EFFECTIVE COMMUNICATION IN ORGANISATIONS INCREASES THEIR COMPETITIVENESS

Stacho Z., Stachová K., Papula J., Papulová Z., Kohnová L.*

Abstract: The speed of changes, determining business environment, is increasing rapidly with the emerging Fourth Industrial Revolution. If Slovak organisations aspire to maintain competitiveness, they will need to keep pace with the organisations that react quickly to such changes. Open communication, as an instrument of effective engagement of human resources may be among the instruments of increasing the chances of organisations to maintain competitiveness. The presented article aims at identifying the level of the implementation of open communication attributes in Slovak organisations, and at evaluating the reasons and consequences resulting from the findings to managerial work. The analysis of the level of openness of communication processes in year 2018 on 214 Slovak organisations was performed by an electronic questionnaire survey. The data collected from the questionnaire survey were subsequently statistically processed, while in addition to descriptive statistics, a method of correlation analysis, particularly statistical Pearson parametric correlation test (r), was used. The results proves the existence of a statistically significant relation between the frequency of attending communication trainings by the managers and the level of the support of employees in bottom-up communication and also the level of influencing informal communication in organisations.

Key words: communication, competitiveness, human resources, managerial skills, education

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Introduction

The current business environment is significantly influenced by the emerging Fourth Industrial Revolution (Brunet-Thornton and Martinez, 2018). Industry 4.0 is the conceptual era where Internet and digital technology becomes an enabler for innovation and transformation (Wahyu Wasono Mihardjo et al., 2018). The exponential speed of developments; disruption across all major industries; and the impact on entire systems of production, management, and governance are what differentiate these developments from previous "industrial revolutions." However, while all these developments will bring many benefits, they also carry risks. If managed well, they have the potential to give rise to innovation that will drive

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growth and social impact. If not handled appropriately, challenges such as the rising threat of cyberattacks that expand into the physical world, privacy issues, and the polarizing effects of technologies on labor markets could derail these benefits (WEF, 2016)

The majority of the companies recognize the concept of Industry 4.0 as a great opportunity for development and improvement in competitiveness, although the state of preparations for its implementation varies widely depending on country, sector, or even an individual company (Ślusarczyk, 2018).

If Slovak organisations aspire to maintain competitiveness, they will need to keep pace with the organisations that react quickly to such changes. Industry 4.0 is rapidly transforming the physical world of machines, and the virtual world of information technology (Richert et al., 2016; Joniakova and Blstakova, 2015; Kampf et al., 2017). Technology enhances flexibility and speed (Yu and Solvang, 2017; Novakova et al., 2017; Poór et al., 2018), thus enabling product personification, effective production, as well as more efficient control (Zhong et al., 2017; Paulikova et al., 2016; Belas et al., 2018). In order to improve competitiveness and performance, corporations must embrace advancements in digitalization (Brunet-Thornton and Martinez, 2018). The systems facilitating instant vertical or horizontal connectivity allowing free flow of data in the entire organisational structures of companies require constant investments and improvements (Blstakova, 2018). Innovative organisations increase their competitiveness and innovativeness by investing in the technologies ensuring such connectivity on the one hand (Carmen et al., 2018; Lorincova et al., 2018; Stasiak-Betlejewska and Ulewicz, 2016; Dvorsky et al., 2018), and by investing in the development of human resources to handle the work with new technologies on the other hand (Bartakova et al., 2017; Hitka et al., 2018; Stachová et al., 2019).

The open exchange of information is a hallmark of the growing knowledge economy (WEF, 2016). Successful implementation of knowledge management is a huge factor in corporate success (Brunet-Thornton and Martinez, 2018).

However, the problem is that while the ability of effective communication is considered to be one of the key abilities in identifying the talented employees (Urbancová et al., 2018; Porvazník, 2018; Vetrakova et al., 2018; Lorincova and Potkány, 2016), significant deficiencies are frequently reported in the level of organisational communication itself. Many organisations have an innovation strategy with clearly set factors and principles, but e.g. line managers have no or only limited information about it. It is then implemented only very slowly, without producing requested outcomes for the organisation. Based on these facts, the authors of the paper focused on the area of open communication in organizations and its support from managers.

Literature Review

The adoption of the Industry 4.0 approach faces a lot of challenges within organisations (Hauer et al., 2018). Scholars of Corporate Communication agree

that all organisational changes may arise uncertainty due to i.e. necessary restructuring of the organisation, wherefore the way of communicating such changes reflects a key success factor (Lies, 2012). Researchers state that the initiative of Industry 4.0 approach is expected to have influences on Corporate Communication as it comprises communication systems and tools by network systems and will change internal communication (German Federal Ministry of Education and Research).

Many of our companies still work on the basis of commands, restrictions, or punishments, and they do not support a preference of the activity and awareness of employees (Pecák, 2012). Unfortunately, the organisations do not realise that the exploitation of the creative potential of employees necessitates sufficient amount of information on the one hand, and sufficient trust in their abilities on the other hand. Open communication can be generally viewed as an instrument of increasing the motivation to work. Osborne (2002) denotes the meaningfulness, importance and usefulness of performed work as the key determinants of job satisfaction. Without clear communication and open access to information, employees are frequently not able to perceive them. In this relation, Králíková (2010) opines that a motivated (e.g. by open communication) employees apply more creativity; they are able to come up with new ideas, and to implement innovation in their work. The lack of creativity or innovative behaviour is often perceived as one of the fundamental reasons of failures of organisations (Yapp, 2009; Potkany et al., 2016; Jurenka et a.,l 2016; Dušak et al., 2017; Nováková et al., 2017). According to Franková (2011), it is therefore necessary to create and maintain an organisational culture supporting innovation and creativity. The same behaviour should be required from managing employees, as their position necessitates their creative potential, their ability to inspire their subordinates and co-workers, as well as their ability to create adequate conditions (Urbancová et al., 2016; Jankelova et al., 2017; Kirchmayer et al., 2016; Hitka et al., 2018b). Open communication between the management of a company and its employees appears to be a suitable instrument of creating the environment in which employees feel the companionship with their company, and they are willing to seek its success in competition.

Communication considerably influences the innovation process in every organisation. Many other studies have indicated that the heart of numerous problems occurring during innovation processes is in the ineffective or unreliable communication, especially between different functional departments of the organisations involved in the process. It is therefore important that organisations put emphasis on the development of open and quality communication (Poláková, 2007; Potkany et al., 2018; Caganova et al., 2017). Effective communication is therefore one of the essential goals of organisations (Hitka et al., 2018a; Spillan et al., 2002). The transformation towards an open communication-workplace is supported by new communication tools e.g. networked platforms as they might be used as an internal sharing-place of information and documents. New internal communication tools are described by experts as internal social-media platforms

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or internal communication banners (Hauer et al., 2018). The aforementioned proves that efficient open communication is generally crucial for the success of innovations in organisations, while its impact is not negligible with reference to the need to engage the highest possible number of employees in the innovation process. For these reasons, an analysis of the level of openness of communication processes in Slovak organisations is considered to be necessary.

Materials and Methods

The analysis of the level of openness of communication processes in Slovak organisations was performed by a questionnaire survey. 500 organisations were randomly addressed with an electronic questionnaire comprising five questions oriented on the openness of communication in the organisations in 2018, while the response rate of comprehensively completed questionnaires was 214, representing 42.8%. The data collected from the questionnaire survey were subsequently statistically processed, while in addition to descriptive statistics, a method of correlation analysis, particularly statistical Pearson parametric correlation test (r), was used

The size structure and the regional structure of the participants in the survey, determined on the basis of NUTS method (La Nomenclature des Unités Territoriales Statistiques), created by the Statistical Office of the European Union, particularly the NUTS II category, is shown in Table 1.

Table 1. The size structure and the regional structure of the participants

The size of organisation						
0-49		50-249		250 and more		
51.9 %	51.9 %		19.6 %	28.5 %		
Regional structure based on NUTS II.						
Bratislava Region	Western	n Slovakia	Central Slovakia	Eastern Slovakia		
39.7 %	19.6 %		31.3 %	9.4 %		

Research questions were formulated in context with the specified research objective of this paper. Research hypotheses were formulated on the basis of the set research questions, and they were subsequently tested by the questionnaire survey and subsequent statistical evaluation.

- 1) Research Question: What was the score achieved by the examined organisations in their support of open communication of employees with the management? Are there statistically significant differences between managers with different frequencies of their education in the area of communication?
- 2) Research Question: What was the score achieved by the examined organisations in their support and leading of informal communication? Are there statistically significant differences between managers with different frequencies of their education in the area of communication?

Hypothesis H1: There is a statistically significant relationship between the frequency of the education of managers in the area of communication and the support of open communication of employees with management.

Hypothesis H2: There is a statistically significant relationship between the frequency of the education of managers in the area of communication and the support and leading of informal communication, ensuring prevention from misunderstandings caused by distorted information.

Results

With reference to the objective of the paper, the authors examined, by means of a questionnaire survey, whether, and how frequently, the managers of companies attended trainings focused on the quality of communication in their organisation. Another focus was on the way how employees were communicated information on the changes planned. The third question was focused on uncovering which management levels applied the communication instruments comprising the possibility of subordinates to express their opinion (meetings with discussion). The fourth question aimed at verifying the method by which the interviewed organisations supported bottom-up communication. The last question aimed at identifying the method of influencing informal communication in organisations by the management.

The first question intended to identify the awareness of the organisations in the area of managerial communication as the key instrument of effective human resource management. The authors examined whether, and how frequently, the managers of companies attended trainings focused on the quality of communication in their organisation (see Table 2).

Table 2. The frequency of attending communication trainings by the managers of the company

The frequency of communication trainings	% of organisations
yearly	26.2
regularly, less than once a year	21.5
yes, once during the time of their work at a managerial position	15.4
do not attend	36.9

More than 60% of the interviewed organisations stated that communication training was arranged at least once during the time of the work of managers at their position. However, the absence of communication training in 36.9% of the interviewed organisations is considered to be very negative, as the level of communication in an organisation is especially dependent on the communication skills of its managers.

The second question was focused on the identification of the instruments of announcing upcoming changes in the organisations (see Table 3).

Table 3. The instruments of announcing upcoming changes in the organisations

The instruments of announcing upcoming changes	% of organisations
all communication instruments are used by the company	39.3
the communication instruments are used by the company for task assignment	40.2
the communication instruments are used by the company for sharing general information	15.4
no information in advance, the change is announced during its implementation	5.1

The outcome of the second question is considered to be very positive. Almost 80% of the interviewed organisations declared that they used the instruments or means of direct interaction between communication partners to announce changes, thus enabling employees to clarify possible uncertainties.

Within the third question of the questionnaire survey, the authors sought to uncover whether employees at all levels of corporate management had room for expressing their opinions (see Table 4).

Table 4. The level of management at which meetings with room for discussion are used

The level of management at which meetings with room for	% of
discussion are used	organisations
The top level of management, middle management, and first-line management with executives.	57.5
The top level of management and middle management.	26.2
Only the top level of management.	16.4

As Table 4 clearly shows, unfortunately, almost 43% of the interviewed organisations declared that their executives were not provided room for discussion at meetings. This finding is considered to be very negative. The given approach builds communication barriers, which may ultimately cause significant problems associated with the competitiveness of their companies. The innovation potential of every individual can only be fully exploited if they are provided room.

In the fifth question, the authors sought to identify the level of the support of employees in bottom-up communication (see Table 5).

The finding of this research question is quite positive, as the support of open bottom-up communication was declared in full extent by 61.2% of the interviewed companies, and in a partial extent by further 29.9% of the interviewed organisations. In spite of this positive finding, the possibilities of further development also in this area are perceived.

Table 5. The support of employees in bottom-up communication

The support of employees in bottom-up communication	% of organisations
It is supported by managers and managing employees in maximum possible extent.	61.2
Managers and managing employees of the company only support it in a limited extent.	29.9
It is minimal and is not supported by management.	8.9

The last question aimed at uncovering whether the management purposefully led also the content of informal communication in the organisation (see Table 6).

Table 6. Influencing of informal communication

Influencing of informal communication	% of organisations
It is supported, and it is led so that no misunderstandings caused by distorted information occur.	52.8
It is tolerated; however its content is not purposefully influenced.	42.5
It is suppressed and restricted in maximum possible extent.	4.7

The possibility to apply informal communication encourages openness in communication, which generally has a positive impact on creative atmosphere in a company. Therefore, the outcome of more than 95% of the interviewed organisations which do not restrict informal communication is very positive; however if organisations seek to use the existence of informal communication for their benefit, their managements should actively monitor and influence its content to prevent misunderstandings. This activity was only declared by 52.8% of the participants in the research. The identification of the level of the use of individual attributes of open communication in organisations was followed by the identification of mutual relations between them. Statistical Pearson parametric correlation test (r) was used in assessing individual correlations.

H1: The result of the Pearson correlation test proves the existence of a statistically significant relation between the frequency of attending communication trainings by the managers of organisations and the level of the support of employees in bottom-up communication. The given variable correlates at the level sig. (0.01) with Pearson correlation coefficient at the level r=0.4542. The desired level of significance was achieved, hence this hypothesis has not been rejected, but a moderate linear relationship between the monitored variables can be confirmed.

H1: The result of the Pearson correlation test proves the existence of a statistically significant relation between the frequency of attending communication trainings by the managers of organisations and the level of influencing informal communication in them. The given variable correlates at the level sig. (0.01) with Pearson correlation coefficient at the level r = 0.2086. The desired level of significance was

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achieved, hence this hypothesis has not been rejected, but a weak relationship between the monitored variables can be confirmed.

Discussion

If the management of an organisation seeks to create the environment encouraging creativity and innovation, the fundamental tasks include the creation of a clear and open communication system applicable in the entire organisation. This statement can be confirmed by the outcomes of a study conducted by Ye et al. (2015), according to which the effectiveness of communication can determine the success or failure of an innovation project.

The competence of employees to communicate effectively is currently considered to be a great advantage. It is also confirmed by a research conducted by Urbancová et al. (2016), according to which the most desirable competence in identifying a talented employee is their ability to communicate.

Innovative organisations are characterised by numerous discussions with the participation of employees with different experience and specialisations. When applying informal communication, the free exchange of ideas takes place, thus encouraging creativity.

The analysis of CRANET international research conducted in 2014/2015 with the participation of 31 European countries and 6093 respondents, which was focused on the methods of communication of managements with employees, and communication of employees with their managements, proved that the forms of written and verbal communication had remained the most frequently applied forms of in-house communication, while individual methods only differed slightly in the analysed countries. Considerable support of the information technology and IC was recorded in all forms of in-house communication. The CRANET research also indicated that communication mediated by employee representatives had been only used to a negligible extent (Blštáková, 2018).

Openness between individual employees is supported by the positive motivation and the example of company managers. Such atmosphere encourages people to discussions about also unfinalised ideas, thus receiving quick feedback, which helps their thought processes (Franková, 2011).

The role of managers in a pro-innovative company is to increase the effectiveness of information flow using the formal communication channels of the company information system on the one hand, and to create conditions for effective informal communication in creative environment on the other hand.

Conclusion

Communication has a significant impact on the level of the use of human resources not only in terms of the innovation efforts of a company. Effective communication flow is especially important when the character of work requires cooperation between several employees. It is also used when information flow needs to be

fastened, when better understanding of an announcement needs to be achieved, and when common efforts need to be coordinated.

The analysis of the research outcomes shows quite weak activity of the organisations related to the education of managers in the area of communication. According to the authors, these points to further uncovered insufficiencies, such as the finding that almost 43% of the interviewed organisations declared that their executives were not provided room for discussion at meetings. The given approach builds communication barriers, which may ultimately cause significant problems associated with the competitiveness of their companies. The innovation potential of every individual can only be fully exploited if they are provided room.

As the survey and subsequent statistical comparison showed, systematic education of managers in the area of communication had a significant impact on the openness and effectiveness of all communication in a company.

To eliminate the identified communication barriers, the authors of the paper recommend that organizations invest in digitalization with real-time information tools with value-adding features of creating dialogues between internal stakeholders as well as invest in the development of managers in the field of effective information sharing towards employees and from employees.

Investment in the education of managers in this area can considerably help organisations to use their human resources in the process of preparation and transformation of the organisation in the context of the emerging Fourth Industrial Revolution.

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References

- Belas J., Ivanova E., Rozsa Z., et al., 2018, Innovations in SME Segment: Important Factors and Differences in the Approach by Size and Age of the Company. Transformations in Business & Economics 17(3), pp. 55-71
- Blštáková J., 2018, *Modely riadenia ľudských zdrojov v ére priemyslu 4.0* [Habilitačná práca] Ekonomická Univerzita v Bratislave, Fakulta Podnikového Manažmentu.
- Brunet T.R., Martinez F., 2018, Analyzing the impacts of industry 4.0 in modern business environments.
- Caganova D., Starecek A., Bednarikova M., Hornakova N., 2017, *Analysis of factors influencing the motivation of generations Y and Z to perform in the educational process*, [In:] Proceedings of the ICETA 2017—15th IEEE International Conference on Emerging eLearning Technologies and Applications, Stary Smokovec, Slovakia, 26–27 October 2017.
- Carmen L.E.M., Raptis T.P., Sepulcre M. et al., 2017, A Software Defined Hierarchical Communication and Data Management Architecture for Industry 4.0, 14th Annual Conference on Wireless On-Demand Network Systems and Services (WONS) Location: FRANCE Date: FEB 06-08, 2018.
- Bartakova P.G., Gubiniova K., Brtkova J., Hitka M., 2018, Actual trends in the recruitment process at small and medium-sized enterprises with the use of social networking, "Economic Annals-XXI", 164(3-4).

POLISH JOURNAL OF MANAGEMENT STUDIES Stacho Z., Stachová K., Papula J., Papulová Z., Kohnová L.

- Dušak M., Jelačič D., Pirc A., Nováková R., 2017, Improvements to the Production Management System of Wood-processing in Small and Medium Enterprises in Southeast Europe, "BioResources", 12(2).
- Dvorsky J., Rozsa Z., Petrakova Z. et al., 2018, Evaluation of State AID for Entrepreneurs and their Access to Financial Resources: Students' Attitudes in Czech Republic, Poland and Slovakia, "Marketing and Management of Innovations", 3.
- Franková E., 2011, Kreativita a inovace v organizaci, Praha: Grada.
- German Federal Ministry of Education and Research, 2015, *Digitale Wirtschaft und Gesellschaft: Industrie* 4.0, https://www.bmbf.de/de/zukunftsprojekt-industrie-4-0-848.html
- Hauer G., Harte P., Kacemi J., 2018, An exploration of the impact of Industry 4.0 approach on Corporate Communication in the German manufacturing Industry, "International Journal of Supply Chain Management", 7(4).
- Hitka M., Kozubíková L., Potkány M., 2018, Education and gender-based differences in employee motivation, "Journal of Business Economics and Management", 19(1).
- Hitka M., Lizbetinova L., Schmidtova J., et al., 2018, *How to Manage Careers in Slovak Small and Medium-sized Wood-processing Enterprises*, "BioResources", 13(3).
- Hitka M., Lorincová S., Pajtinková Bartáková G., Ližbetinová L., Štarchoň P., Li Ch., Zaborova E., Markova T., Schmidtová J., Mura L., 2018, Strategic Tool of Human Resource Management for Operation of SMEs in the Wood-processing Industry, "BioResources", 13(2).
- Jankelova N., Joniakova Z., Blstakova J., Nemethova I., 2017, Readiness of human resource departments of agricultural enterprises for implementation of the new roles of human resource professionals, "Agricultural Economics", 63(10).
- Joniakova Z., Blstakova J., 2015, *Age Management as Contemporary Challenge to Human Resources Management in Slovak Companies*, 9th International Scientific Conference on Business Economics and Management (BEM) Location: Tech Univ Zvolen, Izmir, TURKEY Date: APR 30-MAY 02, 2015.
- Jurenka R., Cagáňová D., Horňáková N., Stareček A., 2016, Smart City in Terms of Social Innovations and Human Capital Smart City 360°; 2nd EAI International Summit: Bratislava, Slovakia.
- Kampf R., Lorincová S., Hitka M., Stopka O., 2017, Generational Difference in the Perception of Corporate Culture in European Transport Enterprise, "Sustainability", 9(9).
- Kirchmayer Z., Remisova A., Lasakova A., 2016, *Ethical Leadership in the Context of CSR*, 28th International Business-Information-Management-Association Conference Location: Seville, SPAIN Date: NOV 09-10, 2016.
- Králíková A., 2010, *Chcete motivované zaměstnance? Jděte příkladem!* HR Forum [online],[cit. 2015-12-17], Dostupný z: zpravodaj.feminismus.cz/cz/clanek/chcete-motivovane-zamestnance-jdete-prikladem.
- Lies J., 2012, Internal communication as power management in change process: Study on the possibilities and the reality of change communications, "Public Relations Review", 38
- Lorincova S., Potkány M., 2016, *The proposal of innovation support in small and medium-sized enterprises*, [In:] Production Management and Engineering Sciences Scientific Publication of the International Conference on Engineering Science and Production

- Management, ESPM 2015, Tatranska Strba, High Tatras Mountains, Slovak Republic, 16th-17th April 2015, 2016.
- Lorincova S., Vetrakova M., Lizbetinova L., 2018, *The Efficiency of Selected Employee Education Methods*, 31st International-Business-Information-Management-Association Conference Location: Milan, ITALY Date: APR 25-26, 2018, Vol. IV –VI.
- Nováková R., Pauliková A., Čekanová K., 2017, *Risk management as a part of a quality management system in woodworking companies*, [In:] More wood, better management, increasing effectiveness, Prague, Czech Republic.
- Novakova R., Sujanova J., Paulikova A., 2017, Use of 8D Method in Nonconformity Resolution a Case Study of Production of Spliced Veeners in Slovakia, "Drvna Industrija", 68(3).
- Osborne J.S., 2002, Components of Empowerment and How They Differentially Relate to Employee Job Satisfaction, Organizational Commitment, and Intent to Leave the Job, George Peabody College for Teachers of Vanderbilt University, 2002.
- Paulikova A., Novakova R., Sujanova J., 2016, Increasing of Quality Management by Means of Coordination of Dangerous Substance Storage for Environmental Protection, 16th International Multidisciplinary Scientific Geoconference (SGEM 2016) Location: Albena, BULGARIA Date: JUN 30-JUL 06, 2016.
- Pecák J., 2012, best office: Zvyšování firemní efektivity. Americká obchodní komora v České republice [online], [cit. 2015-12-29] Dostupný z: http://www.amcham.cz/www/files/2012%20Best%20Office%20Publication_web%20version.pdf.
- Poláková I., 2007, Trainee program, [In:] Moderní řízení, Praha: Ekonomia 2006/07.
- Poór J., Engle A.D., Blštáková J., Joniaková Z., 2018, *Internationalisation of human resource management: focus on Central and Eastern Europe*, (1st ed.), New York: Nova Science Publishers.
- Porvazník J., 2018, Celostný manažment, Bratislava: IRIS.
- Potkany M., Gejdos M., Debnar M., 2018, Sustainable Innovation Approach for Wood Quality Evaluation in Green Business, "Sustainability", 10(9).
- Potkany M., Stasiak-Betlejewska R., Kovac R., et al., 2016, *Outsourcing in Contidions of Smes The Potential for Cost Savings*, "Polish Journal of Management Studies", 13(1).
- Richert A., Shehadeh M., Plumanns L., et al., 2016, Educating Engineers for Industry 4.0: Virtual Worlds and Human-Robot-Teams Empirical Studies towards a new educational age, IEEE Global Engineering Education Conference (EDUCON) Location: Abu Dhabi, UAE Date: APR 10-13, 2016.
- Ślusarczyk B., 2018, *INDUSTRY 4.0 ARE WE READY?* "Polish Journal of Management Studies", 17(1).
- Spillan J.E., Mino M., Rowles S.M., 2002, Sharing Organizational Messages Through Effective Lateral Communication, "Qualitative Research Reports in Communication", 3.
- Stachová K., Papula J., Stacho Z., Kohnová L., 2019, External Partnerships in Employee Education and Development as the Key to Facing Industry 4.0 Challenges, "Sustainability", 11(2).
- Stasiak-Betlejewska R., Ulewicz R., 2016, *The Effectiveness of Selected Machinery and Equipment in the Woodworking Joinery*, International Conference on the Path Forward for Wood Products: A Global Perspective Location: Baton Rouge, LA Date: OCT 05-08, 2016.
- Urbancová H., Vnoučková L., Smolová H., 2016, *Talant management v organizacích v Česke republice*, (1st ed.), Praha: Vysoká škola ekonomie a manažmentu.

POLISH JOURNAL OF MANAGEMENT STUDIES Stacho Z., Stachová K., Papula J., Papulová Z., Kohnová L.

- Urbancová H., Vnoučková L., 2018, *Impact of employee development in agricultural companies on commitment, loyalty and performance*, "Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis", 66(3).
- Vetráková M., Hitka M., Potkany M., Lorincova S., Smerek L., 2018, Corporate Sustainability in the Process of Employee Recruitment through Social Networks in Conditions of Slovak Small and Medium Enterprises, "Sustainability", 10(5).
- Wahyu Wasono Mihardjo L., Sasmoko S., Alamsjah F., Elidjen E., 2018, *The Role of Distinctive Organisational Capability in Formulating Co-Creation Strategy and Business Model Innovation*, "Polish Journal of Management Studies", 18(2).
- WEF, 2016, *Global Information Technology Report 2016*, Retrieved July 30, 2017, from http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf.
- Yapp M., 2009, *Measuring the ROI of talent management*, "Strategic HR Review", roč. 8, č. 4.
- Ye C., Jha S., Desouza K.C., 2015, Communicating the business value of innovation, "International Journal of Innovation Science", 7(1).
- Yu H., Solvang W.D., 2017, Enhancing the Competitiveness of Manufacturers through Small-Scale Intelligent Manufacturing System (SIMS): A Supply Chain Perspective, 6th International Conference on Industrial Technology and Management (ICITM) Location: Cambridge, ENGLAND Date: MAR 07-10, 2017.
- Zhong R.Y., Xu X., Klotz E., et al., 2017, Intelligent Manufacturing in the Context of Industry 4.0: A Review, "Engineering", 3(5).

SKUTECZNA KOMUNIKACJA W ORGANIZACJACH ZWIĘKSZAJĄCA ICH KONKURENCYJNOŚĆ

Streszczenie: Szybkość zmian determinujących środowisko biznesowe rośnie wraz z pojawieniem się czwartej rewolucji przemysłowej. Jeśli słowackie organizacje dażyć będa do utrzymania konkurencyjności, będą musiały dotrzymać kroku organizacjom, które szybko reagują na takie zmiany. Otwarta komunikacja, jako narzędzie skutecznego zaangażowania zasobów ludzkich, może być jednym z instrumentów zwiększania szans organizacji na utrzymanie konkurencyjności. Prezentowany artykuł ma na celu określenie poziomu implementacji otwartych atrybutów komunikacyjnych w organizacjach słowackich oraz ocenę przyczyn i konsekwencji wynikających z ustaleń w pracy menedżerskiej. Analiza poziomu otwartości procesów komunikacyjnych w roku 2018 została przeprowadzona na 214 organizacjach słowackich za pomocą ankiety elektronicznej. Dane zebrane z ankiety zostały następnie poddane statystycznej obróbce. Oprócz statystyki opisowej zastosowano metodę analizy korelacji, w szczególności statystycznego testu korelacji parametrycznej Pearsona (r). Wyniki dowodzą istnienie istotnej statystycznie zależności między częstotliwością uczestniczenia w szkoleniach komunikacyjnych przez menedżerów a poziomem wsparcia pracowników w komunikacji oddolnej, a także poziomem wpływu na nieformalną komunikację w organizacjach.

Słowa kluczowe: komunikacja, konkurencyjność, zasoby ludzkie, umiejętności menedżerskie, edukacja

组织中的有效沟通提高了竞争力

摘要:随着第四次工业革命的兴起,变化的速度,决定商业环境,正在迅速增加。如果斯洛伐克组织渴望保持竞争力,他们将需要跟上对这些变化做出快速反应的组织。开放式沟通作为有效参与人力资源的工具,可能是增加组织保持竞争力的工具之一。本文旨在确定斯洛伐克组织中开放式沟通属性的实施水平,并评估调查结果对管理工作产生的原因和后果。通过电子问卷调查分析了2018年斯洛伐克组织2018年通信进程的开放程度。随后对从问卷调查中收集的数据进行统计处理,同时除了描述性统计之外,还使用相关分析方法,特别是统计Pearson参数相关性检验(r)。结果证明,管理人员参加沟通培训的频率与自下而上沟通中员工的支持水平以及影响组织中非正式沟通的程度之间存在统计上显着的关系。

关键词:沟通,竞争力,人力资源,管理技能,教育