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## QUALITY MANAGEMENT THROUGH SUSTAINABLE HRM BASED ON DIGITAL COMPETENCIES

**Abstract:** *This paper elaborates on the problem of quality management at the company, which is implemented through sustainable HRM, which, in turn, is based on digital competencies. In the process of the research, we disclose the modern understanding of quality, characterise the specifics of sustainable management labour resources, and determine the important role and parameters of digital competencies. The basis of the methodology of this research is the concept that is aimed at combining the spheres of digital competence, sustainable HRM, and quality management, which allows strengthening and expanding the opportunities for ensuring quality at the company.*

*The result of this research is the determination of positive effects and interconnection between digital competencies, sustainable HRM and the system of quality management. Characteristics of these facts allowed identifying the key advantages of the proposed integration of the sub-systems of management, which are based on fuller use of digital solutions in business, learning, and quality management. According to this, we determine the relevance of the company's personnel acquiring digital competencies and their complete use within the sustainable management of human resources, which will allow for a substantial increase in the level of quality management at the company.*

**Keywords:** *quality, quality management, human resources, sustainable human resources management, concept of sustainable development, digitalisation, digital competencies.*

### 1. Introduction

Quality is one of the main factors in economic development. It is an integral and, very often, informal criterion that characterises the success and competitiveness of the company and the level of its interaction with the market. In this context, quality is often treated

as correspondence to a certain set of parameters. However, very often its level cannot be reflected in the form of formalised criteria. This makes the process of quality management special. Despite the above circumstances, the process of quality management at companies belongs to the top-priority ones. It is assigned the key role in strategic planning, resource support, and

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administrative influence. According to this, the search for directions and means of improvement of product quality is among the key tasks of economic development of economic subjects.

Personnel is the goal and factor of development at the same time. On the one hand, the level of competence of employees defines the success of the organisation; on the other hand, companies develop complex strategies for the development of personnel. In this context, quality is one of the goals of development, which is manifested through products and services' correspondence to market demands (Kargar Shouraki, 2022). The available methodologies of personnel management are focused on the result, according to which the interests of employees are taken into account only in the context of wages. Improvement of labour conditions, together with consideration of the employees' interests will allow for a more effective stimulation of the activities in the sphere of product quality management and support.

The relevant trend of modern development is the transformation of demands on employees and the labour market on the whole. It is closely connected with the dominating global processes, which are manifested through strong digitalisation of all spheres of human life, including the economy, and strengthening of environmental threats, which, in turn, actualised the role of the sustainable development concept (WEF, 2023). In this context, the study of the processes of sustainable development of personnel and personnel acquiring digital competencies from the position of product quality support is an important scientific task. Its achievement will allow for a significant increase in the socioeconomic systems' ability to oppose global risks and ensure their competitiveness through the improvement of quality standards.

Digital technologies significantly expand the tools of quality management, including direct processes of personnel management. They influence all processes of personnel

management, including information support, offers of new forms and methods of learning, differentiation of employment forms and involvement in the work process, etc. That is why digital competencies play an important role in the modern stage of quality management through the influence on personnel. In future, their role will be growing, which will make the possession of digital competencies one of the main demands for job applicants.

Thus, ensuring quality management at the company is closely interconnected with the process of personnel management, which is strengthened due to the implementation of the sustainability concept and supplemented by the active use of digital technologies in operational activities and management. The comprehensive use of the potential of such symbiosis of processes requires a high level of possession of novel solutions and technologies, which, in turn, requires that personnel possess digital competencies. Based on these competencies, the system of quality management substantially expands its capabilities and improves the ability to ensure the conditions of sustainability in the process of human resources management.

## **2. Methodological basis of the research**

Research of the problems of quality management from the position of the use of the potential of human resources and digital technologies requires the application of interdisciplinary and system approaches, which would allow the coordination of different views, theories, and concepts within one study. Thus, the methodological framework of this research is comprised of the theories of quality management, human resources management, the concept of sustainable development, and approaches to the study of digital technologies, in particular, the study of digital competencies as factors in the development of the digital economy.

The theoretical basis of the research is comprised of works devoted to new views of quality (Ponomareva et al., 2023; Vorozheykina et al., 2023) and the problem of quality support in the conditions of digital transformation (Balouei Jamkhaneh et al., 2022); study on the sustainability of human resources development (Chams & García-Blandón, 2019; Davidescu et al., 2020; Karman, 2019), analysis of the influence of digital transformation on human resources management (Bajraliu & Qorraj, 2023; Kargar Shouraki, 2022; Manu et al., 2021), and the use of digital solutions for teaching personnel (Starzyńska et al., 2022); combination of the system of general quality management with labour resources management (Bowen & Lawler, 1992; García-Alcaraz et al., 2019; Zehir et al., 2012) and determination of the influence of human resources on quality management (Ortner, 2000); substantiation of the list and characteristics of digital competencies (Vuorikari et al., 2022). The above works considered in detail the problems of definition of quality, development of personnel and personnel management, and proved the connection between the processes of quality management and labour potential. However, complex solutions that, based on digital competencies, would allow characterising the direction, level, and character of their influence on product quality – directly or through the system of responsible management of labour resources – are absent. According to the designated theoretical foundations, the basis for determining product quality is the reduction of the number of defects during production. There is no single indicator that would fully characterise the notion of product quality at the company. Most manufacturers select a limited list of indicators that allow assessing the level of quality in the absolute and relative value (Ponomareva et al., 2023). An important role in ensuring quality is assigned to employees. However, it is necessary to study whether employees who work at modern companies have the appropriate competencies.

Human resources management is a stable system of methodologies and concepts that are aimed at the search for effective tools for the most rational and effective use of personnel for the achievement of the goals of the development of society or entrepreneurial subjects. The evolution of the development of the concept of labour resources management predetermined an increase in the topicality of the problems connected with the exhaustion of employees, their loss of motivation, and an increase in negative reactions to the problems in the spheres of ecology. The concept of sustainable human resources management (SHRM) was formed as a reaction to these challenges.

Sustainable management of labour resources is the next stage in the development of HRM, which takes into account the drawbacks of previous theories and concepts and pays attention to care for employees, their interaction with the external natural environment, and support for equality and participation in the development of employees (Davidescu et al., 2020). Thus, the main features of sustainable HRM are as follows:

- Focus on values, which raises the role of the category of quality not only in production processes but also in everyday conditions, public processes, etc.;
- Managers' participation in the life and development of employees, which involves a better understanding of employees' needs, on the one hand, and the level of motivation and interests, on the other hand;
- Creation of trusting relations between employees and employers, which allows improving the state of company manageability and allows implementation of unpopular decisions, if needed, with lower risks;
- Interaction with stakeholders, which allows going beyond the limits of the company and managerial processes,

aimed at personnel, takes into account the interests of other interested parties and expands the possibilities of employees' influencing production and management processes.

SHRM is a new concept, which focuses on the problems and interactions of employees, and strengthens the sustainability of business processes from the position of not only economy but also environmental and social aspects. Large attention here is paid to the formation of the flexibility of employees from the position of skills (ability to change speciality, raise qualification, and track the current needs of the labour market), behaviour (ability to fight stresses, motivate oneself, and interact), and functions of HRM (self-development, determination of priorities and values, search and resolution of problems, creativity, etc.) (Karman, 2019).

Thus, sustainable HRM is a combination of strategy and practice of human resources management, which stimulates the achievement of complex social, economic, and environmental goals using an increase in the use of internal resources and involvement of the potential of the external environment, which is conducted on the long-term basis (Bajraliu & Qorraaj, 2023). Sustainable management of labour resources is a rather universal concept, which goes beyond the limits of production relations of the employee and employer. It is focused on the quality of employees' lives, their level of development, and success. According to this, employees' perception of the category of quality in the modern world depends on their life values and settings. In this context, the achievement of the quality of production cannot be viewed in isolation from the perception of these processes by employees. That is why sustainable management of labour resources has much more in common with ensuring quality than could seem at first (Vorozheykina et al., 2023).

Dynamic digitalisation created opportunities for the use of additional tools in personnel and

quality management in organisations. Innovative technological changes allowed achieving the sustainability of economic systems, which takes place due to better access to data, the use of the capabilities of artificial intelligence (AI), the Internet of Things (IoT), technologies of data processing (cloud services, centres for data processing, big data analysis), robotization, blockchain, augmented and virtual reality, 3D print, and other tools of the digital economy. Thus, digital communication means allowed ensuring a better balance of work and personal time for employees due to the options of remote learning and communications. The methodologies and technologies of Big Data and the IoT created conditions for the collection and processing of large arrays of data on completion of production processes, records of deviations and their management; robotization and 3D printing became important tools in freeing employees from execution of large volumes of routine operations (Bajraliu & Qorraaj, 2023). Digital technologies predetermine the emergence of the need for digital transformation of people, regardless of their role in the system of production of public development. This led to the change in demands for workplace and functional responsibilities, and, in aggregate, allowed forming new directions for the growth of productivity and innovativeness of economic systems.

It is considered that available educational resources on the tools of quality management are inaccessible and unattractive. They are not easy to perceive and mastering by employees, which limits their possible influence on product quality. Contrary to this, the use of new technologies, such as virtual reality, allows simplifying the process of training, ensuring its visualisation, and raising the level of perception of information by employees who are responsible for quality at the company (Starzyńska et al., 2022). The use of digital technologies in training has become more popular and is actively used by educational establishments, training centres,

and other establishments, which, in turn, allows for raising the level of possession of digital competencies.

The proposed theoretical provisions are clearly agreed from the position of their influence on the processes of ensuring quality at the company. In this context, attention should be paid to the new approach to quality management in the conditions of the digital economy, which involves the digitalisation of the systems of quality management. In such conditions, traditional quality management goes beyond the limits of operational and managerial processes and is directly concerned with data and device security. Support for the quality during the entire course of the formation of product cost is also important. Such an approach in scientific circles is called Quality 4.0, which points to its close connection with Industry 4.0, based on a wide use of digital technologies in industrial production (Balouei Jamkhaneh, 2022). Quality 4.0 is a complex combination of the processes of different characters, which requires the active participation of human resources. According to this, employees' having digital competencies is an important demand for quality personnel and the possibility of their involvement in the work processes in the environment of Quality 4.0. Integration of the effective concepts of ensuring quality and digital technologies drastically changed the role of humans in economic and social development. Labour resources are more often considered in the context of interaction with machines, artificial intelligence, robots, etc. This sets additional requirements for the system of human resources management and stimulates companies to support the development of personnel, mastering digital competencies, and ensuring the quality of labour and life. On the other hand, employees' mastering digital competencies require additional attention from the position of the use of optimal means of their training and use within the execution of production and management tasks.

### **3. Experimental setting and methods**

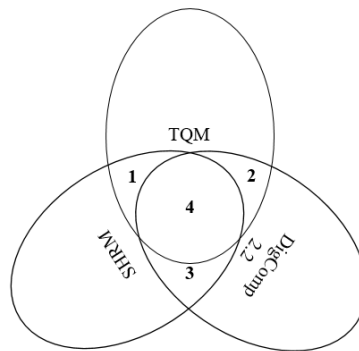
The purpose of this research was to find potential connections between the processes of development of digital competencies, sustainable management of labour resources, and ensuring quality at companies. Achievement of this goal requires the completion of a range of tasks, which involve more detailed disclosure of the essence of digital competencies, their characteristics and structuring, determination of the specifics of sustainable management of labour resources and their influence on quality support at the company. It is assumed that there could be a close connection between these processes, which is manifested through the strengthening and improvement of the sub-systems of the management of labour resources and quality at companies.

Production systems in the market conditions are focused on constant improvement and reduction of the variation of production processes. Ensuring the stability of production is one of the main criteria for high-quality production. Constant improvement is here the result of competitive struggle and a stable factor in development. Reduction of the variability of production is ensured by standardization of processes and is one of the elements of quality management (Zehir et al., 2012). An important tool for ensuring product quality at the company is the system of Total Quality Management (TQM). This tool is closely integrated with other elements of production systems, including processes of planning, organisation, control, supply, financial support, personnel management, etc. Human resources are often considered a critical factor of success for TQM (García-Alcaraz et al., 2019). Thus, the notion of quality comes from human abilities, knowledge, and interaction, and the role of human resources in its management is rather high.

Perception of human resources in the systems of quality management used to change. In the 1990s, there was a popular statement of the key role of managers as agents of change and leaders in quality (Bowen & Lawler, 1992). Later on, this idea was further developed, and the human factor was considered the key one in the process of quality management (Ortner, 2000). This allowed expanding the list of positions involved with ensuring quality and determining each employee's capability to influence it through direct execution of their work duties. At present, quality and human resources are considered to be the main pillars of the sustainable development of business and society (Chams & García-Blandón, 2019), and the main reserves for their improvement are found mainly in the sphere of digital technologies. The conducted research confirmed the existence of a close connection between the processes of sustainable human resources management, technologies of Industry 4.0, and quality of personnel, which is manifested in an increase in the level of flexibility, competence, involvement in management, and expansion

of the production potential (Manu et al., 2021).

In the modern dynamic world, companies striving to reach success have to use a complex approach to the resolution of the problem of ensuring quality and formation of competitive advantages. The focus on the implementation of models and concepts of quality management in such conditions must be set onto a wider range of processes and functions. One of the decisive directions in this context is the complex integration of the systems of quality management with personnel and current approaches to the development of employees' digital competencies. In a more specific expression, such integration involves a combination of concrete systems and concepts, such as Total Quality Management (TQM), Sustainable Human Resources Management (SHRM), and DigComp Framework (DigComp 2.2). A schematic image of the method of combining these systems and their explanation are shown in Figure 1.



**Figure 1.** Schematic combination of the systems of Total Quality Management (TQM), Sustainable HRM (SHRM), and DigComp Framework (DigComp 2.2)

*Note:*

1 – a combination of the systems of quality management TQM and SHRM offers a long-term perspective, integration of all processes of quality management, and wide involvement of employees in the processes of the improvement of management;

2 – a combination of the system of quality management TQM and DigComp 2.2 allows structuring the list and characteristics of digital skills necessary for ensuring the quality of management in the conditions of Industry 4.0;

3 – a combination of SHRM and DigComp 2.2 expands the opportunities for training and working of personnel due to active preparation for work in the conditions of Industry 4.0;

4 – a combination of all components offers a complex methodological basis for improving the system of quality management, which is based on the development of sustainable management of personnel, which is combined with active acquisition and use of digital competencies.

Source: Authors

Within the given combinations, all components mutually supplement each other and form a synergetic effect, due to which the influence of the system of management, which includes TQM, SHRM, and DigComp 2.2 on quality management grows. Thus, the implementation of the system of Total Quality Management, combined with sustainable human resources management, allows for a complex resolution of the problem of personnel support and motivation of personnel, who are actively involved in the processes of quality management. Supplement of sustainable human resources management with an ordered framework of digital competencies substantially raises the topicality of demands to personnel and forms the potential to accelerate the innovative development of companies. In turn, TQM and DigComp 2.2, combined, offer directions and tools for the digitalisation of the process of quality management. Thus, coordination and mutual supplement of all three components allow specifying demands for personnel and quality management from the position of Industry 4.0, as well as substantially raising the intellectual and labour potential of employees and bringing the sets of their competencies in accordance with the current demands.

The outlined concept of the interaction of different elements of the system of corporate management is based on empirical theoretical provisions. However, it requires deeper substantiation from the position of the description of directions and effects that are achieved due to quality management through sustainable HRM and based on digital competencies. The main methods that can be used here include analysis and synthesis, observation and generalisation, cognitive modelling, grouping, and structural and functional analysis.

#### **4. Results**

Given the goal and task of the research, its subject is most closely connected with digital competencies. The essence and role of digital

competencies have been determined by the European Commission initiative. It was developed as a reaction to the digital transformation of the economy and social processes and was to outline the strategic directions for the development of the digital economy in the European Union. Provisions formed by the European Commission received global status. The first version of the framework of digital competencies was proposed in 2013. With the development of digital technologies and the emergence of new digital solutions, their number and contents constantly changed. At present, the version DigComp 2.2, formed in 2022, is effective (Vuorikari et al., 2022). By its essence, digital competence is manifested through the confident and responsible use of digital technologies and interaction with them in the process of training, work, or active participation in public life. It involves the combination of the designated skills, knowledge, and attitude towards digital technologies. The actual framework DigComp 2.2 characterises 21 competencies, which are structured within five groups:

1. Information literacy and working with data – it is aimed at competencies connected with the ability to determine information needs, search for digital data, work with them, and process according to the needs;
2. Communication and cooperation – it is aimed at competencies in the sphere of communication and cooperation, including social life and economy. It defines the ability to manage one's presence in a digital space;
3. Creation of digital content – discloses competence in the creation and editing of content in a digital environment, including skills in working with copyright;
4. Safety – it contains definitions of competencies in the sphere of data and device protection, actualises a need for the preservation of mental

health and social integration, and takes into account the influence of digital technologies on the environment;

5. Problem-solving – it is aimed at the ability to determine and solve problems connected with the use of digital technologies, as well as being aware of the course of digital

evolution.

Each group of competencies has the potential for raising the sustainable management of human resources, as well as the ability to influence the system of quality management. Characteristics of this connection and influence are presented in Table 1.

**Table 1.** Characteristics of the connection of competencies of DigComp 2.2 and SHRM and their influence on quality management at the company

Competencies DigComp 2.2	Connection of competencies with SHRM	Influence of competencies on quality management
Information and data literacy	1.1	Search and filtering of data provides access to a larger volume of relevant information
	1.2	Mastering of the tools of critical assessment of information
	1.3	Better structuring of information about employees and their development
Communication and collaboration	2.1	More opportunities for communications and forms of dissemination of information
	2.2	Possibility of quick dissemination of information
	2.3	Offers tools for raising responsibility and motivation of employees
	2.4	Ensures the possibility of better team interaction
	2.5	Offers norms of digital etiquette
	2.6	Tools for identification of employees' activity



Digital content creation	3.1	Development of skills for the creation of digital content	Creation and expansion of training materials, manuals, and illustrations on quality for employees
	3.2	Ability to combine current and new knowledge, generalise and study the current experience	Allows creation of additional educational materials and manuals on quality management, as well as using them effectively
	3.3	Develops the culture of copyright protection	Allows protecting own inventions from unsanctioned use, industrial espionage, and theft
	3.4	Possibility of creating and improving specialised software	Automatization of quality management processes (collection and processing of data, monitoring of processes)
Safety	4.1	Improving the level of reliability of devices that are used at the company	Ensuring reliability of equipment, improvement of the parameter of reliability in quality management
	4.2	Better protection of confidential data of employees and processes at the company	Prevention of commercial espionage, protection of methodologies and processes of quality management
	4.3	Creation of conditions for safe and comfortable work of employees, ensuring the high level of their everyday life	Ensuring ergonomic and environmental demands for the work of employees, improvement of their productiveness and responsibility
	4.4	Proposition of tools and methodologies to track the influence of employees on the environment	Raising the level of environmental safety of the company, as one of the criteria for product quality
Problem-solving	5.1	Allows for the effective use of equipment and digital tools in personnel management	Ensures reliability of equipment and improves its durability, which positively influences the level of product quality of the company
	5.2	Generalises and proposes directions for the digitalisation of personnel management	Expands the opportunities for digitalisation of the processes of quality management at the company
	5.3	Forms the basis and creates conditions for implementing innovations in personnel management	Offers effective tools for analysis of production processes, tracking the volume of defects and its reduction
	5.4	Stimulates the determination of the need for teaching digital skills to personnel and specifies the sets of relevant digital skills	Raises the level of digital competence of employees involved in the process of quality management at the company

Source: Compiled by the authors based on (EC, 2020; Vuorikari et al., 2022).

Thus, quality management in organisations agrees well with the processes of management of labour resources in terms of sustainability. Based on digital competencies, it receives additional reserves for development and improvement. According to this, competence in the sphere of information and digital literacy stimulates an increase in

the level of employees' awareness of the processes connected with quality management at the company and raises the level of substantiation of the corresponding decisions. Digital competencies in communication and cooperation facilitate the development of effective communications between employees, the exchange of

knowledge and experience, and an increase in the level of coordination of quality management processes.

Competencies in the sphere of the creation of digital content stimulate an increase in the level of intellectual capital of the company, automatization of processes, and protection of copyrights for solutions in quality management according to the principles of SHRM and systems of quality support. The group of competencies of the safety sphere ensures an increase in the level of confidentiality of information and data protection, the creation of safe working conditions, and harmonious interaction with the external environment, as well as an increase in the level of cyber security and reliability of information systems connected with the sphere of quality management at the company. Based on the competencies of DigComp 2.2, which are concerned with the resolution of problems, quality management is closely integrated with sustainable management of human resources and digital technologies. This allows for quick and effective resolution of technical problems in the sphere of quality management, better identification of the opportunities for digital solutions from the position of their influence on personnel and product quality, and improvement of the level of digitalisation and the corresponding development of personnel.

On the whole, quality management with the help of the tools of sustainable HRM based on digital competencies forms an effective complex construct, which can ensure sustainable development of economic systems in the conditions of an increase in competition and digital transformation. The use of the potential of such a construct allows quality managers to raise the level of professional competencies of employees and the level of their interest in the processes of quality support. Possession of digital competencies in this context is an important factor in the expansion of the sphere of quality management through the use of a wider range of tools for the collection and processing of data, automatization and

robotization of routine operations, and change in the form of transfer and mastering of information. Given the acceleration of the rates of digital transformation, personnel's quick acquisition of digital competencies can become one of the key factors in the formation of competitive advantages and transition to a new level of quality.

In these conditions, it is important to ensure constant development and support for the relevance of employees' digital competencies. This requires constant monitoring of the evolution of digital technologies and their dissemination in the sphere of quality management. Apart from this, mastering digital competencies must be closely integrated with the processes of human resources management and be combined with the principles of sustainable development. Only the optimal and rational combination of all elements around one goal will allow forming an effective system of quality management, which uses actual tools and has a long-term character.

## **5. Discussion**

The presented research results have a large potential for further development. However, they also contain a range of provisions that require additional discussion to raise the level of their substantiation or formation of new tasks for further scientific activities. Important provisions that require additional elaboration are differences between various systems of quality management. Their research in the context of the influence of the tools of sustainable HRM and digital competencies will allow identifying unique differences or regularities that can strengthen the influence of human factors on the processes of quality management at the company.

The digitalisation of the HR sphere has significant reservations regarding the determination of admissible limits and ethical norms. From this position, it is necessary to pay attention to the problem of the use of

artificial intelligence and, the replacement of human labour with digital tools not only in the sphere of routine operations but also in creative and managerial sectors. Given the concept of sustainability of HRM, it is necessary also to further study the problem of possible technological unemployment.

Another direction for discussion in the sphere of digital competencies is the problem of mismatch between competencies and the needs of the labour market. This problem has two separate directions – lack of qualification and its excess. According to this, the relevant task that requires further study is the development of methodology aimed at the determination of the necessary list of digital competencies, survey and monitoring of these competencies with employees who are responsible for quality management, as well as measures necessary for coordination of the desired and present competencies.

The revealed connections between digital competencies, parameters of quality management and sustainable HRM are substantiated at the theoretical level. However, to improve the scientific value of the given conclusions, these results require further research with the help of the tools of sociological survey, monitoring, and generalisation. The result of this research must be a complex model that would take into account the direction and level of the impact of each digital competency on the state of development of labour resources from the position of their use within the system of quality management. In this context, the open questions include the conditions and methodologies of using KPI for evaluating the level of effectiveness of the use of labour resources with digital competencies within the system of quality management.

## **6. Conclusions**

Current processes in economic and socioeconomic systems are closely connected with the problems of sustainability and digitalisation. According to this, economic

interests gradually reduce their priority in favour of social and environmental aspects. Against this background, the problem of quality remains relevant and is constantly supplemented by new criteria that lie in the space of competitive struggle, compliance with environmental demands, observation of proper labour conditions, etc. That is why systems of quality management gradually develop and are supplemented by sustainability criteria. In this context, labour resources are assigned an important role, which involves constant improvement of professional competencies according to the current demands of the labour market. At present, these demands are formed around the need for sustainable human resources management and digitalisation.

Sustainable HRM is a complex notion, which includes the processes of training and use of labour potential of employees. Due to this, management of labour resources is conducted in terms of flexibility, values of sustainable development, ability for constant professional development and self-realisation. Sustainable management of labour resources goes beyond the limits of direct personnel management and offers a comfortable life and development for employees. This influences the employees' treatment of the notion of quality and stimulates the formation of personal responsibility.

A separate direction for quality management is digitalisation. It proposes current solutions for acceleration and simplification of production operations, complex collection and data processes, ensuring constant monitoring and production processes, and increase in the potential of the tools of quality management at companies. Current capabilities of digital technologies, in turn, require the corresponding level of competencies with employees. Most of such competencies are generalised and grouped within the Framework of digital competencies DigComp 2.2. Based on this framework, this work suggests tracking the mutual influence and interaction between the processes of quality management, sustainable

management of labour resources, and achievement of digital competencies. As a result of the performed analysis, we identified the main advantages that improve the state of responsible HRM and offer new opportunities for quality management.

The main advantages that are achieved by each group of digital competencies include an increase in the level of awareness of the state of the operational system and the system of quality management, as well as support for better substantiation of managerial decisions in the designated sphere. Advantages that lead to an increase in the level of intellectual capital of the company, growth of the level of automatization of the processes of quality management and formation of the culture of intellectual property protection are also important. Achievement of the effects in improvement of the level of safety and confidentiality of data, as well as the creation

of favourable labour conditions and development of harmonious relations with the surrounding environment also belongs to important effects that are achieved within the influence of digital competencies on HRM and quality management. The most significant effect of the influence of digital competencies on the considered processes is achieved due to the effective influence on technical problems, determination and implementation of new digital solutions, as well as constant increase in the level of digitalisation, with the simultaneous observation of the conditions of responsible management of labour resources.

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