

EMPLOYEE COMPETENCIES IN THE CHANGING ORGANIZATIONAL ENVIRONMENT

Alicja MIŚ^{1*}, Krzysztof ŁYSIK²

¹ Cracow University of Economics; alicja.mis@uek.krakow.pl, ORCID: 0000-0002-5264-0742

² IBM, Kraków; lysik@wp.pl

* Correspondence author

Purpose: The study aims to identify changes in the importance of employee competencies in the competency structure under the influence of selected elements of the business environment. The results obtained are derived from literature analysis and empirical research.

Design/methodology/approach: The problem in the study was formulated as the influence of selected elements of the macro-environment of enterprises (such as: aggressive competition, economic crisis, knowledge-based organization, modern technology, and internationalization) on the reconfiguration of the weights of employee competencies (among them: creativity, flexibility, information processing and knowledge generation, interdisciplinary knowledge, and interpersonal communication) in the competency structure.

Findings: The strongest changes was perceived between the increase in the importance of knowledge and information in the business environment and the competencies of information processing and knowledge generation. The second strongest relationship was between the economic crisis and employee flexibility. The third was the relationship between the intensity of competition and employee creativity, and the last one was the relationship between the use of modern technology and employees' interdisciplinary knowledge.

Research limitations/implications: Limitations of the article include the size of the sample only from Malopolska region and lack of the equivalence of the investigated group.

Practical implications: The results of the conducted research draw attention to the current needs of enterprises in the field of employee competencies and therefore provide information for schools, students, unemployed people, employees of enterprises, and all those for whom it is important to acquire and develop their own competencies.

Originality/value: The study pointed out the influence of selected elements of the macro-environment of enterprises on the reconfiguration of the weights of employee competencies in the competency structure.

Keywords: Organizational environment, competencies, change.

Category of the paper: Research paper.

1. Introduction

Changes taking place in the environment have been and continue to be widely raised in scientific as well as non-scientific circles. In recent decades, they have been dynamic in nature; increasingly, the modern economy, and in particular the business environment, is being described as volatile, turbulent, unpredictable, unstable, and uncertain. This is due to many factors that make up the technological, economic, political legal, socio-cultural, and competitive environment.

Changes occurring in different types of environment to varying extents force companies to adapt to new operating conditions, which also affects the sphere of human resource management (Gigauri, 2021). A fundamental question arises as to how this affects employee competencies, and whether a "new employee" is needed as a result, equipped with either completely new competencies or the same ones, but at a different level than before.

The fact that competencies can be measured, assessed, and developed allows attempts to identify the existing competency gap and eliminate it. Undertaking research related to competencies makes it possible to track the dynamics of changes in their expression in organizational practice, manage them, and anticipate future needs. Understanding the causes of changes in the value of competencies in the competency structure will contribute to reducing the problem of the competency gap between the competencies that employees have and those desired by organizations.

Therefore, the aim of this publication is to identify changes in the importance of employee competencies in the competency structure under the influence of selected elements of the enterprise environment.

2. The environment of modern enterprises: current and emerging issues

The environment of an organization can be broadly defined as "the totality of conditions and impacts of various organizations (institutions) that influence the behavior of individual enterprises" (Gierszewska, Olszewska, Skonieczny, 2013). These are all the processes, phenomena, and entities related to the organization through mutual interaction, but not included in it (Brózda, Marek, 1999). It includes a set of different conditions that directly and indirectly affect the functioning of the organization, creating opportunities on the one hand, and limitations on its development on the other (Wach, 2008).

The multiplicity of definitions of the environment entitles to simplify the mutual environment-organization relationship despite the awareness of its complexity.

In the technological environment cited in the Introduction, changes are particularly rapid. Examples include the emerging and obsolete technical innovations in the field of consumer electronics. Although known for a long time, they have now fundamentally changed the work environment (Ćwiek, Ćwiklicki, Firszt, 2021).

Moreover, recent years have particularly emphasized the importance of technology in the functioning of companies. The period of the COVID-19 pandemic forced partial or complete changes in the way work was performed by most employees and forced employers to change management principles, including development, work evaluation and valuation (Zhang, Yu, Marin, 2021). Organizations became responsible for the health and safety of their employees, struggling with problems they had not previously experienced (Koveshnikov, Lehtonen, Wechtler, 2022). Remote work management reversed the perspective from "a worker going to work" to "work going to a worker". The solutions adopted in relation to remote work will be norms with a longer validity period (Selmer et al., 2021, p. 12). This is confirmed by López Peález (2021, p. 377) stating that "the pandemic has accelerated a process of digitalization that has produced relevant changes in...companies' organization".

One of the most important events in the economic environment of the 21st century was the economic crisis initiated in 2008, the effects of which are still being observed. This is a time of great opportunity for so-called agile organizations, taking advantage of opportunities. The crisis is also an impulse to take more risky and radical actions; it is a wake-up call for innovation in the sense that it forces better use of existing resources, which are particularly valuable in times of crisis. Studies indicate that the most common response to the crisis was to cut costs and save (Orlowski, Pasternak, Flaht, Szubert, 2010). This was followed by searching for new markets and customers, being more active in the market, and lowering prices of products and services. The last two actions, in particular, can be seen as an attempt to use the crisis to make changes and treat this period as a source of potential opportunities. As the research shows, relatively few companies took a proactive stance during the crisis, such as starting to look for new markets (20%) or intensifying advertising (12%) (Orlowski et al., 2010, p. 39).

Another event that changed the conditions under which companies operated was Poland's accession to the EU in 2004. This had a positive effect on the level of internationalization of Polish companies, linking the Polish economy to the economies of other countries. In the competitive environment of enterprises, the number of foreign entities increased, and access to foreign markets became easier. An increase in the requirements of customers was observed, as they began to pay more attention to the quality of products, and their impact on health and ecology. A global customer emerged, purchasing global products in a global market.

According to J. Kotowicz-Jawor (2008), small and medium-sized companies experienced a significant impact of European institutions on their behavior. This refers to regulations, norms, and standards, including those related to ecology. According to the research presented by U. Grzelonska (2008), EU bodies had the greatest impact on the attitude of companies to the environment at the beginning of Poland's EU membership. About 33% of enterprises noted

changes under the influence of EU bodies. Based on the survey results, it can be concluded that in 20% - 67% of enterprises, Poland's accession to the European Union resulted in changes in labor relations, internal organization systems, technical standards, and approach to the environment. It turns out that EU accession was perhaps the most important factor in terms of the strength of its impact, changing the functioning of enterprises in our country.

The expansion of markets and the increase in the number of entities intensified competition, giving it a more aggressive character. The reasons for this are seen in the internationalization of enterprises and the development of transnational corporations, the processes of consolidation: mergers, the opening of markets, the expectations of the global consumer, the increasingly shorter lifecycle of products, and easier and faster access to information. New concepts of corporate competitiveness are related to innovation, entrepreneurship, and alliances (Ring, 2006, p. 19). The increase in competitive pressure should prompt companies to intensify investment in R&D, innovation, learning, and knowledge (Thomas, Inkson, 2015). Competitive advantage based on knowledge is becoming more and more characteristic of modern enterprises operating under aggressive competition.

The previously mentioned ecological issues as challenges in the management of organizations include problems of environmental protection and quality. The green management/green HR category is an aftermath of the pressure of modern societies to improve the quality of the environment, and the international quality standards (PN-EN ISO 14001:2015-09) and the European Parliament directives (2004/35/EC) are its formal expression. The idea of green HR is a tool for the implementation of the concept of sustainable development of organizations, the goal of which is the green economy (Bugdol, Stańczyk, 2023).

In summary, in order to face the increasing demands of the environment, companies are becoming innovative and flexible, i.e. able to adapt quickly to ongoing change. Intangible resources such as knowledge or the ability to learn, stemming from human capital, are increasingly important sources of competitive advantage (Tome, Gromova, 2021). The internationalization of companies is forcing a change in the competitive strategy to one based on innovation, which consequently entails the requirement to have appropriately qualified employees equipped with the necessary competencies.

3. Employee competencies in business management

The term "competency" has been in use since about the middle of the 20th century, and denotes the characteristics of people resulting from their personality traits, attitudes, motivation, knowledge, experience, and skills, which are revealed through behavior, enabling them to perform professional tasks and achieve results at least at a satisfactory level (Kocór,

2019). Unlike qualifications, which are much more formal in nature, competencies determine future professional performance to a greater extent.

Particularly interesting groups of competencies are the key competencies, i.e. those considered most important, and the universal competencies, i.e. those common to all employees. Since they are not limited to a narrow group of employees or companies, learning about the possibilities of their diagnosis, assessment, and development is attractive from the point of view of their importance to a relatively wide range of people.

Employee competencies serve organizations, first and foremost, as a measure of the quality of human capital and the effectiveness of achieving goals, and consequently for attracting, rewarding, evaluating, and developing employees. In other words, they help carry out the basic functions of human resource management by closely linking them to the organization's vision, mission, and strategy. As a result, competencies today determine the competitive advantage of companies. On an individual level, the development of competencies, in accordance with the concept of lifelong learning, continues over many years and requires effort, time, and cost. However, nowadays, competencies determine the possibility of obtaining employment in a desired job position and, consequently, material and social status.

In this context, it is worth seeking knowledge - based on solid research - explaining how the business environment affects employee competencies and when, and as a result of what, the importance of these competencies changes. The available research tends to focus on narrow groups of competencies (for example, managerial or soft competencies), on competencies related to a specific profession (for example, the competencies of a teacher, or a nurse), or those related to a particular social group (for example, the competencies of students, graduates, the unemployed). However, it is difficult to find representative studies devoted to a group of key universal competencies, that is, the most important competencies common to all employees and all enterprises in the existing environmental conditions.

4. Methodological assumptions of the reported research¹

The problem in the study was formulated as the influence of selected elements of the macro-environment of enterprises on the reconfiguration of the weights of employee competencies in the competency structure. This allowed the construction of a research model determining the possible relationship between the environment and employee competencies. The independent variables were selected elements of the enterprise environment such as aggressive competition, economic crisis, knowledge-based organization, modern technology, and internationalization. Their selection was based on the assumption that they are current and significant, they reflect

¹ Full details of the reported research can be found in a forthcoming book published in 2024 by PWE (in progress).

the volatility of the contemporary environment and are associated with a high probability of influencing the importance of employee competencies.

The dependent variables were the weights of specific employee competencies selected on the basis of literature analysis, existing research, and the authors' reflections. These included creativity, flexibility, information processing and knowledge generation, interdisciplinary knowledge, and interpersonal communication. It was assumed that they should be more important for enterprises now than in the past, universal, therefore common to all employees, and related to the likelihood that they changed due to changes in the environment.

The main objective of the study became the identification of changes in the importance of employee competencies in the competency structure under the influence of selected elements of the macro-environment of enterprises.

The empirical research² was carried out on a group of 195 enterprises registered in the Małopolska region. The enterprises were represented by people in managerial positions (questionnaire surveys) and by employees of human resources departments (interviews). The most important results and conclusions of the research are summarized below

5. Assessment of the contemporary environment and its impact on the functioning of enterprises

The survey conducted in the first part dealt with issues related to the environment of enterprises - its characteristics and impact on their functioning.

The results made it possible to conclude that in the opinion of the people surveyed:

- the contemporary business environment is characterized primarily by a greater frequency of changes, greater complexity, and a faster pace of change, and to a lesser extent - by greater impact and uncertainty,
- the volatility of the business environment has increased the most over the past few years,
- the technological environment has changed the most in recent years,
- the phenomena that most affected the company's operation in the socio-cultural environment were: greater mobility of society (47%),
- the spread of mass consumption patterns (38%) and changes in the level and quality of education in society (37%),
- in the political and legal environment, the most important changes affecting business operations are domestic legal regulations (45%), the complexity of laws (40%), international regulations (38%), and instability of laws (30%),

² Empirical research was carried out in April-June 2018. The main sources of information for the research were surveys obtained from 220 people employed in managerial positions and 40 interviews conducted with employees of human resources departments.

- in the competitive environment, the increase in customer demands for products and services is the most important change affecting business operations,
- the 2008 economic crisis was felt by businesses to a moderate extent, and the resulting changes in businesses were mostly positive,
- the Internet and means of communication such as emails, instant messaging, tele- and videoconferencing are the most commonly used modern technologies by the surveyed enterprises,
- the use of knowledge in companies is low, and it is mostly based on a widespread orientation to continuous improvement and regular review and updating of operating procedures.
- internationalization in the surveyed companies is mainly manifested in the existence of a large number of foreign cooperators, operations in many foreign markets, and the occurrence of intensive interactions with people from other countries.

6. Key employee competencies in the surveyed companies. Observed trends of change

In the next research step, competencies considered as key were diagnosed, their changes over time (updating to the needs of the environment), and the most important skills included in the competencies.

The results obtained showed that *all of the five selected competencies adopted in the survey were considered key in more than half of the surveyed companies.*

The most important competency in the opinion of the surveyed managers was interpersonal communication (78%). Three competencies were also rated highly: flexibility (73%), information processing and knowledge generation (73%), and creativity (70%). The fewest respondents indicated interdisciplinary knowledge (57%). It should be noted that for each of the competencies, the number of negative responses did not exceed a dozen percent, which means that all of the listed competencies were key for more than half of the respondents.

We also examined the specific characteristics and behaviors related to this competency that are currently most important. This turned out to be: the ability to work in a team (83%), the ability to listen (81%), and language competencies (77%).

The respondents' statements also showed that often job candidates with a high level of expertise (mainly technical) simultaneously present a deficit in competencies related to interpersonal communication and teamwork. Moreover, they believed that the most important type of intelligence today is interpersonal intelligence. Intrapersonal, linguistic, and logical-mathematical intelligence were also frequently indicated. Thus, the predominant intelligence types were those related to the so-called soft skills (except for the last one). The challenge,

therefore, is to find employees who have well-developed both the so-called hard competencies and the soft ones.

The universal competencies required from employees change over time, and they have changed the most over the past few years.

9 out of 10 respondents believed that the set of universal competencies that employees currently have has changed over time compared to the past. More than half of the managers surveyed also believed that the universal competencies required from employees have changed the most over the past few years. The fewest, only 1%, claimed that this occurred before 1989. Also, the majority (more than half) of HR professionals pointed precisely to the last few years, without specifying either a specific number of years or a specific event. A tendency was also observed to attribute greater importance to changes that have occurred relatively recently, compared to those that occurred in the more distant past. Therefore, extreme caution should be exercised in drawing firm conclusions about when exactly a particular change occurred.

The importance of all five key competencies adopted in the research model increased.

The largest increase (above 70% of indications) was recorded for the following competencies: creativity (77%), flexibility (76%), interpersonal communication (74%), and information processing and knowledge generation (72%). The importance of interdisciplinary knowledge increased to a lesser extent (57%).

Company size did not significantly differentiate the responses, creativity and flexibility were only slightly higher in small companies, and interpersonal communication, information processing and knowledge generation in large companies. Flexibility and interdisciplinary knowledge are the competencies that are now more important primarily for managers from the production department. Information processing and knowledge generation for managers from the IT department, and interpersonal communication for the logistics department. Interestingly, creativity was equally important in the opinion of virtually all surveyed managers regardless of the department they came from.

There are three main areas of science in which employees today, more than in the past, should have general knowledge: technical sciences (72%), sciences (66%), and social sciences (62%).

On the other hand, the importance of natural sciences (e.g. biology, geography, environmental protection) (36%) and medical, health, and physical sciences (29%) was rated lower. The least important from the respondents' point of view was general knowledge in the humanities (e.g. history, philosophy, cultural studies) (11%), agricultural, forestry, and veterinary sciences (7%), and the arts (e.g. film, music, visual arts, theater) (6%). It can be assumed that as interest in environmental issues and cultural globalization increases, these types of knowledge will also become more important.

The respondents also identified computer science as the scientific discipline currently of greatest importance (an average of 8 out of 10 people), and interpersonal intelligence as the most important of its possible types.

7. Summary

In summary, the conducted research confirmed the authors' thesis that as a result of changes in the macro-environment of enterprises, the importance of competencies in the employee competency structure is modified. Generalizing the results obtained, it can be stated that:

1. There is a relationship between the increase in the intensity of global competition in the corporate environment and the increase in the importance of employee creativity in the competency structure.
2. There is no relationship between the level of internationalization of enterprises and the importance of employees' interpersonal communication skills.
3. When enterprises operate in an economic crisis, the importance of employee flexibility increases.
4. There is a relationship between the level of use of modern technologies in enterprises and the importance of knowledge of an interdisciplinary nature.
5. There is a relationship between the level of use of knowledge in enterprises and the importance of information processing skills and knowledge generation.
6. One element of the environment can affect multiple competencies, for example, a higher level of competition affected not only the importance of employee creativity but also the importance of flexibility, information processing skills and knowledge generation, as well as interdisciplinary knowledge.
7. Elements of the environment affect competencies with varying degrees of intensity. The strongest of the relationships studied was between the increase in the importance of knowledge and information in the business environment and the competencies of information processing and knowledge generation. The second strongest relationship was between the economic crisis and employee flexibility. The third was the relationship between the intensity of competition and employee creativity, and the last one was the relationship between the use of modern technology and employees' interdisciplinary knowledge.

The research results obtained made it possible to supplement the cognitive issues regarding the influence of environmental elements on the universal competencies of employees. On the other hand, from a utilitarian perspective, the results of the conducted research draw attention to the current needs of enterprises in the field of employee competencies and therefore provide information for schools, students, unemployed people, employees of enterprises, and all those for whom it is important to acquire and develop their own competencies.

Even though the article provides the research findings within specific sample, we see potential practical and organizational contributions. However this contribution may be limited due to the fact that the reported research does not allow the results to be generalized. Therefore, a follow-up study is planned.

References

1. Brózda, J., Marek, S. (1999). Enterprise environment. In: S. Marek (Ed.), *Elements of enterprise science*. Szczecin: Foundation for the University of Szczecin.
2. Bugdol, M., Stańczyk, I. (2021). *Green people management. Green HRM*. Warsaw: Difin.
3. Ćwiek, M., Ćwiklicki, M., Firszt, D. (2021). *Digitalization and the labor market*. Krakow: MSAP of the University of Economics in Krakow.
4. Gierszewska, G., Olszewska, B., Skonieczny J. (2013). *Strategic management for engineers*. Warsaw: PWE.
5. Gigauri, I. (2021). Organizational Support to HRM in times of the COVID-19 Pandemic Crisis. *European Journal of Marketing and Economics*, Vol. 4, Iss. 1, pp. 16-30. <https://doi.org/10.26417/492dn143d>
6. Grzelońska, U. (2008). Changes in the relations of enterprises with the environment. In: J. Kotowicz-Jawor (Ed.), *Adaptation of Polish enterprises to the European Union market*. Warsaw: Key Text Publishing House.
7. Kocór, M. (2019). *Surplus or deficit of competences*. Kraków: Jagiellonian University Publishing House.
8. Kotowicz-Jawor, J. (2008). Introduction. In: J. Kotowicz-Jawor (Ed.), *Adaptation of Polish enterprises to the European Union market*. Warsaw: Key Text Publishing House.
9. Koveshnikov, A., Lehtonen, M.J., Wechtler, H. (2022), Expatriates in the run: The psychological effects of the COVID-19 pandemic on expatriates' host country withdrawal intentions. *International Business Review*, art. no 102009.
10. López Peláez, A., Erro-Garces, A., Pinilla Garcia, F.J., Kiriakou, D. (2021). Working in the 21st century. The coronavirus crisis: A driver of digitization, teleworking, and innovation, with unintended social consequences. *Information*, Vol. 12, Iss. 9.
11. Orłowski, W., Pasternak, R., Flaht, K., Szubert, D. (2010). *Investment processes and strategies of enterprises in times of crisis*. Warsaw: PARP.
12. Pierścionek, Z. (2006), Contemporary concepts of enterprise competitiveness. In: Z. Pierścionek, S. Jurek-Stępień (Eds.), *Success factors of Polish enterprises on European Union markets*. Warsaw: Oficyna Wydawnicza SGH.
13. Selmer, J., Dickmann, M., Froese, F.J., Luring, J., Reiche, B.S., Shaffer, M. (2021). The potential of virtual global mobility: Implications for practice and future research. *Journal of Global Mobility*, Vol. 10, No. 1.
14. Thomas, D.C., Inkson, K. (2005). Cultural Intelligence: People Skills for a Global Workplace. *Consulting to Management*, Vol. 16, No. 1.
15. Tomé, E., Gromova, E. (2021). Development of Emergent Knowledge Strategies and New Dynamic Capabilities for Business Education in a Time of Crisis. *Sustainability*, Vol. 13, No. 8, Article 4518. Retrieved from: <https://doi.org/10.3390/su13084518>

16. Wach, K. (2008). *Effects of accession to the European Union for Polish enterprises*. Krakow: Publishing House of the University of Economics in Krakow.
17. Zhang, C., Yu, M.C., Marin, S. (2021). Exploring public sentiment on enforced remote work during COVID-19. *Journal of Applied Psychology*, Vol. 106, No. 6, pp .797-810.