

SOFT SKILLS AS A COMPETITIVE ADVANTAGE FOR TECH SPECIALISTS IN THE ERA OF AI

Goncharko S.A.

Belarusian State University of Informatics and Radioelectronics, Minsk, Republic of Belarus

Andreeva O.V. – Senior Lecturer at the Department of Foreign Languages

Annotation. This paper examines the role of soft skills in the modern workplace and their impact on the career advancement of technical specialists. It analyzes the influence of artificial intelligence on automation of various processes. Particular attention is paid to teamwork, flexibility, responsibility, and communication as key factors for career advancement and increased labor market demand. The balance between the development of leadership and communication skills and the pace of professional promotion is also discussed.

Keywords: soft skills, AI, automation, employability, labor market, career development, professional promotion.

Introduction. In recent years, due to the development of neural networks the demands of the labor market has been rapidly changing. Previously, deep technical knowledge, or hard skills, was exclusively the key factor of success in engineering and information technology (IT) careers. Nowadays, artificial intelligence (AI) is increasingly capable of handling complex computations and data analysis. As processes are automated, soft skills, skills defining interpersonal relationships, begin to play a much greater role.

The relevance of this topic is driven by the rapid integration of AI into all areas of human activity, which requires highly qualified specialists able to develop emotional intelligence, communication abilities, and critical thinking. This paper identifies key skills and examines their important role in career growth. The results of this study will help to determine the directions for professional development in the context of digital transformation.

Main part. The development of AI has a significant impact on the structure of professional activity in technical and engineering fields. The introduction of AI does not lead to the complete replacement of specialists, but rather to a change in the functions that they perform [1]. Routine tasks can be defined as repetitive, algorithmically controlled actions requiring minimal creativity and little or no interpersonal cooperation. Operations such as code testing, process analysis, finding errors in code, and data analysis are easily automated using algorithms. This explains why demand for hard skills is declining, while the value of skills that focus on interaction with other people continues to rise. Consequently, skills that do not require creative and social collaboration among specialists no longer hold the same level of significance as they once did.

As neural networks can process vast amounts of information faster than humans, identify patterns, and offer optimal solutions with high speed and accuracy, companies can avoid hiring a large number of employees to perform these tasks. Instead, specialists capable of performing tasks related to interpersonal communication, activity coordination, and strategic decision-making are valued much more highly [1].

Owing to the transformation of professional roles, skills that cannot be fully algorithmized are gaining much greater importance. These skills include:

- time management;
- ability to work in a team;
- flexibility;
- critical thinking;
- leadership;
- responsibility.

It should be emphasized that in the modern labor market, specialists who possess mental flexibility and develop social skills are in increased demand [2]. It is more beneficial for an employer to view an employee not only as a performer of technical tasks, but also as a participant in an entire collective dedicated to developing innovative technologies.

Teamwork is becoming an integral part of the information technology and engineering spheres. Successful execution of complex projects necessitates close collaboration among developers, analysts, designers, marketers, managers and clients. Taking in to account the fact given above, the importance of soft skills is particularly amplified, as communication barriers will lead to errors and financial losses [2]. It is also essential to note that the use of AI helps to facilitate the work of team significantly.

Flexibility acquires special value. Technological tools and platforms updated at a high rate, specialists to be ready for non-stop learning are required. Professions most susceptible to the influence of AI need regular updating of skills and mastering new digital tools [1]. The ability to adapt quickly to changes becomes an important factor for professional activity.

According to data published by HR Dive in 2024, employees possessing a high level of communication and leadership skills receive promotions faster than specialists focused exclusively on technical skills [3]. Advancement to leadership positions involves making decisions under conditions of uncertainty, managing a team, and being responsible for the work results of all team members. Figure 1 demonstrates a generalized diagram of the impact of automation on the structure of professional skills.

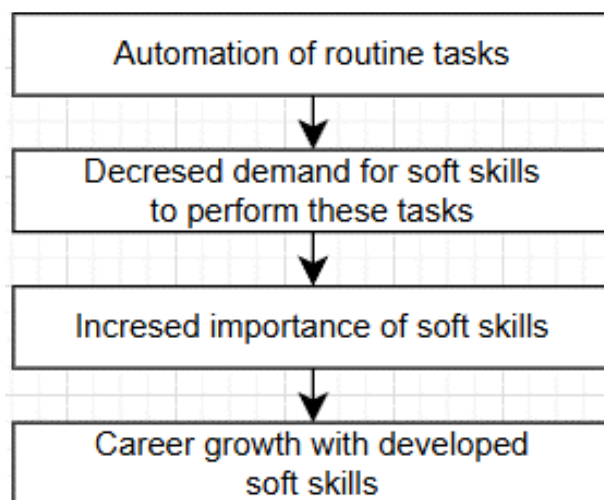


Figure 1 – Transformation of competency requirements in the context of AI implementation

According to this diagram, the importance of management and soft skills increases as the importance of people's ability to perform repetitive tasks declines. Developed soft skills become a main factor in career growth in an automated environment.

Conclusion. Research shows that developing soft skills is critically important for tech specialists. The combination of technical expertise and strong interpersonal abilities creates a competitive advantage for tech specialists that cannot be replaced. As AI continues to evolve, professionals who invest in these human qualities will remain valuable and resilient in the changing labor market. By embracing soft skills development, professionals can secure their place in the era of AI and open new opportunities for professional growth.

Sustainable professional success depends on the balanced development of both hard and soft skills. Automation may transform the nature of work, but human interaction and responsible decision-making remain fundamental while making a brilliant career.

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