

Mechanisms for the formation and development of entrepreneurial competencies in the context of the digitalization of the economy

Tret'yakov Oleg Vladimirovich

Candidate of Economic Sciences

General Director of "LUKOIL-PERM" LLC

Abstract. Digital skills and competencies are the key to the full development of the digital economy. Digital literacy should be one of the key competencies. The article defines the essence of entrepreneurial competencies, identifies the features of the development of entrepreneurial competencies in the digital economy. The mechanisms for the formation of digital competencies are also considered and ways of their further development are proposed.

Keywords: competencies, digital entrepreneurship, digital economy, formation and development of digital competencies.

Today, the issues of forming and building up entrepreneurial competencies in the context of the decentralization of the economy and its digitalization are gaining special importance and relevance. Competence is a group of interrelated behavioral actions that, when shown by a candidate and considered by an observer, characterizes competence in a specific aspect of the work performed [1, p. 264].

"Competency" is broader than competence. Most modern researchers define competency as the possession, mastery by a person of the appropriate competence, including his personal attitude towards it and the subject of activity.

The components of the competence are shown in fig. 1 [2, p. 293].

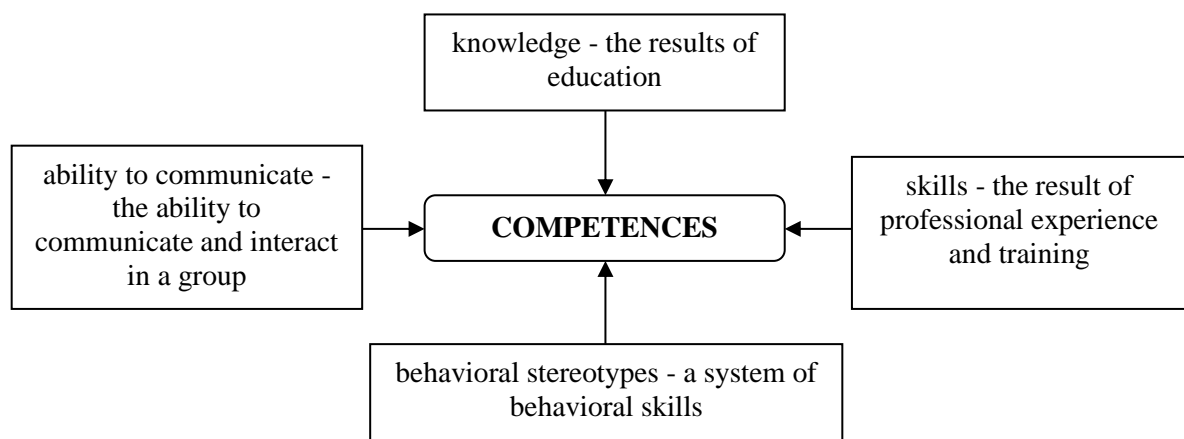


Fig. 1. Components of competence

It should be noted that specialists in any field of activity must have general competency (the ability of a person to analyze, synthesize, general knowledge, the ability to learn independently, cooperate and communicate, purposefulness, leadership qualities, organization and the ability to plan) necessary for existence in society, to solve any situations, even not related to a specific professional activity [3, p. 75]. Along with the general competency of any specialist, there are professional competencies, corresponding to the type of activity, specialties, the necessary certain knowledge, experience, personal qualities. For example, the following types of competencies are distinguished in terms of the competency of learning in the European Higher Education Area (fig. 2) [4, p. 122].

Instrumental competencies	
	Skills and cognitive abilities required for professional competency
Interpersonal competencies	
	Ability for empathy, social interaction and collaboration skills
System competencies	
	Change planning ability
Competencies specific to each profession	

Fig. 2. Types of competencies in terms of the learning competency of the European Higher Education Area

Professional competency should be considered as an integrated result of acquired experience associated with mastering professional knowledge, the ability to use their totality in professional activities, the formation of the corresponding personal qualities of an individual. Competency of an employee is formed on the basis of existing competencies (knowledge, skills, abilities) and motivation. In a competitive environment, the main priorities of the professional competency of a specialist is the ability to adapt to rapid changes and new needs of the labor market, to be informationally educated, to act actively, make quick decisions and learn throughout life [1, p. 147].

Entrepreneurial competency is a personal quality, ability, and behavior model necessary for successfully solving certain business problems and achieving high results in entrepreneurial activity.

In the European Reference System (Key Competences for Lifelong Learning. A European Reference Framework), entrepreneurial competency is interpreted as the ability of an

individual to translate ideas into the sphere of economic life, as an integrated quality based on creativity, creativity, innovation, the ability to take risks, as well as the ability to plan and organize entrepreneurial activity [5, p. 8].

The approach to the formulation of competencies for successful employment in the digital economy differs among different authors: some argue that four main types of competencies are needed: professional, communicative, informational and digital [6]; others write that in relation to the digital economy such a paradigm of terms has emerged: "hard skills", "soft skills", "digital skills", which reflect fundamental changes in the educational sphere [7].

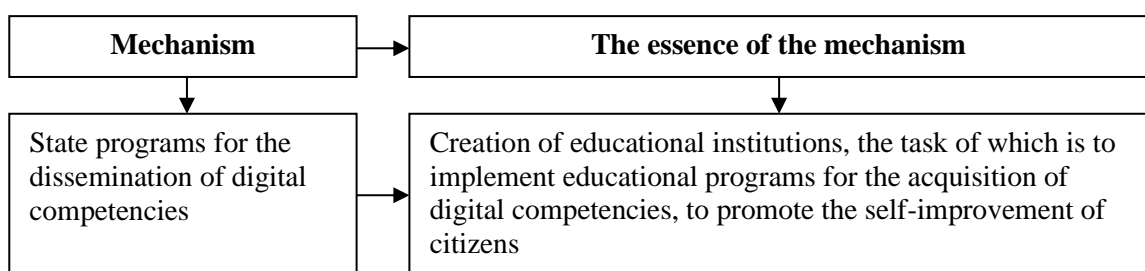
The introduction of digital technologies is accompanied by challenges that society must overcome for the successful implementation of the digital economy in life, among which are: insufficient competencies and knowledge, low level of digital literacy of the population; short-term decline in labor productivity from the introduction of new technologies; rising technological unemployment; significant changes in the regional structure of the distribution of productive forces; lack of qualified personnel to implement a digital transformation strategy; lack of a strategy and regulatory framework for the use of digital technologies for competition and innovation [8, p. 40].

The strategy of digital transformation of the business environment requires the improvement of consumer service and the transition to a customer-oriented service system, the development of partnerships and flexible integration with partner companies (digital partnership is becoming one of the factors of business scale), the use of databases, the introduction of new HR strategies and culture innovation.

Digital entrepreneurship competencies include the confident, critical and responsible use and engagement with digital technologies to study, work and participate in society. These are information and data literacy, communication and collaboration, digital content creation (including programming), security (including digital well-being and cybersecurity-related competency), and problem solving.

The acquisition of digital competencies is seen today as a need for the entire society. This problem was also identified at the level of government through the development and implementation of mechanisms for the formation of digital competencies in society.

The following types of mechanisms for the formation of digital competencies can be distinguished (fig. 3).



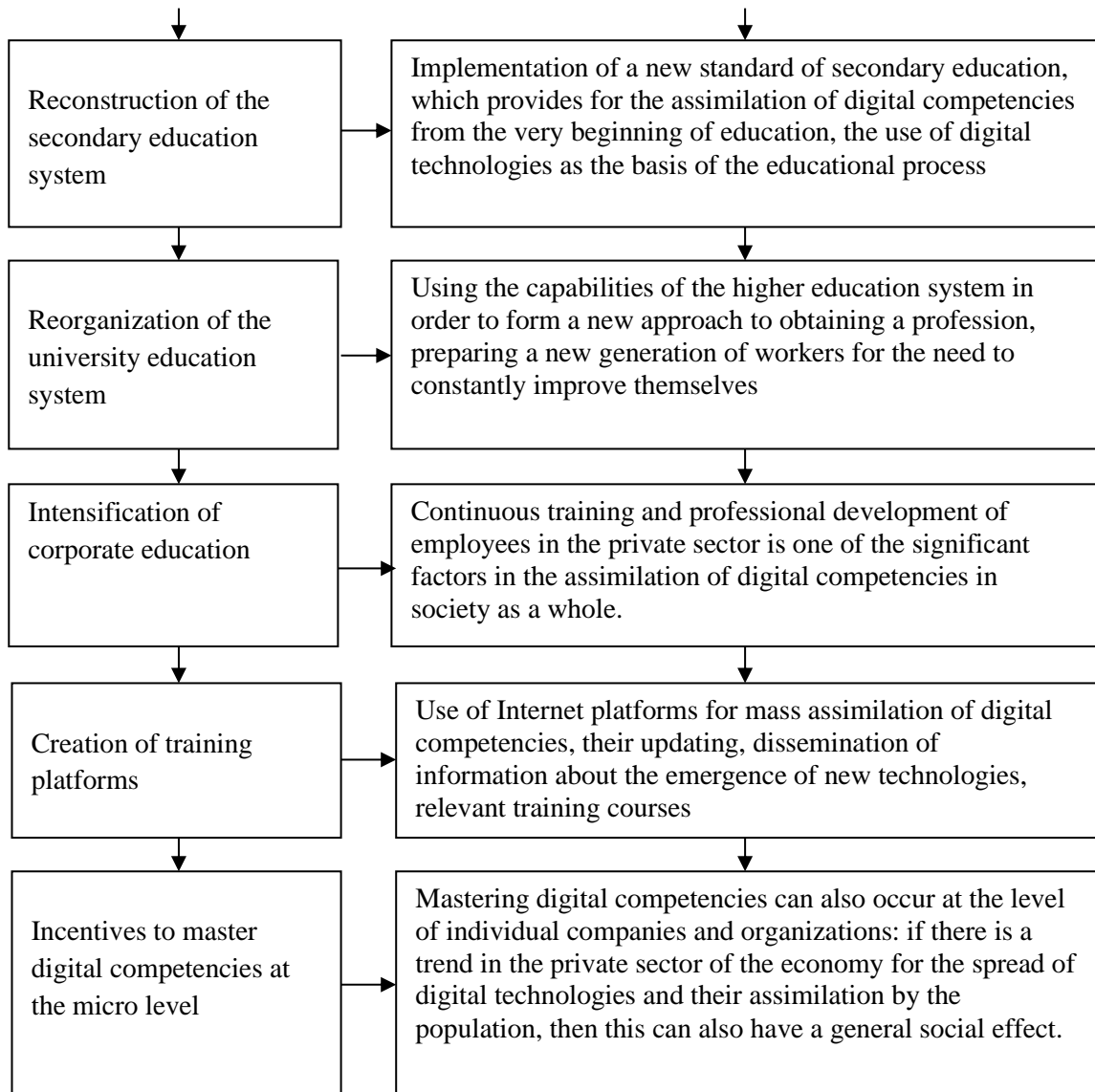


Fig. 3. Mechanisms for the formation of digital competencies (Author's development)

The most common mechanism for the formation of digital competencies in society is government programs aimed at adapting society to the conditions of the digital economy. Among the existing programs, one can single out those whose priorities are overcoming the digital inequality, intensifying the innovative activity of the population, and increasing competitiveness. Personnel and education are classified in the Program "Digital Economy of the Russian Federation" as one of the key institutions within which conditions are created for the development of the digital economy. The Program outlines the main goals of the direction related to personnel and education: "creating key conditions for training the digital economy; improving the education system, which should provide the digital economy with competent personnel; the labor market, which should be based on the requirements of the digital economy; creating a system of motivation

for mastering the necessary competencies and the participation of personnel in the development of the digital economy of Russia "[9].

Businesses need to be critical of the accuracy, reliability and impact of information and data that is digitally accessible, and be aware of the legal and ethical principles associated with the use of digital technology. Companies that have relied on global trends are among the world leaders, but how long they can stay is a big question, largely related to the competencies of their employees. The new higher education model forms "competency portfolios" based on an assessment of the future demand of companies. The introduction of this model is largely due to the coincidence of the action of three groups of factors: active use of new technologies (including online education); transition to the concept of an "entrepreneurial university" combining education, science and business; development of demand from end users within the framework of the concept of lifelong learning [10].

The modern educational policy should be based on such approaches as the openness of education to external demands and demands of the labor market, the needs of society, practice-oriented, innovativeness, the use of innovative pedagogical technologies aimed at developing graduates of the XXI century skills and professional competencies, competitive identification and support leaders who successfully implement innovations in practice, informal communication with business, in particular, the formation of innovative student research in the form of startups. The creation of favorable conditions and the search for appropriate models of public-private partnerships with operators of non-formal education, their support, will contribute to the growth of private investment in this area. The emergence of new operators will significantly expand the opportunities for citizens, especially in the regions, to acquire relevant digital skills and master new professions.

One of the important tasks is to update the state classifier of professions, develop and approve a list of digital professions based on the requirements of the labor market, digital trends, with the subsequent development of an appropriate program for their implementation in specialized educational institutions. Digital technologies in Russia should be accessible both from the point of view of organizational and technical access to the relevant digital infrastructure, and from a financial and economic point of view, through the creation of conditions and incentives that will encourage businesses to digitalize.

Integration of digital technologies into production processes, or digitalization of industry, is a priority of state industrial policy. The state policy of stimulating the development of digital competencies of entrepreneurs has three directions [8, p. 42]:

- creation of the infrastructure of "Industry 4.0" - industrial parks, industry technology centers;

- access to capital for the creation of new innovative industries;
- development of digital skills to train personnel capable of working with Industry 4.0 technologies.

To develop the potential of "Industry 4.0" in Russia, it is important to implement such initiatives as: targeting; industrial informatization, or a program of education and transfer of the best practices of the IT sector and digital industries to the industrial sectors; creation of engineering clusters; development of sectoral roadmaps for digital transformations [8, p. 42].

Thus, the massive dissemination of information and communication technologies contributes to the formation of network relations and the emergence of information networks built on the interaction of individual members of society. The creation of programs, trainings, continuous improvement of the level of digital competencies of entrepreneurs is an urgent need for economic development at the present stage. The formation of professionally competent personnel allows to improve the quality of work performed and ensure high labor efficiency in a competitive environment. The priority task on the way to the accelerated development of the digital economy is the creation and implementation of a national training program for general and professional digital competencies.

References:

1. Kondratenko A.I. Theoretical aspects of building a model of personnel competencies // Alley of Science. 2018. V. 4. № 1 (17). P. 264-268.
2. Sleptsova E.V., Tumanova M.Yu. Competence management in the personnel management system // Economics of sustainable development. 2018. № 3 (35). P. 293-297.
3. Chulanova O.K. Competence-based personnel management: monograph. M.: SRC INFRA-M, 2018. 122 P.
4. Vasilyeva E.V. Competency approach in civil service: what knowledge and skills do civil servants choose? // Issues of state and municipal management. 2018. № 4. P. 120-144.
5. Definition and Selection of Competencies. Theoretical and Conceptual Foundations (DeSeCo). Strategy Paper on Key Competencies. An Overarching Frame of Reference for an Assessment and Research Program - OECD (Draft), 2001, P. 8. [Electronic resource]: text. URL: <http://www.oecd.org/education/skills-beyondschool/41529556.pdf> (appeal date 02.03.2021).
6. Sizova I.L., Khusyanov T.M. Labor and Employment in the Digital Economy: Problems of the Russian Labor Market // Bulletin of SPbSU. Sociology. 2017. V. 10. Iss. 4. P. 376-396.
7. Participation in the management of the university: Scientific publication / Ex. ed. O. Bychkova. SPb.: Norm, 2016. 120 P.

8. Vernikov V.A., Khambazarov Sh.B. Strategic planning and labor productivity management in the field of digital entrepreneurship through the development of entrepreneurial competencies // MIRBIS Bulletin. 2019. № 2 (18). P. 38-46.

9. Program "Digital Economy of the Russian Federation". Approved by the Order of the Government of the Russian Federation dated July 28, 2017 № 1632-r. [Electronic resource] // Official website of the Government of Russia. URL: www.government.ru/docs/28653/ (appeal date 02.03.2021).

10. Human Development Report 2018 in the Russian Federation / ed. S.N. Bobyleva and L.M. Grigoriev. M.: Analytical Center for the Government of the Russian Federation, 2018. 172 P.