

SCTCMG 2021
International Scientific Conference "Social and Cultural Transformations in the Context of
Modern Globalism"

TRAINING SKILLED HUMAN RESOURCES IN THE EVOLVING
DIGITAL ECONOMY

Idigova Lalita Musaevna (a, b)*, Rakhimova Bella Khasanovna (b),
Chaplaev Huseyn Gilanievich (c)
*Corresponding author

(a) Chechen State University, 32, A. Sheripova str., Grozny, 364024, Russia, l.idigova@mail.ru

(b) Kh. Ibragimov Complex Institute of the Russian Academy of Sciences, 21a, Staropromyslovskoe highway,
Grozny, 364051, Russia, ya210412@yandex.ru

(c) Chechen State Pedagogical University, 62, Kh. Isaev Ave., Grozny, Russia, 364068, maret_fil@mail.ru

Abstract

This study focuses on the need to train a skilled human resource with digital competencies. The authors consider the essence of the concept of digital economy and its main tools, and identify the importance of training with digital skills in various sectors of the economy. The article points out the need for training to ensure enterprise competitiveness and their ability to absorb digital technology quickly. In the paper, the authors highlight the fact that digital technology is constantly evolving, which means that the professional development process is not a one-off approach, but involves an ongoing learning process. According to the authors, human resources play a decisive role in the strategic development of the enterprise and mark the conditions for the competitiveness of enterprises in a digital environment. Nowadays, training in digital technology implies a continuous learning process that will accompany the individual throughout his or her entire career with an individualized approach to the learner. So, there are some important points about digitalization to note: continuous professional development to remain competitive; the move to remote working. There is already a tendency for some schools to base their teaching on the child's abilities and interests, with STEM subjects receding into the background. The authors conclude that, in the current context, the state should start college-based training of professionals and pay attention to improving the legal framework for the formation of the digital economy, as well as continue further support for improving literacy and eliminating the digital divide between regions.

2357-1330 © 2021 Published by European Publisher.

Keywords: Digital economy, educational process, human resources, online university, online learning, professional development



This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 Unported License, permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

1. Introduction

The 21st century has been marked by the rapid development of digital technology and its active use in human activities. Today, information resources represent a crucial spectrum of socio-economic, administrative-legal, organizational and political development in the region. The rapid dissemination of information and immediate feedback from legislatures are the result of the strong digitalization. This rapid implementation of digital technologies has contributed to the emergence of digital culture, which characterizes society's attitude to the digitalization of the economy and its further development (Yudina, 2019).

There are many definitions of the digital economy today, but our understanding is that the digital economy is an economy based on digital technology. In addition to the concept of the digital economy, many other definitions embody the term: e-economy, Industry 4.0 and others. The digital economy includes not only computer technology, but also online payments, the possibility of developing online universities, e-services and business development in the Internet segment. In turn, the digital economy is seen as a global trend in the development of the world economy. The level of development of the digital economy is considered to play a crucial role in the competitiveness of states on the world stage, including political interests (Novikova & Strogonova, 2020).

Russia started to actively promote digitalization with the approval of the National Programme "Digital Economy" in 2017, which focuses on creating a digital ecosystem of the state and will promote not only the implementation of digital technologies, but also the training of the population in digital skills (Gumerova & Shaimieva, 2018).

The digital economy is the foundation that will transform various sectors of the economy and become a factor of change in the socio-economic development of the state. This will be reflected in the entrepreneurial activities of the population.

The emergence of the digital economy has a positive impact on the quality of life of the population and the improvement of the business environment. The results of the conversion include a reduction in time costs, a wider market for products and prompt feedback from the product manufacturer.

The digital economy is transforming not only the production processes themselves, but is also changing the demand for skills and contributing to the emergence of new professions and the obsolescence of existing skills. Therefore, personnel training and mastering digital skills is a priority for organizational leaders (Vaseyskaya & Glukhov, 2018).

The significance of the state's economic development does not stop at its digital establishment. Further development of industry, training a skilled human resource, creation of transport and logistics infrastructure, and development of the tourism sector are necessary for the effective development of the country. The digital economy is the only way to achieve some success.

2. Problem Statement

A feature of today's training of skilled personnel is not just the availability of continuing education courses, but also the relevance of these courses to the interests of the company. Therefore, heads of organizations seek to create their own professional development courses, where employees have the

opportunity to receive training or retraining in line with the goals and objectives of the enterprise (Idigova & Rakhimova, 2021).

In other words, employees are quite familiar with the strategic goals of the enterprise and its mission, which increases employees' interest in acquiring skills and applying them to the enterprise's results. In addition, this attentive company management has a positive effect on the image of the company and increases its credibility with customers.

Digital technology is improving every year, which requires continuous training. In today's context, digital technology has become an essential element in the emergence of online education. Today, various online universities are already in operation that trains personnel with digital skills to meet labour market demand for new professions. We should note that training personnel with digital skills represents a priority issue for the country's economic and political development.

3. Research Questions

The transition from the traditional economy to the digital economy has generated new approaches to human resource management, which the Digital Economy of Russia has found in the "Human Resources for the Digital Economy" project. The Digital Skills Training Project aims to train 40 % of the population with digital skills by 2024, and to train at least 800,000 professionals to meet labour market demands. Therefore, in today's environment, the issue of training personnel with digital skills and increasing the digital literacy of the population aims to build a digital culture of the population and replace paper-based media with electronic media. One such example is the switch to e-employment records, where employees can obtain information about their employment history from the Pension Fund, a multifunctional centre or the State Service portal. However, age limits determine how people feel about switching to an e-work record book. E-workbooks are most popular among 18–24 year olds, accounting for 51 %. Moscow and St. Petersburg stand out among the leading cities whose residents prefer the electronic format of their workbooks – 36 %. Among working pensioners, 56 % oppose the switch to electronic workbooks, fearing loss of their data or leakage of information to the public. In addition, another disadvantage of using electronic workbooks is the impossibility to access them in case of a power cut or unauthorized access by unauthorized people. 68 % of respondents agreed with this wording. According to recent data, only 5 million people have decided to switch to an electronic work record book format, while 34.8 million Russians have preferred paper work records (Borisova et al., 2020).

The Russian Ministry of Labour had already reported that by the end of 2020, there was a shortage of 18.5 information security professionals compared to 19.5 professionals in 2019. Experts estimate that in 2024 Russia will already have a deficit of 300,000 IT professionals. At the same time, the COVID-19 pandemic has increased the demand for specialists in marketing, analytics, big data, SMM managers and others (Idigova et al., 2019).

According to the Moscow Information Technology Department, the most in-demand specialists were information security specialists, programmers, application developers and others.

At the same time, programmers account for 43 % of vacancies in Moscow in telecommunications companies, 13 % in financial institutions and 7 % in retail companies.

The most in-demand specialists come from Lomonosov Moscow State University, Plekhanov Russian University of Economics, Kosygin Russian State University and several others.

Compared to other professions, IT professionals are the most susceptible to colds at 90 %, followed by teaching personnel at 86 % and medical personnel at 77 %. In addition, 30 % of the representatives of these professions have musculoskeletal disorders and 25 % have diseases of the gastrointestinal tract (Idigova et al., 2019).

Health problems in IT professions are due to poor lifestyle habits such as sedentary behaviour, unhealthy diets and prolonged use of computers.

Nowadays, training in digital technology implies a continuous learning process that will accompany the individual throughout his or her entire career with an individualized approach to the learner. So, there are some important points about digitalization to note: continuous professional development to remain competitive; the move to remote working. There is already a tendency for some schools to base their teaching on the child's abilities and interests, with STEM subjects receding into the background.

We think that in modern conditions, the state should start college-based training of professionals and pay attention to improving the legislative framework for the formation of the digital economy, as well as continue further support to improve literacy and eliminate the digital divide between regions.

In the emerging digital economy, the emphasis in training is not on experience and fundamental knowledge, but on people's ability to adapt quickly to changing conditions and adopt innovative technologies. The Russian education system must therefore be changed to meet the current realities and new demands of the labour market.

4. Purpose of the Study

The purpose of the study is to address the challenges of training in a digitalized environment. This purpose requires achieving a number of tasks:

- consider the main aspects of the transition from the traditional economy to the digital economy;
- assess the level of public attitudes towards the transition from paper to electronic media;
- analyse the level of demand for IT professionals.

5. Research Methods

The research used statistical and comparative analysis methods, as well as methods of expert assessments, to identify the main problems of training skilled personnel in the digital economy.

6. Findings

Based on the above, we note that in the modern context, competitive businesses in the era of the digital economy include:

- first, businesses that are quicker to adapt to changing conditions and able to make their own decisions about the use of innovative technology;

- second, businesses that use digital technologies in the recruitment process for vacant positions, considering digital skills. Priority should be given to employees who are self-improving and seeking to improve their qualifications, rather than dwelling on knowledge gained at university;
- third, businesses that keep personnel up to date with the latest innovations and the use of digital technology in HR.

In addition, recent years are witnessing a trend towards the introduction of a person who monitors the latest developments in the world of digital technology, assesses the advantages and disadvantages and, depending on the findings, assesses the possibility of applying them in the enterprise.

7. Conclusion

So, we can summarize that the digital economy is a global trend of the world economy that cannot be reversed. Therefore, businesses will eventually have to switch over to digitalization of their operations. The digital economy requires human resources and infrastructure. To solve these problems, the Government of Russia has proposed a program for the digitalization of all sectors of the economy and the formation of a digital culture of the population, which should have a beneficial effect on improving the quality of life of the population and attracting investment, as well as the effective use of digital technologies for the provision of public services.

References

- Borisova, V. V., Tasueva, T. S., & Rakhimova, B. K. (2020). In: *State support for digital logistics. Lecture notes in networks and systems* (pp. 631–638).
- Gumerova, G. I., & Shaimieva, E. Sh. (2018). Virtual organization of the digital economy as an object of the study of management theory. *Azimuth of scientific research: economics and administration*, 108–110.
- Idigova, L. M., & Rakhimova, B. K. (2021). Current issues of digital transformation of the oil and gas industry. *Problems of the economy and management of the oil and gas complex*, 18–21.
- Idigova, L. M., Tagaev, C. K., Tasueva, T. S., Israilov, M. V., & Magomadov, E. M. (2019). Modernization of regional industry on the threshold of digital economy. In: *Social and cultural transformations in the context of modern globalism. Collector International Scientific Conference* (pp. 2158–2166). Russian Acad. Sci.; Complex Res. Inst. Kh.I. Ibragimov.
- Novikova, N. V., & Strogonova, E. V. (2020). Regional aspects of studying the digital economy in the system of economic growth drivers. *Journal of the new economy*, 76–93.
- Vaseyskaya, N. O., & Glukhov, V. V. (2018). The principles of organizing the educational system for personnel training in a digital economy *St. Petersburg state polytechnical university journal. Economics*, 7–16.
- Yudina, T. N. (2019). Digital segment of the real economy: digital economy in the context of analogue economy. *St. Petersburg state polytechnical university journal. Economics*, 7–18.