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GENERIC SKILLS DETERMINING QUALITY OF HUMAN RESOURCES – LESSONS FROM MANAGERS

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Abstract: *Human resources are recognized as one of the key factors of success. The generic skills significantly determine the quality of those resources. The paper aims at identifying a set of generic skills which are the most expected by managers. The discussion is based on the results of a survey which was carried out among the representatives of the pulp and paper industry. The responses came from 34 managers (including 17 top managers) from 17 different countries. The 10 most significant (most wanted by the managers) generic skills were identified as: (1) teamwork, (2) flexibility, (3) initiative, (4) leadership, (5) drive, (6) analyzing and investigating, (7) global skills, (8) planning and organizing, (9) verbal communication and (10) computer skills.*

Keywords: *Generic skills, quality of human resources, the pulp and paper industry*

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1. INTRODUCTION

Human capital is of great importance in the modern economy (Hrabinová et al., 2012). The quality of human resources is identified in the scientific literature as one of the key elements of success, no matter whether the discussion concerns whole organization (Almeida & Zylbersztajn, 2017; Owusu-Manu et al., 2017) or only chosen projects or activities carried out in an organization (Prasad et al., 2018; Sohu et al., 2018).

According to the definition formulated by International Organization for Standardization, the meaning of an object's quality (i.e. for example organization, product, and activity) is understood as „degree to which a set of inherent characteristics of an object fulfils requirements" (International Organization for Standardization [ISO], 2015). On this basis one can assume that the quality of human resources (workforce quality) is the extent to which those resources meet the requirements of the interested parties i.e. managers, associates, subordinates, members of task teams etc. The quality is built up of many factors (e.g. C. Aruștei (2013), claims, that they include skills, behaviors and attitudes, physical appearances). Undoubtedly, in this set the skills are the most significant. Although they are thoroughly described in the scientific literature, they still require researching and analyzing with reference to various specific situations (e.g. for chosen countries, branches, professions etc.).

The article aims at identifying a set of generic skills which are currently the most expected by managers. It was assumed that the research would cover the managers from different countries, representing industry which is recognized as "average" i.e. the one which is neither very modern (does not belong to the high-tech sector) nor seen as outdated. It will be possible to use the conclusions especially in creating manufacturing-related degree programs.

2. THEORETICAL BACKGROUND

According to Mansfield (2005), competence is being able to perform 'whole' work roles to the standards expected in employment in real working environments. This refers to the achieved outcomes, and thus to the level of work performance setting the standards. It is referred to as the external, functional approach (Lester, 2014). It is assumed that the quality of human resources is a combination of vocational and generic skills (Heijke et al., 2003). Generic ones (other terms: transferable skills, employability skills, soft skills, skills for success, etc) refer to skills that are beyond disciplinary knowledge and which can be applied broadly across different contexts. Competence in these skills will not only contribute to the overall economic competitiveness and development of organizations, but will also determine the social and personal growth of future generations (Chan et al., 2017). In the source literature there are a lot of results of researches proving high importance of generic skills for getting a job and for further promotions and progress in the workplace (Sharma, 2009). The recruitment managers may respect and expect technical expertise, but results show that they do prefer people with experience, but at the same time, they also look for certain other qualities in them. Technical or the so-called hard skills soon become outdated when there is no motivation to keep learning new ones. So, they also look for people who are flexible and have the passion to appreciate and learn new technologies as part of their growth process. The ability to effectively communicate with the managers, superiors, bosses and coworkers plays a definite role in workplace success. Furthermore, the interpersonal skills, alignment with the corporate culture, the ability to work as an effective and contributing team member and the political savvy to know how to get things done in the organization also determine a person's long-term success in an organization (Deepa & Seth, 2013).

Currently there is not one, unified and generally accepted approach defining which generic skills are the most significant. The source literature provides a number of such proposals, however they considerably differ one from another. The differences result among others from: (1) the fact whether the authors aim at providing a universal set or focus on a specific group of workers (engineers, IT workers etc.), (2) what level of description's detail they accept, (3) what range of skills is accepted. As a result the literature provides examples of sets including e.g. 42 (Ramos et al., 2013), 36 (Chan et al., 2017), 26 (Top 10 skills..., 2018) and 10 (Griffin, & Annulis) generic skills. When the skill rankings are developed they may be influenced by the chosen procedure of gathering opinions or the choice of the respondents (e.g. students, staff of HR departments, recruiters, project leaders, managers, etc.).

3. RESEARCH METHODOLOGY

The research procedure was divided into three parts. The first stage was establishing the list of generic skills. It was decided that for the following research an existing set would be used. The chosen set, proposed by The University of Kent, based on a number of surveys undertaken by Microsoft, Target Jobs, the BBC, Prospects, NACE and AGR and other organizations (15). Among many reasons supporting this choice the most important are:

1. The research carried out by the university is of a universal nature i.e. they are not narrowed to one chosen profession (e.g. logistics workers).
2. Every generic skill included in the set had been defined which greatly facilitated their interpretation.
3. The university's research had been profiled in the way which allowed using the results in the process of academic education.
4. The set includes a ranking of 10 most significant skills sorted from the most to the least significant. Utilizing such a short set considerably increased the chance that the managers would accept to fill in the survey. At the same time the set prepared by the University of Kent included a list of additional 16 generic skills (important but not included in the ranking), which may be used to slightly expand the research survey.

Finally the survey included 15 skills. It consists of 10 most significant skills which were supplemented by 5 chosen on the basis of the research author's subjective decision (they were chosen from the list of 16 additional skills provided by The University of Kent). The skills are presented in table 1.

Skills	*Description*
1. Verbal communication	Able to express your ideas clearly and confidently in speech
2. Teamwork	Work confidently within a group
3. Commercial awareness	Understand the commercial realities affecting the organization
4. Analyzing and investigating	Gather information systematically to establish facts & principles. Problem solving
5. Initiative/self motivation	Able to act on initiative, identify opportunities & proactive in putting forward ideas & solutions
6. Drive	Determination to get things done. Make things happen & constantly looking for better ways of doing things.
7. Written communication	Able to express yourself clearly in writing
8. Planning and organizing	Able to plan activities & carry them through effectively
9. Flexibility	Adapt successfully to changing situations & environments
10. Time management	Manage time effectively, prioritizing tasks and able to work to deadlines.

11. Global skills	Able to speak and understand other languages; appreciation of other cultures
12. Negotiating and persuading	Able to influence and convince others, to discuss and reach agreement
13. Leadership	Able to motivate and direct others
14. Calculations/numeracy	To multiply & divide accurately, to calculate percentages, to use statistics, to understand charts
15. Computer skills	Word-processing, using databases, spreadsheets, the Internet & email, designing web pages etc.

Table 1: Generic skills. Source: *own study on the basis of (Ramos et al., 2013)*

The second stage was choosing the kind of industry which would be covered by the research and the chosen one was the pulp and paper industry (PPI) – which produces pulp, paper, board and other cellulose-based products. The main steps of the process are pulping, papermaking and paper finishing. North America, Asia and Europe are the dominating world regions for PPI, and accounted for 37, 24 and 25%, respectively, of the global pulp production. The PPI is a globalized industry sector where several countries that were strong producers in the past now face growing competition from new producers. On national level, cost-efficient production is crucial for the survival of the industry. A future increase in competition for biomass resources from the energy sector implies further challenges. In meeting climate targets, biomass resources, including pulpwood, will likely become a sought after resource for energy products. However, measures and new technologies for increased cost-efficiency and competitiveness exist and include option for increased energy efficiency and diversification of products. An increased societal demand for "green", high-value energy products can therefore be turned into an opportunity for the PPI, which has well-established biomass supply-chains and plants that can be converted to efficient energy combines with multiple outputs. In relevant countries, this could make the PPI a key factor in a future "greener" energy system (Pulpapernews.com, 2018; Euler Hermes Global, 2018). The strengths and weaknesses of PPI are presented in table 2.

Strengths	*Weaknesses*
Growing needs for (cardboard) packaging, in line with manufacturing and skyrocketing e-commerce activities	High sensitivity to feedstock costs (i.e. pulp)
New market outlets stemming from rising middle class in emerging markets	Ability to face high investments costs to ensure future growth
Rising demand for hygiene products	Plastics in competition against cardboard in the packaging outlet depending on variations of ethylene price vs. pulp (NBSK) price

Table 2: Strengths and weaknesses of PPI. Source: *(Gębarowski & Siemieniako, 2015)*

The third stage was carrying out the research surveys. Auditorium questionnaire was chosen as the research method. This technique is a form of measurement suitable for application during such events as conferences, symposia, lectures, trade shows. The research involves distributing questionnaires to its participants and after answering the questions – an interviewer collects the completed questionnaires. The possibility of measurement control is an advantage of the auditorium questionnaire, which enables to achieve a huge percentage of answers and to preserve anonymity at the same time (20). The research was carried out in May, 2017 during the 4th edition of the Open House Conference entitled "Save You Energy. Save You Money. Empower You Future". The idea of the event is to gather industry experts from all around the world and create a networking platform. The conference attracted 103 participants including VIP papermakers, suppliers, media representatives and associations. The managers representing the PPI industry were asked to fill in the questionnaire.

The questionnaire was completed by 34 managers. The biggest number of respondents were from Poland (9 people), then Germany (4), Italy (3), France (2), India (2), the Netherlands (2) and Russia (2). There were single representatives from Austria, Czech Republic, Finland, Iran, Mexico, the RSA, Spain, Taiwan, Great Britain and the USA. Altogether there were 17 different countries represented. All respondents were managers, with an exact half of top level managers, and the second half consisting of middle or low level managers. All of them were professionally experienced. The average number of years in business was 27 (the lowest was 10 while the highest was 45).

The reliability of the constructs was tested with Cronbach's alpha coefficient. Cronbach's coefficient in this case was equal to $\alpha = 0.77$. The particular result indicates good reliability, since the coefficient's value is greater than 0.70.

4. FINDINGS

The research procedure was to present the list of 15 soft skills to the respondents and ask them to choose and mark 4 most significant (i.e. the most required from the employees) among them. The distribution of the answers is presented in Figure 1.

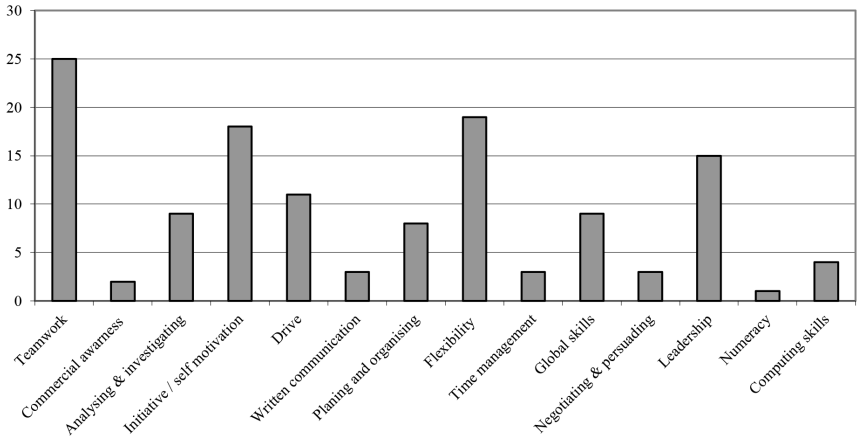

Figure 1: The distribution of the answers concerning the most significant soft skills.
Source: *own study*

The assessment of the 10 most significant generic skills declared by the respondents is different from the list proposed by The University of Kent. The comparison of both rankings is presented in table 3.

On the basis of the results of the carried out research three key conclusions may be drawn:

1. Every of the 15 generic skills included in the questionnaire were chosen by at least one respondent. Therefore it is justified to claim that they are all significant and expected by managers.
2. The most significant generic skills selected by the managers were as follows: (1) teamwork, (2) flexibility, (3) initiative/self motivation and (4) leadership. These four skills gained a noticeable advantage over the remaining issues included in the survey therefore they need to be especially remembered in the manufacturing-related degree programs. The finding is essential as it differs from the results of research carried out on other

groups of respondents e.g. Griffinand and Annulis while analyzing opinions stated by 30 faculty and 121 students concluded that the most significant skills are: (1) problem solving, (2) teamwork, (3) critical thinking, and equally placed: (4) verbal communications and (4) project management (16).

The ranking of the most important soft skills – by The University of Kent	*The ranking of the most important soft skills –the survey results*
1. Verbal communication	1. Teamwork
2. Teamwork	2. Flexibility
3. Commercial awareness*	3. Initiative/self motivation
4. Analyzing and investigating	4. Leadership*
5. Initiative/self motivation	5. Drive
6. Drive	6. Analyzing & investigating
7. Written communication*	7. Global skills*
8. Planning and organizing	8. Planning & organizing
9. Flexibility	9. Verbal communication
10. Time management*	10. Computer skills*

* the skills which appeared only in one of the two presented lists

Table 3: Top ten generic skills
Source: *own study*

The ranking of top 10 generic skills prepared by the University of Kant is different from the ranking resulting from the carried out research. The differences concern the position in the ranking. Some of the differences are not significant e.g. the case of "teamwork", which in the first ranking takes the second while in the other the first position. However some differences are crucial which concerns e.g. "verbal communication". In the ranking prepared by the University of Kent it is positioned in the first place while in the ranking prepared after the research it is in the far ninth place. Moreover, three out of ten skills included in the first ranking were not chosen for the list prepared as the result of the research. They are: commercial awareness (which was in the 4th place), written communication (7th place) and time management (10th place). On the other hand the second ranking included 3 new skills i.e. leadership (which was in the 4th place), global skills (7th place) and computer skills (10th place). The differences might result from including different subjects in the researches. While The University of Kent based on opinions of different businesses, the research carried out by the author of the article concerned only one chosen industry. Therefore it may be claimed that the pulp and paper industry's unique characteristics could have influenced the final results of the research.

4. CONCLUSION

Generic skills are vital to the quality of human resources. Findings indicate that currently the most important generic skills are teamwork, flexibility, initiative (self motivation) and leadership. The findings are significant as they were formed on the basis of opinions of 34 experienced managers (including 17 executive directors) from 17 different countries.

This research lays the foundation for manufacturing-related degree programs. It will be possible to use the conclusions drawn from the research to design and improve the programs. The findings and recommendations are also informative for workforce development agencies and human resources managers.

In the summary it is worth to emphasize that the research concerned only one, chosen industry. The future research needs to cover also the representatives of other businesses in order to compare the results.

REFERENCES

Almeida, L. F., & Zylbersztajn, D. (2017). Key Success Factors in the Brazilian Coffee Agrichain: Present and Future Challenges. *International Journal on Food System Dynamics*, 1(8), 45-53. doi: http://dx.doi.org/10.18461/ijfsd.v8i1.814

Aruștei, C. (2013). The Quality of Human Resources. A Request for Hotel Industry Development. A Theoretical Approach. *Annals of the „Constantin Brâncuşi" University of Târgu Jiu*, 2, 86-91.

Chan, C. K.Y., Zhao Y., & Luk, L. Y.Y. (2017). A Validated and Reliable Instrument Investigating Engineering Students' Perceptions of Competency in Generic Skills. *Journal of Engineering Education*, (106)2, 299–325. doi: 10.1002/jee.20165

Deepa, S., & Seth, M. (2013). Do Soft Skills Matter? – Implications for Educators Based on Recruiters' Perspective. *The Icfai University Journal of Soft Skills*, 7(1),7-20.

Euler Hermes Global. Retrieved January 17, 2018 from www.eulerhermes.com

Gębarowski, M., Siemieniako, D. (2015). Mystery visitor as a research method of trade show performance. *Economics and Management*, 7(3), 15-24. doi: 10.12846/j.em.2015.03.02

Griffin, M., & Annulis, H. (2013). Employability skills in practice: the case of manufacturing education in Mississippi. *International Journal of Training and Development*, 17(3), 221-232.

Heijke, H., Meng, C., & Ris, C. (2003). Fitting to the job: the role of generic and vocational competencies in adjustment and performance. *Labour Economics,* 10, 215-229. doi:10.1016/S0927-5371(03)00013-7

Hrabinová, Š., Novosák, J., Hájek, O., & Pomazalová, N. (2012). Universities, human capital, social capital and enterprise: Some lessons from the Czech Republic. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 60 (2), 91–96.

International Organization for Standardization. (2015). ISO 9000 *Quality management systems — Fundamentals and vocabulary*, Geneva.

Lester, S. (2014). Professional standards, competence and capability. *Higher Education, Skills and Work-based Learning*, 4(1), 31-43.

Mansfield, B. (2005), *Competence and standards*. In Burke J. (Ed), *Competency Based Education and Training* (pp. 23-33), London-New York-Philadelphia: The Falmer Press.

Owusu-Manu, D., Addy, M., Agyekum, K., & Aidoo, C. (2017). Exploring the Critical Success Factors of Ghanaian Bullt Environment Consulting Firms. *International Journal of Construction Project Management*, 9(2), 137-152.

Prasad, D., Pradhan R., Gaurav, K., Chatterjee P., Dash, S., & Mayak, S. (2018). Analyzing the critical success factors for implementation of sustainable supply chain management: an Indian case study. *Decision*, 45(1), 3-25. doi: 10.1007/s40622-017-0171-7

Pulpapernews.com. Retrieved January 11, 2018, from www.pulpapernews.com

Ramos, C., Ng M., Sung J., & Loke F. (2013). *Wages and skills utilization: effect of broad skills and generic skills on wages in Singapore*, *International Journal of Training and Development*, 17(2), 116-134. doi: 10.1111/ijtd.12004

Sharma, M. (2009). How Important Are Soft Skills from the Recruiter's Perspective. *The Icfai University Journal of Soft Skills*, 3(2), 19- 28.

Sohu, S., Jhatial, A. A., Ullah, K., Lakhiar, M. T., & Shahzaib, J. (2018). Determining the Critical Success Factors for Highway Construction Projects in Pakistan. *Engineering, Technology & Applied Science Research*, 8(2), 2685-2688.

The Energy Technology Systems Analysis Program. Retrieved January 11, 2018, from www.iea-etsap.org

Top 10 skills employers are looking for. Retrieved January 12, 2018, from www.kent.ac.uk/ces/