

Digital competence development of state civil servants in the Russian Federation¹

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Abstract

In the international field of public services, the competence approach is used as a basis for developing productivity, innovation and responsibility among employees. In Russia, the competence approach is central to legislative and regulatory documents but has not yet become a working tool. Russia's transition to the digital economy in accordance with the Federal Program necessitates the transformation of professional qualities and qualification requirements for positions of the state civil service. The development of a single information space of the state civil service and the widespread introduction of e-government technologies impose increased requirements on public servants' competencies in the field of information and communication technologies. However, studies have shown that until now, Russian civil servants consider as a primary priority only those competencies that focus on results, discipline, time and stress management skills, and to a lesser degree adaptability, willingness to change, creativity, initiative, and adopting new ideas and innovations. Management by competences requires an individual approach, taking into account the characteristics of each employee, as well as the development and implementation of competence models, in which all aspects of work in the digital world should be reflected.

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The aim of the study is to develop guidelines for improving official regulations of state civil servants in terms of qualification requirements for competencies in the field of information and communication technologies (ICT). The use of comparative analysis methods in the study of the content of official regulations of state civil service in various subjects of the Russian Federation, as well as an expert survey on the content and current level of development of ICT competencies of civil servants allowed the authors to identify “basic,” “advanced” and “special” components in the structure of competencies. We also propose methodological recommendations for the transformation of ICT competences into digital components that provide an expanded set of knowledge and skills required for the digitalization of the civil service. These changes will allow the HR services of public authorities of the Russian Federation to provide a unified approach to the formation of requirements for the maturity level of digital competencies of applicants seeking positions in the state civil service. It also will help to implement a targeted approach in the formation of programs for the development of personnel potential, taking into account the requirements of digital literacy.

Key words: digital competencies; digital economy; civil servant; public administration; position regulations; meta-competence; soft skills.

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Introduction

The current stage of economic and social development can be characterized as the “new economy”, “innovation economy”, and “knowledge economy” [1]. All these terms imply a level of development in social and economic life such that the following fundamental changes occur: networked coordination of economic entities becomes a priority, an orientation towards innovation takes place, human capital and information become primary competitive factors, and the tertiary sector prevails in the national economy [2]. In 2017, the Federal Program “Digital Economy” was developed in the Russian Federation, representing one of the most promising areas in the field of public administration [3]. Thus, it has become necessary to study the process of expanding the competence model of civil servants to ensure their suitability for the challenges of the digital environment, as well as the degree of readiness of civil servants for digital transformation. It is important to revise

the qualification requirements for potential and current holders of civil service positions in the Russian Federation in terms of information and communication (ICT) skills and knowledge, highlighting new requirements for employee knowledge and the skills necessary for working in a digital environment.

The purpose of this work is to identify the digital components of ICT competencies of civil servants for inclusion in the official work regulations and Handbook of Qualification Requirements for applicants to civil service positions. To achieve this goal, the following tasks were completed:

- ◆ reviewed existing job descriptions and methodological tools;
- ◆ identified in regulatory documents the prerequisites for expanding the competence model of civil servants to ensure the effective functioning of government agencies in the innovation environment;
- ◆ conducted a survey of specialists and managers of the civil service in order to identify

current requirements for specialists of various position groupings;

- ◆ developed guidelines for the inclusion of digital components in the provisions of the official regulations of civil servants.

1. Background on changes in the competence model of state civil servants

There are many definitions of the concept of “competences”. Many experts and specialists in personnel management [4–10] offer their own interpretations, but two approaches to understanding competences are considered basic: the American and the European. According to the American approach, competences are defined as a description of employee behavior such that an employee who possesses appropriate competences demonstrates the correct behavior and achieves the desired work results [11]. The European approach focuses on the ability of an employee to solve certain tasks in order to achieve results in accordance with organization-defined requirements and standards [12–14]. Thus, the American approach involves the use of behavioral indicators to assess employees and generally relies on the postulates of behaviorism, while the European approach is more functional, since it focuses on the solving of specific professional problems.

Until recently, Russian academics dealt with issues of competence primarily from a pedagogical science standpoint that considered the acquisition of knowledge and skills. Thus, according to I.A. Zimnyaya [15], social-professional competence is the cumulative integral personal characteristic of a person who has received qualification and is characterized by a certain level of professionalism. Competence, as a professional characteristic of an individual, is based on his or her personal qualities, intelligence and experience. Social-professional competence is broken down into four blocks, two of which are basic: the intellectual

abilities and personal qualities that exist in a person before entering vocational training that serve as the foundation for the development of the personal competences inherent to a given profession [15].

Recently, domestic practice has seen an integration of existing approaches to the understanding of professional competences due to the activity of a large number of transnational companies using foreign management techniques, as well as the transition of vocational education away from the assessment of knowledge, abilities and skills and towards the assessment of competences [16].

The need to apply a competence approach to the state civil service system was first mentioned in Presidential Decree No. 601 of 7 May 2012, “On the main paths for improving the public administration system”. This decree called for the creation of a list of qualification requirements for filling civil service posts based on the competence approach and taking into account the specific duties and functions, as well as the requirements of certain professional groups [17]. Subsequently, the Presidential Decree No. 403 of 11 August 2016 “On the main directions of development of the civil service of the Russian Federation for 2016–2018” outlined the main pathways for the development of the civil service, including the creation of a single information and communication space in the civil service through a unified information system for the management of civil service personnel, electronic personnel workflow, and the creation of a single, specialized information resource for the continued professional development of civil servants.

In accordance with the above legal/regulatory actions, the Ministry of Labor and Social Affairs of the Russian Federation has developed the following advisory documents:

- ◆ Methodology for a comprehensive assessment of the professional performance of a public civil servant [18] (hereinafter referred to as the Methodology);

◆ Methodological toolkit for establishing qualification requirements for filling civil service positions (version 3.2) [19] (hereinafter referred to as Methodological Toolkit);

According to the Methodological Toolkit, “competence is a complex of professional and personal qualities manifested in the behavior of a civil servant, indicating the presence of the knowledge and skills necessary for the effective and efficient fulfillment of official duties” [19]. A professional quality is understood as a characteristic demonstrated in the behavior of a civil servant that reflects the unity of the aspirations, abilities, knowledge, skills and personal qualities necessary for the effective and efficient execution of official duties.

1.1. Professional qualities of state civil servants: Russian practice

Today there are three groups of professional qualities of a civil servant: general, applied and managerial (*Table 1*).

At the same time, as can be seen from the table, the professional qualities (competences) of civil servants identified by the Ministry of Labor do not take into account modern trends in the digitization of the economy and society (the only applied professional quality in this area is a more general “collection and analysis of information”). This gap in the legislation, as well as other factors described above, made it necessary to undertake a study to form a model of digital competences of civil servants and identify the degree of readiness of government bodies to function in the innovation environment.

1.2. Official regulations for state civil servants: Russian practice

In accordance with Clause 7, Article 12 of the Federal Law “On the public civil service of the Russian Federation”, the knowledge and skill qualification requirements necessary for the performance of official duties depend on the

Table 1.

Professional qualities of state civil servants

| General professional qualities | Applied professional qualities | Managerial professional qualities |
|---|--|--|
| Results oriented | Collection and analysis of information | Planning activities and resources |
| Strengthening the authority of civil servants | High-quality preparation of documents | Task setting and organization of activities |
| Interpersonal understanding and communication style | Focus on ensuring the protection of legitimate interests of citizens | Monitoring and evaluation of performance |
| | Creative approach and innovation | Motivating and developing subordinates |
| | Persuasive communication* | Making managerial decisions |
| | Working on a team* | Strategic vision |
| | Professional self-development (hereinafter self-development) | Managing changes |
| | Transferring knowledge and experience* | Public speaking and external communications* |

* soft skills [20]

field and nature of service performed by a civil servant. The official civil servant regulations (hereinafter referred to as the official regulations) may also provide qualification requirements for a given specialization and a training regime for filling a civil service position.

Article 47 of this law states that the professional service activity of a civil servant is carried out in accordance with official regulations that are approved by the representative of the employer and that form an integral part of the administrative regulations of the state entity. The official regulations contain the necessary qualification and other requirements for public civil servants, as well as a description of the duties and expected results of the employee in the performance of his or her professional work activities in accordance with the position being replaced. The official regulations are taken into account when holding a competition for a vacant civil service position, certification, qualification examination, as well as designing plans for professional civil servant activity [21].

The compliance of a civil servant to the official regulations is to be taken into account when holding a competition for a vacant civil service position, for the inclusion of a civil servant in the personnel reserve, for the assessment of his or her professional performance during certification, for a qualification exam, or for the promotion of a civil servant.

Model regulations are approved by the relevant body of state service management.

1.3. Analysis of professional competences requirements for civil servants

In 2015, the Federal Public Service and Managerial Personnel Portal² was created as an information resource and database of vacancies and civil service resumes. This site contains information about vacancies in govern-

ment agencies and qualification requirements for candidates. Some vacancies also include regulation information.

In the study, the authors analyzed ten official regulations from state authorities in various constituent entities of the Russian Federation as posted on the Gossluzhba (Civil Service) portal. The purpose of the analysis was to identify the requirements for professional knowledge and skills in the field of information and communication technologies as currently used for candidates.

Half of the regulations reviewed contain only the most general description of the professional skills that an applicant must possess for these positions. At the same time, almost all the regulations mention knowledge requirements for interdepartmental interaction systems and management of state information resources. Moreover, the official regulations for the main state customs inspector of Moscow contain an extensive list of knowledge and skill requirements needed to work in this position, including information security (not only for service-related information, but also for personal mail and social network accounts), personal data, workflow systems, electronic signatures, and facility with a personal computer (creating documents, spreadsheets and presentations, working with network resources, and much more).

The analysis allows us to conclude that there are no uniform templates for professional knowledge and skill requirements in the field of information and communication technologies for civil service positions. In some regulations they are classified as “professional skills”, while in others they are considered “basic knowledge and skills”, etc. There is also no unified approach to the extent to which these requirements are disclosed: in some regulations it occupies only a few lines, in others an entire page.

² <https://gosslužhba.gov.ru/>

At the same time, the Ministry of Labor and Social Affairs of the Russian Federation, together with other federal agencies, have prepared a handbook of qualification requirements for state civil servants and applicants (hereinafter referred to as the Handbook), including basic and functional qualification requirements. The basic requirements that determine general qualification for civil service positions include the following requirements for ICT knowledge and skills:

1. General knowledge of information technology and facility with personal computers (hereinafter PC):

- a) knowledge of PC components, including hardware, software and storage devices;
- b) general knowledge of modern communications, network applications, software;
- c) knowledge of basic health protection for PC work and security and data protection issues;

2. PC knowledge and skills:

- a) knowledge of basic commands for PCs;
- b) knowledge of the basic principles for working with the desktop;
- c) knowledge of the principles of file structure organization;
- d) skills in creating, moving and deleting files;
- e) skills in printing electronic documents;

3. Knowledge and skills in working with office programs:

- a) skills in creating and formatting text documents, including copying, pasting, and deleting text;
- b) working with tables and pictures in text and graphic editors;
- c) skills in preparing presentations in presentation and slideshow programs;
- d) creating, sending, receiving e-mails, writing responses, forwarding previously received messages, working with attachments in e-mail programs;

4. Knowledge and skills in working with the information and telecommunications network “Internet” (hereinafter the Internet):

- a) understanding of the basic functioning of the Internet and principles of information protection;
- b) using Internet search engines to work with Internet resources, including obtaining necessary information [22].

1.4. Results of survey of civil servants on managing the competence level of personnel

The high economic and social significance of the actions of public authorities requires the use of not only quantitative economic criteria and indicators, but also qualitative ones. Considering the specific activities of civil servants, the preferred research method uses expert assessments in combination with a questionnaire.

The experts used were representatives of various categories and groups of positions in the state civil service of three constituent entities of the Russian Federation (Penza, Moscow and Leningrad regions). The state authorities of these subjects of the Russian Federation were included in the sample because they represent different authorities at the federal and regional levels. The leadership of these bodies expressed interest in conducting a study to develop a model of competences of civil servants, as well as in developing information systems supporting personnel management in the civil service system based on the competency approach and their implementation in the public authorities under review. Experts from five groups of four categories of positions in the Ministry of Economic Development of the Russian Federation, Ministry of Finance of the Russian Federation, Administration of the Governor of St. Petersburg, Interregional Resource Center, Ministry of Economy of the Penza Region, Ministry of Finance of the Penza Region, Government of the Penza Region, Federal Treasury

Department of the Penza Region, the Legislative Assembly of the Penza Region, the Ministry of Labor of the Penza Region, etc.

For greater data accuracy in the expert survey, the expert groups included managers and specialists with significant experience in the civil service.

The rating of priority information and communication competences was determined based on the ranking of expert assessments, taking into account significance (on a scale of – 3 to 3).

Since the average sum of points for this block of competences was 201.71, the most significant competences in the eyes of the experts were ICT competences, which had a higher sum total than average. The survey showed that, despite the increasing role of digitalization processes in the civil service, only three competences in the ICT block were identified as highly significant (*Figure 1*). One of the most sought-after and relevant competences—skills in project management methods—were evaluated by experts as less significant in relation to the average value for this block.

Thus, the analysis of the handbook and current job regulations in various state authorities of the constituent entities of the Russian

Federation, as well as a survey of public civil servants, revealed the unreadiness of government agencies to transform the competences of public civil servants and the lack of a unified approach to the formation of a competency model to ensure the functioning of electronic government and the implementation of the “Digital Economy” national program. In this regard, it is proposed to unify the qualification requirements for competences in the use of information and communication technologies for civil servants, taking into account modern requirements for specialists in various position groups.

2. Changes in the professional competence requirements of civil servants in the context of the digital transformation of the civil service

With the growth of the digital economy in the 21st century, there is an acute need to develop “digital competences” [23]. At the World Economic Forum in Davos in 2016, one hot topic of discussion involved assessing the strength of the transformative influence of the fourth industrial revolution on the world of work [24], education, and basic skills that are not yet considered

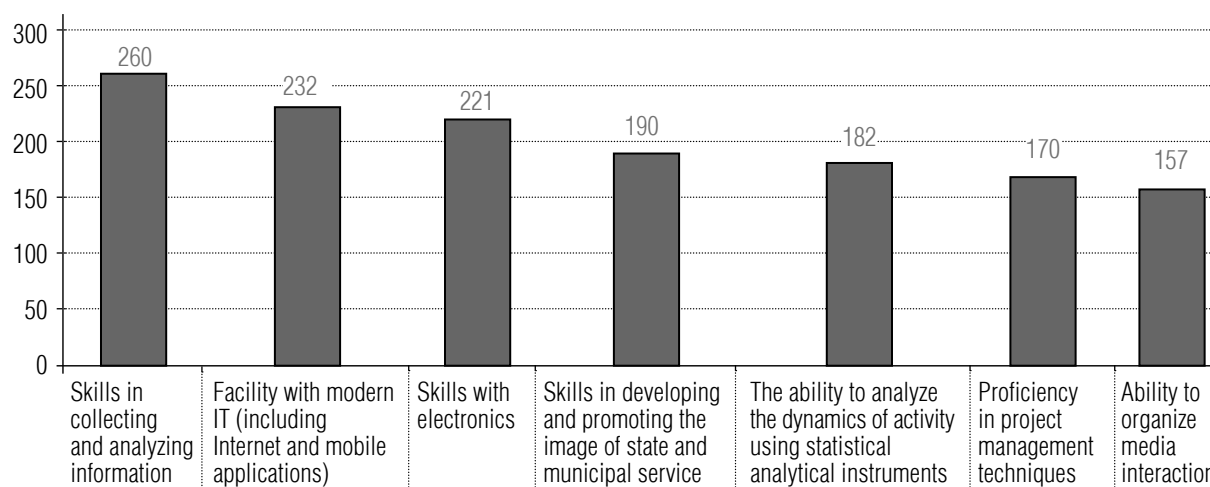


Fig. 1. Ranking of information and communication competences by degree of importance (average value: 201.71)

crucial for work today but that will be needed by 2020 [25]. The workplaces of the industrial era are giving way to a new means of organizing work in the digital age, including remote access via Internet platforms, flexible work and on-demand work. Managing both people and machines will create new challenges for the organization of personnel, including problems like retraining employees and the introduction of new HR processes for managing virtual teams. “People and machines might develop symbiotic relationships, each with a set of specialized skills and abilities,” [26] in a single personnel landscape that will benefit businesses.

Each year the Regional Center for Internet Technologies (ROCIT) assesses the digital literacy index of the population of the Russian Federation. For the purposes of this project, digital literacy refers to a set of knowledge and skills that are necessary for the safe and effective use of digital technologies and Internet resources. Digital literacy includes three elements: digital consumption, digital competences and digital security, each of which also consists of a number of sub-elements (*Table 2*). Digital consumption means the ability to use Internet services for work and personal life, digital competencies are the skills to effectively use technology, and digital security is basic Internet security.

The development of competences relevant to the digital economy has been the subject of many recent research papers. Of particular interest to our topic is the summary work “Skills for the digital world” [27], as well as the report “Cities as a labor market” [9], presented at the International Transport Forum in 2015. These works demonstrate the close interconnectedness of digital economy processes, including workforce skills and training. Based on research from [27], it is clear that the concept of “digital skills” has achieved international recognition, along with the concept of “digital economy”.

Table 2.

Digital literacy structure*

| Digital consumption | Digital competences | Digital security |
|---------------------|----------------------------------|--------------------------|
| Fixed Internet | Information search | Personal data protection |
| Mobile Internet | Use of digital devices | Secure password |
| Digital devices | Use of social networks | Legal content |
| Internet mass media | Financial operations | Behavior culture |
| News | Online shopping | Reputation |
| Social networks | Critical analysis of information | Ethics |
| Government services | Creation of multimedia content | Information storage |
| Telemedicine | Synchronizing devices | Creating backup copies |
| Cloud technology | | |

* Compiled from the Digital Literacy Project³

The increased use of ICT and the Internet in the workplace and at a wide range of organizations, including government services, is increasing demand for new digital skills in three areas.

First, employees in a wider spectrum of occupations need to acquire general ICT skills in order to be able to use such technologies in their daily work (for example, to access information on the Internet or use software to solve current problems).

Secondly, there is an obvious need for professional skills in producing ICT products and services, i.e. the actual means of conducting labor in the new economy (software, web pages, e-commerce, financial technology, cloud data, the Internet of Things, big data). Such professional ICT skills were previously

³ <http://цифроваяграмотность.рф/>

considered the prerogative of ICT specialists, along with skills in programming, application development, data and network management. However, the digitalization of activities makes it necessary to revise the current practice and transfer this experience to the competency model in most other professions.

Third, the use of ICT has led to a change in the way work is done, which has increased demand for complementary ICT skills that support the implementation of new tasks related to the use of ICT in the workplace. In particular, these include the use of social networks to communicate with colleagues and customers, brand promotion products on e-commerce platforms, big data analysis, business planning, etc.

Mass adoption of all types of ICT skills has led to the rapid growth of the entire digital economy, as a result of which one should expect a high degree of variability in the ICT skills that are in demand and their adaptability to new working conditions and increases in their functional capabilities [28, 29].

3. Development of proposals for improving the provisions of official regulations with respect to digital competency qualification requirements

Based on the results of the study, we propose making changes to the handbook of qualification requirements for civil servants and applicants with respect to knowledge and skill requirements in the sphere of digital activities (digital competences).

Digital competencies are part of ICT competencies as additional components related to skills in digital information processing, skills in working with PCs and standard office software, and knowledge of information analytics technologies and information security. We also advise including skills in digital content creation, digital collaboration, network etiquette, digital exchange, digital security, etc. in the digital competences. Digital components of

ICT competencies should be divided into basic, advanced and special ones. In *Table 3* you will find recommendations on the inclusion of digital competences within the regulatory standards of the state bodies that approve qualification requirements for professional knowledge and skills necessary for state civil servants.

We offer the following remarks:

1. The list of professional ICT knowledge and skills necessary for a civil servant in the specialist category can be adjusted by the employer based on the functional duties and specific demands confronting employees of a particular state body, including use of special software used by a particular government body.

2. Basic digital competencies should include those that are currently already indicated in the handbook, as this level of knowledge and skills is sufficient for the junior group level of civil service positions. In addition, as a rule, applicants with no experience in government bodies and who do not have skills working with special information systems should be recruited to lower positions.

3. The knowledge and skills found in the specialist level are to be considered as additional to the knowledge and skills in the basic and advanced levels.

Currently, business processes in the civil services are mostly automated. The main information systems of the civil service include: the Unified Information Management System for staff of the Civil Service of the Russian Federation (15% of respondents), "1C: Personnel (Enterprise)" (10%); AIS "Personnel of the Ministry of Economic Development of Russia", Unified Information Management System for staff of the State Civil Service of the Russian Federation, "Consultant+" (4% each), Lotus, AIS GSPO, Parus, PPO PZIK Aksiok.Net, Estimated Personnel (2% each), as well as the Federal Portal of Civil Service and Management Personnel. This diversity of information systems is already expanding the list of requirements for knowledge and skills

Table 3.

**Recommended requirements for professional knowledge
and skills related to the digital components of ICT competences
for position categories and groups of the civil service**

| Level | Qualification requirements for professional ICT knowledge and skills for civil servants | Position categories and groups | |
|-------------------|--|---|--|
| | | “Leaders” category – highest and most central position group in the civil service | Other categories and civil service position groups |
| Basic | Knowledge: | | |
| | Hardware and software | | + |
| | Capacities and features of modern information and communication technologies in government agencies, including the use of interdepartmental document circulation | | + |
| | Common issues in information security | | + |
| | Skills: | | |
| | Use the internal and peripheral devices of a computer | | + |
| | Use information and telecommunication networks, including the Internet | | + |
| | Use operating systems | | + |
| | Email management | | + |
| | Use a text editor | | + |
| | Use spreadsheets | | + |
| | Preparing presentations | | + |
| | Use of graphic objects in electronic documents | | + |
| Use databases | | + | |
| Advanced | Knowledge: | | |
| | legal aspects in the field of information and communication technologies | + | |
| | state policy documents and priorities in the field of information and communication technologies | + | |
| | legal aspects of the provision of public services through information and communication technologies | + | |
| | Hardware and software | + | |
| | Capacities and features of modern information and communication technologies in government agencies, including the use of interdepartmental document circulation | + | |
| | Common issues in information security | + | |
| | Basic project management | + | |
| | Skills: | | |
| | Strategic planning and management of group activities, using modern information and communication technologies in government bodies | + | |
| | Use internal and peripheral devices of a computer | + | |
| | Use information and telecommunication networks, including the Internet | + | |
| | Use operating systems | + | |
| Email management | + | | |
| Use a text editor | + | | |

Table 3 (continued).

| Level | Qualification requirements for professional ICT knowledge and skills for civil servants | Position categories and groups | |
|------------------------------------|---|---|--|
| | | “Leaders” category – highest and most central position group in the civil service | Other categories and civil service position groups |
| Advanced | Use spreadsheets | + | |
| | Use databases | + | |
| | Use project management systems | + | |
| Specialist | Knowledge: | | |
| | Systems for interacting with citizens and organizations | + | + |
| | Accounting systems that support the implementation of primary tasks and functions by federal bodies | + | + |
| | interdepartmental interaction systems | + | + |
| | public information management systems | + | + |
| | information and analysis systems for collecting, processing, storing and analyzing data | + | + |
| | Systems for managing electronic archives | + | + |
| | Information security systems | + | + |
| | Operation control systems | + | + |
| | Skills: | | |
| | Using systems for interacting with citizens and organizations | + | + |
| | Using interdepartmental interaction systems | + | + |
| | Using public information management systems | + | + |
| | Using information and analysis systems for collecting, processing, storing and analyzing data | + | + |
| | Using systems for managing electronic archives | + | + |
| Using information security systems | + | + | |
| Using operation control systems | + | + | |

in the field of ICT. Moreover, in the coming years, the infrastructure of civil service decisions will undergo changes due to the introduction of new technologies and the transfer of more business processes into the digital space. Therefore, advanced competences and ICT skills should include the following:

- 1) skills in working with interdepartmental interaction and electronic document management systems;
- 2) ability to work with state information resource management systems;
- 3) skills in working with information and analytical systems that allow for the collection, processing, storage and analysis of data;

4) ability to work with regulatory information systems;

5) knowledge of basic information security with regard to personal data, storage and processing of official information, and use of the Internet for official and personal purposes.

Applicants should have digital competences at the advanced level to be granted admission to positions starting with the senior group.

The third block is special competences and ICT skills determined by the specific requirements of a particular state authority and position. For example, these could be skills in working with the “electronic budget” state integrated information system for managing

public finances or the ability to work with the system “zakupki.gov.ru”, etc.

Thus, we propose reinforcing in official regulations the mandatory inclusion of digital competence requirements at three levels: basic, advanced and special. This will ensure a unified approach to the development of requirements for applicants to civil service positions and will assist in the more efficient development of refresher courses for civil servants and those in the personnel reserve.

4. Specialist competence in digital economy

Many professions that were previously considered purely technical will undergo new demand for creative and interpersonal skills. It is expected that by 2020, the following will become critical for all industries: data analytics (to collect and successfully take advantage of increasing information flows), commercialization and communication skills (to explain offers to business or government customers and consumers), engineering knowledge, and experience managing teams of multidisciplinary specialists [30]. Among the basic skills predicted as necessary by 2020 at the World Economic Forum are cognitive flexibility, creativity, logical and mathematical reasoning, problem sensitivity, visualization, active perception and critical thinking, self-control and emotional intelligence, as well as the ability to coordinate and train others [31].

At the same time, most jobs require different combinations of skills. In addition to hard skills, where predictability of context and formal qualifications are key and which can be easily taught, demonstrated and measured, employers are often concerned about the practical skills or competences staff need to perform tasks in an uncertain environment and imprecise context, as well as the ability to adapt in a continuously developing and changing environment. Soft skills, which include emotional intelligence, time manage-

ment, and leadership skills, are not associated with a specific type of activity but with the ability to effectively build relationships with colleagues, clients and partners. For the development of soft skills, an important factor is so-called metacompetences, which include awareness of thoughts and emotions, empathy, the ability to perceive facts without interpretation, flexibility of behavior, creativity, integrated thinking, tolerance of differences, attentiveness, sincerity and authenticity in communications. Such skills are necessary both in the business environment and in everyday life.

Anything that goes beyond a concrete judgment, a set of ready-made answers or a body of standard cases requires integrative thinking. The ability to look at problems from different points of view, think in several dimensions, see not only the obvious facts but develop a broader picture of reality in the imagination—these are all crucial in the VUCA world (volatility, uncertainty, complexity and ambiguity) in which you have to confront and manage the unpredictable [32]. People with integrative thinking skills can expand the scope of issues related to a problem, refusing “either/or” thinking in favor of “and/and” [33].

Conclusion

Currently, every specialist who wants to achieve success in an organization must have special “digital” competences. This is also true for public servants [34, 35].

The authors conducted a study of the key competences required of civil servants and the options for developing their qualifications given the digital transformation of the economy, taking into account qualification requirements for professional knowledge and skills found in regulatory documents. The analysis focused on the legal context of ways in which civil services qualification requirements are developed, as well as specific job requirements

and information and communication competences in particular. The analysis of regulatory and legal documents for civil service qualification requirements revealed a lack of preparation by government agencies to advance the competences of civil servants and the absence of a unified approach to the formation of a competence model for ensuring the functioning of the Digital Economy national electronic government program. The lack of a uniform approach to developing requirements for information skills and knowledge was also revealed.

A survey of more than 100 civil servants from various constituent entities of the Russian Federation and state authorities revealed a lack of preparedness in the public administration system for the transition to innovative human capital management, as well as inertia and an underestimation of the importance of digital competences.

To resolve these contradictions, proposals were made for the unification of qualification requirements in the job descriptions regarding information and communication skills and knowledge and dividing these requirements into three levels, depending on the position

group and specific nature of the work involved. These proposals will increase the minimum threshold for digital competences of civil servants, as well as ensure their further development in the future when managing a career in the civil service system. Key competences of civil servants under digitalization conditions were identified and have different levels of complexity depending on the position.

The proposed recommendations will increase the level of professional competence among civil servants by providing them with the ability to quickly adapt to rapid changes in the digital economy of the Russian Federation. Clear formulation and transparency of promotion requirements will ensure the introduction of tactical methods in career management and serve as career elevators (sometimes called career ladders), including, among other things, an information base for the development of individual programs and assistance for training and improving competence using a variety of methods including mentoring, coaching, knowledge management and the introduction of design thinking tools for the development of metacompetence and integrative thinking. ■

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