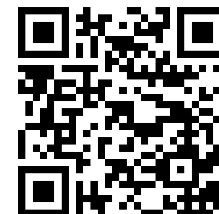


## The Factors That Influences on Working Environment of Government Employees in Bosnia and Herzegovina

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**ABSTRACT:** In today's business environment, the majority of business activities are closely tied to information technologies, which play a crucial role in enabling and facilitating business operations when utilized effectively. There is a growing emphasis on the adaptability of individuals in the workplace and the utilization of human capital in business success.

A key requirement for business organizations is the effective management of information technologies, which encompasses the knowledge, skills, and abilities possessed by employees to navigate evolving technology and achieve organizational objectives. This includes proficiency in digital competencies for continuous learning and adaptation to the ever-changing landscape of information technologies.

This study introduces indicators related to adapting to changes in the workplace, focusing on human capital engaged in continuous learning and information technologies. The process of adapting to changes is highlighted as a means of transforming essential business competencies into contemporary skills. The integration of these factors in the business framework reflects organizations' readiness to embrace modern business practices.

While the research was conducted in state institutions rather than private companies, its significance lies in introducing novel approaches to business practices in Bosnia and Herzegovina. The recommendations presented at the conclusion of the study aim to further enhance the modernization of business approaches and assess the potential impact of competency gaps on organizational performance.

**KEYWORDS:** work environment, government employees, digital competencies, lifelong learning, organizational performance.

### INTRODUCTION

In recent years, there has been a significant focus on information technologies, which have become integral to business activities. While these technologies have greatly facilitated business operations, the success of a business increasingly relies on the effective utilization of these technologies and the competencies of the individuals who use them.

One of the key requirements for organizations in the business sector is the competency in managing IT. This entails a comprehensive set of knowledge, skills, and abilities possessed by employees that allow them to navigate IT demands and achieve organizational goals. It encompasses digital skills for continuous learning and adaptation to evolving technological advancements.

Information technologies play a crucial role in advancing the economy, society, and overall quality of life. Investing in IT innovations, training employees to manage these technologies, and promoting information literacy are essential for organizational growth and development. However, the ability of individuals to effectively utilize these technologies within business organizations can impact various aspects such as goal achievement, problem-solving efficiency, user satisfaction, as well as potential negative consequences like poor publicity and decreased morale.

The integration of new IT programs in the public sector poses challenges for employees who must adapt to new technological requirements. Inadequate skills in managing digital applications can have significant repercussions on government services, interconnected state institutions, and citizen relations. However, the absence of regulations regarding information literacy in the public sector imposes additional challenges for IT system maintenance.

Promoting lifelong learning and continuous professional development is vital in enhancing IT competencies in employees across all sectors. Acquiring knowledge and skills for managing IT programs is essential for improving productivity in business organizations. However, competent individuals in the IT sector are scarce in government services, leading to issues in information security, business management, and overall system governance.

Effective training and lifelong learning opportunities, particularly in the realm of information technology, can empower employees to proficiently utilize computer applications. By analyzing organizational needs and implementing suitable technical and organizational solutions, significant progress can be made in educating government employees. However, limitations such as

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financial constraints, employee willingness for additional education, and job positions may hinder the acquisition of quality individuals to manage IT applications.

EU regulations emphasize the importance of computer literacy for all individuals and readiness to adapt to changing work environments. These standards align with those in Bosnia and Herzegovina, and needs to be widely implemented.

Enhancing competencies of civil servants in managing IT applications is crucial for organizational success and should be a priority in skills development initiatives.

### RESEARCH METHODOLOGY

The influence of information technologies on the business environment is a significant topic in today's world. Information technology is present in all aspects of society and is particularly prominent in the public sector. Implementing a final framework for state institutions can aid in establishing programs for continuous improvement and enhancing the performance of the public sector. Conducting a gap analysis on the utilization of information technologies among public sector users is crucial for identifying deficiencies in skills and competencies. This concept has been utilized in various sectors such as business and education to determine the necessary skills for efficient work performance. By identifying the essential skills needed for effective work, organizations can strive for success and competitiveness.

Therefore, the focus of the proposed article is to analyze how information technology impacts the development of modern skills and competencies among employees in the public sector. And their working environment.

This research aims to explore the extent to which information technologies shape competencies, examine potential differences in competencies based on gender and age, and evaluate how these factors influence the success of the public sector's work.

### RESEARCH QUESTIONS

The article will concentrate on investigating several research inquiries, the outcomes of which will be unveiled at the end of the article. Some of these inquiries include:

- How do information technologies impact the enhancement of contemporary skills among public sector employees?
- Do government officials possess the necessary digital skills to effectively operate in a dynamic work setting?
- Is there a correlation between the modern skills possessed by government employees and the attainment of organizational objectives, such as sustaining a competitive edge in the job market and adapting to technological advancements?
- Do the digital competencies of employees vary based on their profession and the nature of their work within governmental departments?

**Research sample:** 300 employees of state units from several cities in Bosnia and Herzegovina (Sarajevo, Mostar, Tuzla and Banja Luka) participated in the research, which includes various departments.

An assessment scale was used. The assessment scale consisted three parts:

- ♣ The working environment in which questions were asked in order to determine the adaptability of state organizations and their employees to the novelties that information technologies bring with them;
- ♣ Use of IT in the training of employees in the public sector;
- ♣ Assessment of the digital competencies of civil servants, i.e. their knowledge and skills in relation to computer literacy.

### METHODS

During the data analysis, various methods were utilized including descriptive analysis to explain specific terms and changes, a case study method to present different types of information, and a comparative method to compare different phenomena and processes. This allowed for a more thorough understanding of government employees' proficiency in information technologies based on factors such as age, occupation, and type of work. Statistical analysis and factor analysis were also used to examine correlations between variables and generate additional insights. Additionally, a skills gap analysis was conducted to identify areas where competencies may be lacking, and the ALM model was utilized to understand the impact of technology on workplace dynamics and the necessary skills for employees in various organizations.

### RESULTS

The results showed that, depending on the type of digital competences, there are no major deviations among employees in the state sector. They usually range is between 3% to 20% for a full upgrade or from 3% to 18% for a partial upgrade of digital competencies. Unfortunately, it was not possible to monitor the situation before and after the research in order to see a difference over several years, but it is possible to see the current state of competencies of civil servants whose organizations are constantly changing.

The model of digital competences can be characterized as a mixed model in which three structures are presented. On the first level, the structure looks like an open trapezoid, while on the second, a structure like an open triangle and a trapezoid are mixed. The third structure has the appearance of an open triangle. In this model, it is evident that, depending on the work, each structure in state

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institutions has chosen the type of competence that suits it best, that is, in which it will successfully perform and realize its tasks. However, this should not be an obstacle for further development of competences.

Additionally, in the data analysis process, employees' routine tasks are carried out based on their routine competencies, which may need to be further specified, such as data tabulation and calculations. Professional competencies refer to skills that employees possess to a high level, including knowledge of managing files and conducting information searches. Given the current low level of organizational performance, management must establish strategic goals and actions to enhance competencies in these two areas among employees, leading to continuous improvement and utilization of skills in the future. The organizational structure should function more like an interconnected system of thought, resembling a community where all organizational units work together. However, as organizations expand, their mindset evolves, influenced by various factors. Growing organizations tend to lose the communal, social aspect of their structure, becoming more individualistic and rigid in their thinking. This shift can lead to short-term problem-solving capabilities but may result in challenges down the line. Viewing the organization as a single entity, it is vital to observe the external environment, generate innovative solutions, and continuously enhance knowledge to become a learning and competitive entity in the market. This also involves collaboration among various departments within the organization, fostering effective communication and a culture of trust. The benefits of such collaboration include:

- Cultivating a positive business culture within the organization
- Sustaining innovative solutions
- Maintaining competitiveness
- Offering quality responses to internal and external pressures
- Continuously enhancing knowledge
- Building and maintaining strong relationships with clients
- Establishing and improving the organization's business image
- Adapting to organizational changes in response to external factors
- Applying new knowledge in alignment with IT requirements
- Encouraging the implementation of new ideas within the organization
- Promoting a sense of unity within the organization
- Enhancing internal collaboration
- Networking and maintaining connections to leverage new knowledge and experiences, among other benefits.

The analysis has demonstrated and verified the following points:

- The influence of Information Technology on the enhancement of modern skills among employees in the public sector is apparent in a dynamic work setting.
- Government employees are equipped with digital skills necessary to thrive in an evolving work environment.
- The contemporary skills of public sector workers are crucial for gaining a competitive edge, particularly their ability to adapt to IT advancements.
- Regression analysis indicated that younger respondents with more diverse work environments and higher professional qualifications tend to have a higher level of digital competence development.

## CONCLUSIONS

Learning is an essential aspect of human life, both historically and currently. It is through learning that individuals are able to adapt to the constantly evolving modern world. The importance of learning has increased globally, particularly due to advancements in technology that require diverse skills and knowledge. This has led to a shift towards lifelong learning and continuous development, transcending traditional boundaries of time and space. Organizations, including state institutions, are now emphasizing the significance of learning and adapting to technological changes in order to remain competitive.

Institutions are recognizing the need to support employees in their professional development, with a focus on information technology skills. Organizational learning is essential for adapting to changes and achieving strategic goals. A learning culture within organizations enhances innovation, knowledge sharing, and performance improvement. To meet the demands of the modern work environment, organizations must invest in educational programs to develop digital competencies among their workforce.

The research carried out in state institutions in Sarajevo, Mostar, Tuzla and Banja Luka, justified the set hypotheses and proved that the influence of information and communication technologies on the development of modern competencies of civil servants in a changing work environment is evident as a factor of influence and that they are necessary for achieving the key goals of their organizations, including adapting to changes in information technology.

Employees must be equipped with the skills and attitudes necessary to navigate technological advancements and adapt to changing working circumstances. This requires ongoing training and development opportunities, beyond occasional seminars. By nurturing a culture of continuous learning and embracing modern competencies, organizations can enhance their competitiveness and adapt to

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the demands of the global market. Organizations that prioritize learning and development are better positioned to achieve their objectives and ensure employee satisfaction.

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