the 21st century is the century of innovation which defines corporate and country competitiveness. Similar opinion could be found also in Dalotă and
Perju (2010), as they claim innovation and human resources management play an increasingly important role in sustaining „leading edge” competitiveness for organizations in times of rapid change and increased competition.

In the literature, there are many articles dealing with the relation between the innovations and performance as well as between the creativity and performance of an enterprise (Mattia 2013; Mostafa, El-Masry 2008; Overall 2015; Stock et al. 2013 etc.). Innovation is usually at the end of the creative process. Creativity or the results of creative process can be perceived one of the main sources of innovative ideas, products, services or solutions. Mattia (2013) and the others (e.g. Hessels et al. 2008) claim creativity that has an innovative outcome can lead to increased productivity and increased wealth for a firm. On the basis of Mostafa and El-Masry (2008) creativity may be the key to market success and improved operating efficiencies. They found specific results from increasing organizational creativity and those are new products, methods, increased efficiency, greater motivation, job satisfaction, teamwork, focus on customer satisfaction and more strategic thinking at all levels. Chung (2004) argues innovation is relatively easy to recognize, but very difficult to achieve consistently. The author has observed that innovation comes directly from two major areas: creativity and insight. Creativity can be spawned from the methods, processes, and applications. A strong method to problem solving can lead to great success.

Talking about creativity, it is needed to discuss the factors enhancing creativity and the barriers to it. The barriers to creativity can be considered the opposites of the factors enhancing it, thus the list of the barriers to creativity in the enterprise could be as follows: criticism and sarcasm, extreme evaluation or over-control, conflicts and inappropriate corporate culture, no support and empathy, mistrust and fear among the employees and in relation to the managers, fear of failure, no humour and playfulness, no motivation to explore and curiosity, no incentives, no courage to risk, no environment for inventions and development of crazy ideas or solutions, no teamwork and responsibility, no discussion, no freedom and respect for the opinions of the others, sectorial specifications (some industries/branches are less innovative or creative), no time or money (lack of resources), excuses for being passive (not creative), no open-mindedness etc..

Reviewing the literature, the barriers can be completed with those from the studies (e.g. Mostafa 2005; Mostafa, El-Masry 2008; Chak-Keung, Wai-Ling 2003). Mostafa (2005) surveyed 170 managers to discover factors affecting organizational creativity in Egyptian organizations. He came to the conclusion (beside the others) that there is a statistically significant difference in attitudes towards organizational creativity based on the managers’ functional area in the organization and, at the same time, the higher the education of the manager, the
more is he/she likely to adopt creative and innovative activities. Mostafa and El-Masry (2008) distributed a total of 67 questionnaires among the students of universities throughout Egypt and 17 questionnaires among the students at the University of Manchester in order to analyse the barriers to organizational creativity. They discuss these barriers: not feeling involved, low morale, lack of communication, conflicting goals and objectives, lack of peer cohesion and support, no recognition and appreciation of work done, risk aversion, fear of failure, threatening evaluation, destructive criticism, status quo, management turn-down of suggestions, not supported by the management, time pressure, work pressure, rules and regulations to follow, conservative management style. Finally, Chak-Keung and Wai-Ling (2003) reviewed the literature and they found the environmental stimulants and obstacles to creativity. The environmental obstacles to creativity were following: time pressure, evaluation, status quo and political problems and the stimulants were as follows: various organizational characteristics such as inappropriate reward systems, constraint such as lack of freedom, organizational disinterest, poor project management, evaluation, insufficient resources, time pressure, over-emphasis on the status quo and competition. The authors further performed the research focused on the barriers to creativity in the hotel industry. 17 statements were taken into consideration when asking respondents from hotel industry about barriers to creativity. 288 valid responses were surveyed in order to discover the barriers to creativity. 4 factors, creativity barriers were recognized: low commitment to organization and system, fear of change and criticism, time and work pressure, rigid rules and company style.

As Szczepańska-Woszczyna (2014) writes, organizational culture can effectively promote or inhibit cooperation, exchange of knowledge, experience and ideas. Open culture, promoting the participation of all team members in the creative process, is favourable to the activity and initiative of employees, while culture based on strong control is definitely not conducive to creativity and innovation. The author further states that in order to build innovative culture certain requirements must be met, involving six kinds of attitudes: the ability of managers to take risks, encouraging creativity, participation of all employees in building innovation-oriented culture, responsibility of both managers and employees for their actions, allowing employees to develop their interests and to use their unique talents, developing the company’s mission, which the employees will identify with, providing employees with a sense that their work is meaningful and has a positive impact on the achievement of objectives (Szczepańska-Woszczyna 2014).

In the literature, there are many typologies of the corporate cultures. Goffee and Jones (in Zabid et al. 2004) developed one of the most recent typologies of corporate culture. They categorized organizational culture into four main
types based on two dimensions: sociability, defined as friendliness in relationships between people in an organization, valued for its own sake and independent of its impact on the performance of the organization; and solidarity, the ability of people to pursue shared goals efficiently and effectively for the larger good of the organization without much regard for the impact on individuals and the relationships between them. Placing these two dimensions on the axes of a diagram, we can see four types of cultures defined as the quadrants: communal culture, fragmented culture, networked culture and mercenary culture. Each combination (culture) can have a positive or negative impact on the enterprise. According to Trompenaars’ typology (in Pyszka, Piłat 2011) culturally influenced organization can differ among countries based on certain key dimensions on the bipolar typology. The typology uses two dimensions: the orientation towards tasks or relationships being the first one, the orientation towards hierarchies or egalitarianism being the second one. The typology is based on four cultural types: family, Eifel tower, guided missile and incubator.

It can be argued that the creativity in the company and the innovation, as its result, can be related to the employees (and their personality traits such as no courage, no open-mindedness, sarcasm, no humour or playfulness) as well as to the company (inappropriate social or working environment and culture, status quo, lack of money or time). Some of the barriers can be subjective as well as some others can be objective.

2. Corporate culture and people in the context of innovation at the university department

In the last part of the article, the corporate culture and people in the context of innovation are discussed and this issue is based on the example of selected university department. Corporate culture, as in the literature mentioned, is one of the factors affecting people’s creativity and innovations. In case it is inappropriately built and managed, it can be also a barrier to the innovations. Corporate culture is very strong and powerful motivational (or de-motivational) factor. The situation at the department, especially the innovations and the quality and quantity of work performance are directly influenced through the culture (regardless the branch, size or type of the company).

2.1. Objective and methodology of research

The aim of the research was to identify the type of the corporate culture, its strengths and weaknesses and its connection with the innovations at particular university department in Slovak Republic. The research was carried out and 25 employees were asked in order to gain the appropriate data. The answers from 18 respondents were used, representing 72% of all the staff. The type and position of corporate culture at the department were analysed and identified and most noticeable characteristics of the culture as the potential base for improve-
ments were detected. Two typologies were used, F. Trompenaars’ typology and 
R. Goffee and G. Jones’ typology. The culture was analysed from the point 
of view of insiders while using the observation as well as questionnaire 
and in-depth interviews. 44 statements about the corporate culture were included 
in the questionnaire with options to answer (from “strong disagreement” to 
“strong agreement”) and this was distributed to all 25 employees of the depart-
ment. The employees were asked to show their attitude to the statements such 
as: “The relationships at the department are close”, “The employees are con-
sidered to be the sources of the growth of the department”, “There is a strong 
orientation towards tasks at the department”, “The employees are equal” etc. 19 
answers were received and 1 of them was eliminated due to the incompleteness. 
The structure of the sample was as follows: 9 pedagogical employees (50%), 4 
operating staff (22.22%) and 5 postgraduates (27.78%); 10 employees working 
more than 10 years at the department and 8 employees working less than 10 
years. On the basis of the results obtained, the predominant types of cultures 
were identified: according to F. Trompenaars it is the Eiffel tower culture (av-
erage agreement with the statements was 66.08%) and according to R. Goffee 
and G. Jones it is the networked culture (average agreement with the statements 
belonging to this type of culture was 49.43%). No absolutely pure type of the 
culture was identified since no one of them was completely predominant over 
the others or there were only little differences between the types.

Figure 1. Average agreement with the statements about the corporate culture at the univer-
sity department (in %)

Source: Own elaboration.

Analysing the responses related to the dominant culture (Eiffel tower cul-
ture based on the F. Trompenaars’ typology), it was found out that employees at 
the department are considered to be only the resources and the roles are exactly 
assigned to the employees on the basis of qualifications and skills. The univer-
sity surrounding requires the employees to be the experts and to have required 
qualification. This could be sometimes understood as unrespecting people as 
the individuals (personalities) and it could negatively affect the overall atmos-
phere at the department, especially innovations. This type of culture is intended to symbolize the typical bureaucratic tall organization – narrow at the top and wide at the base. The orientation toward building healthy (and informal) relationships is by employees appreciated much more than one-time increasing of salary. Regarding the second dominant culture (Family culture) it can be stated that there is the orientation toward relationships and hierarchies. Two most important culture types are oriented on the hierarchies not on the egalitarianism. The respondents answered that close relationships are typical only for small groups of people which cannot be considered the positive form of culture. This is visible in the context of innovations. Some employees belonging to the “smaller groups” strive to innovate while the others (as the outsiders) not a bit. The person of “father” at the department was hardly an inspiring leader but the formal authority, the innovation was poor. It was revealed that a “father” was only the figure on the top of hierarchy without the informal authority and respect from the side of the others. This statement does not support the family type of culture in the positive (ideal) meaning. Following the theory, it would be the best option to build an incubator-oriented culture at the department as it is the fulfilment-oriented culture with the emphasis on persons and equality. This type of culture is aimed at self-fulfilment and self-expression of its members, while the authority is associated to the personal traits of an individual rather than on the performance. This culture, when developed in a positive form, enhances the innovations and supports new ideas.

Investigating the dominant culture according to the second typology (R. Goffee and G. Jones), the networked type (average agreement with the statements was 49.43%) and the fragmented type (average agreement with the statements received from 45.89% respondents) were revealed. The networked type of culture is the one with high sociability and low solidarity level, based on the personal relationships and friendships. Based on the results, the culture has the negative form. It was noticed that good relationships and sharing of information are performed within the specific small groups of people who are “friends”, while this is the cause of acting tactically and sharing the gossips rather than clear and true information. The decisions and the innovations as well, are made “behind closed door” or “between friends”. This can result in the breakup of atmosphere and can negatively affect the innovation and performance of the employees. The trust disappears, the informal groups are built, the adversaries and enemies are found, the collaboration is broken off and the sharing of information does not exist. Employees do not feel like a team and they are not willing to innovate, to work over-times or strengthen the relationships. An interesting fact was the employees did agree with the statement “the department is characterized by the creativity, flexibility, loyalty of the employees”, perhaps because they are well-educated and the workplace is specific due to its type
(university department). This statement could be perceived in a positive meaning as the results are influenced by specific environment. The employees of the university should be creative and flexible in order to fulfil the requirements of the customers (students), of the state and other interested parties (management, laws, community, region, city etc.). Discussing the second dominant type of the culture (the fragment type) it must be mentioned this is typical for the world of lawyers or journalists as well as for the university teachers and scientists. The respondents did agree with the statement they work for their own reputation and career not for the money and they are motivated intrinsically (they want to be the best in their branch). The results can be found disputable as in the world of university teachers there is sometimes no intrinsic motivation but the status quo which is hardly changeable (mostly for those who have been working as the teachers for long time and the change could be difficult – e.g. financial situation, work time, family, commuting to the work etc.). Following the theory again, the networked type of culture would be most suitable for innovative companies as it is the culture characterized by good relationships (when built in a positive way), mutual cooperation support, hierarchical orientation, free information flows and almost no rules. In a negative form, the tolerance to the low performance due to the friendships, too high emphasis on the process and inappropriate politics, formation of the groups and circumvention of the formal hierarchies in an enterprise are present. The fragmented culture (the positive form) can be appropriate for some reasons in the enterprises where important innovations are produced by individuals not teams. This is the culture often typical for universities, consulting agencies or lawyers, editorial offices or virtual organizations and characterized by freedom, flexibility and fair-play in a positive form or by disloyalty, cynicism, criticism, struggle for survival and information hiding in a negative form.

2.2. Findings and limitations

The employees stand for the important element of increasing innovativeness, performance and competitiveness of every enterprise. Reviewing the literature, it can be stated that the human resources, when appropriately managed, are involved in creative process and produce the right amount of innovations which can consequently result in increased performance and competitiveness. The most important findings emerging from the research at the selected university department can be summarized as follows (the symbol „+” standing for the strength of the culture, the symbol „-“ representing its weakness and the symbol „+/-“ meaning that it is the strength in some case and the weakness in the another case): the culture at the department is unambiguously hierarchically oriented (-), with low solidarity level (-) and the focus on the tasks rather than the relationships (+/-). The real manifested attributes of the culture (according the Trompenaars’ typology) at the department seems to be mostly consistent
with the attributes of the Eiffel tower type of culture, oriented towards the tasks, hierarchies and based on the roles (+/-). Following the Goffee and Jones’ typology, the most frequently represented type of culture was the networked one, based on low solidarity (-) and oriented towards common tasks and goals (+). In this type of culture, the tasks are of the greater importance than the relationships (+/-), the employees try to build the relationships one to each other (+) but the information, innovation and decisions are shared within the specific small groups and only among friends (-). Although the employees see the “father” in the head of the department (+), this person was rather the formal authority than the inspiring leader (-); the employees are loyal only as long as they get better job offer (-). The relationships are purpose-built (-), the values and goals are shared (+); the employees have high qualification and skills (+) as the department should be the place of high creativity, flexibility and expertise. The predominant type of culture should be the fragmented culture but the assumption has not been confirmed.

Every typology of the corporate culture is very simplistic as it connects the elements of different (national) cultures. The differences between the types of the culture at the department were almost invisible. In the research, the authors strived for the objectivity due to the fact that the culture was analysed from the point of view of insiders. This could have provided them with the deeper look into the opinions and feelings but, on the other hand, the distance from the researched phenomenon could have been absent. The other discrepancies can be present as the authors applied the typologies from the Netherlands (F. Trompenaars) and the Great Britain (R. Goffee and G. Jones) to the conditions of the Slovak republic. Therefore it should be revised and adjusted to the conditions of the national culture.

**Conclusions**

Business performance is closely related to the innovations as well as people’s creativity and to the appropriate work environment (i.e. corporate culture). The culture characterized by the openness, honesty, fair-play, good relationships, support, freedom, flexibility, self-fulfilment and self-expression is one of the factors enhancing creativity and innovations. The selected university department was researched in order to identify the type of corporate culture. Even though the theory says the culture based on strong control is definitely not conducive to creativity and innovation, the “invisible” control has the same effect on it. With the intention to improve the performance of the selected university department, following recommendations should be valuable: the ability of all employees to take responsibility to their actions as well as to take risks (e.g. even if no security of the employment exists at the department), participation of all employees in decision making process, developing the department’s mission and provision of employees with a sense that the work is meaningful,
People in the process of innovation and as the factor increasing business... building healthy and competitive environment and relationships, supporting the employees in their efforts and enhancing their pride of the work, rewarding the efforts to innovate and to be productive etc.. If only some of the recommendations were followed, the performance could be increased and the stability of the results of the department could be achieved.

References


