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INFORMATION AND COMMUNICATION CULTURE OF YOUTH IN THE DIGITAL AGE: GENERATIONAL ANALYSIS, TRENDS, FACTORS AND MODELS OF FORMATION

Author: MARIA DOMBROVSKAIA
e-mail: maria.dombrovskaia@yandex.ru
Mentor: Assoc. Prof. Marina Ponomareva
Department of Operational and Sectoral Management
Faculty «High School of Management», Financial University under the Government of the Russian Federation

Introduction: Digital transformation has made online services part of young people's everyday life, and internet access in Russia is close to universal. However, only a small share of the population has basic digital skills, which raises the question of what information and communication culture is forming among young people and how it relates to their economic behavior and careers.

Aim: To identify generational features of digital adaptation and to determine the trends, factors and models of the impact of digital technologies on the behavior, economic strategies and careers of young people in Russia.

Materials and Methods: The study is based on open secondary data for 2020-2025 from HSE ISSEK, Rosstat, Mediascope, NAFI, VCIOM, Smart Ranking, the Bank of Russia and HeadHunter. The methods include a comparative analysis of generations and age groups, a comparison with the EU, an economic and statistical analysis of digital economy expenditure and ICT wages, the Bass innovation diffusion model and scenario forecasting up to 2030.

Results: Generations differ not in access but in the depth of digital skills. Adolescents spend the most time online yet show the lowest digital literacy, and Russia lags behind the EU mainly in digital security and content creation. Internet diffusion in Russia developed in two waves, computer and mobile, and is approaching full saturation. Growth in digitalization expenditure is accompanied by rising relative wages and employment in the ICT sector, while young job seekers expect digital HR services from employers.

Conclusion: Being "digitally born" does not guarantee competence, so security skills and the critical evaluation of information must be developed purposefully through education, youth policy and a managerial approach to educational work in schools and universities. Digital economy expenditure, estimated at 10-13.7 trillion rubles by 2030, will benefit young people only if investment in infrastructure is complemented by investment in human capital.

Keywords: information and communication culture; digital competence; generations; digital divide; youth; economic behavior; digital economy

INTRODUCTION

The digital transformation of recent years has turned the technological environment into part of everyday life. Through online services, young people communicate, study, buy goods, look for work and manage their money. The level of access to these online services in Russia is very high, and anyone with mobile internet can buy training courses or goods on a marketplace in two clicks. In 2024, 90% of residents aged 15 and over used the internet regularly and 85% used it daily (Popov, 2025), and in 2025 the share reached

91% (Kuzina & Shcherbakov, 2026). However, only 11% of Russians had digital skills at or above the basic level according to the Eurostat methodology, compared with 56% in the European Union (hereinafter EU), and in the best-prepared group aged 20-24 the figure was 18% (Popov, 2025). The gap between universal access and low skills raises the question of what kind of information and communication culture is emerging among young people and how it relates to their economic behavior and careers.

Information culture describes the ability of an individual and society to find, evaluate and use information, which is now becoming the main economic resource. Digital competence is understood as the ability to apply technologies in the information environment confidently, effectively and safely to solve everyday tasks, relying on knowledge and skills (Soldatova & Rasskazova, 2014). The European DigComp framework, which Eurostat and Russian statistics use to assess skills, identifies five areas of measurement: information, communication, content creation, safety and problem solving (Popov, 2025).

Summarizing these approaches to information culture and digital competence, the information and communication culture (hereinafter ICC) of young people is viewed as a system of values, norms, competencies and stable practices formed under specific generational conditions, through which young people search for, evaluate, create, transmit and protect information and build communication in online and offline environments, from messaging and watching a theater broadcast to receiving public services, making payments, studying and looking for a job. Three levels are distinguished in the structure of ICC, corresponding to the levels of the digital divide: access, competence, and practice with outcomes.

Among the studies by Russian authors devoted to generational characteristics and digitalization, the works of V. V. Radaev, M. A. Ponomareva, N. V. Alikperova, G. U. Soldatova and E. I. Rasskazova, E. Popov, L. Kuzina and R. Shcherbakov stand out, and this study draws on their research.

For K. Mannheim, a generation is defined by a shared experience of growing up in specific socio-historical conditions rather than by year of birth (Mannheim, 1952). The popular labels "millennial" and "Generation Z" come from the American generational theory of Strauss and Howe. Applying American boundaries to Russia is not always appropriate, so V. V. Radaev, using data from the Russia Longitudinal Monitoring Survey of HSE University, distinguishes generations by the period of socialization: the mobilization generation (1941-1956), the Thaw generation (1956-1964), the stagnation generation (1964-1984), the reform generation (1985-1999), and early and late millennials, who are characterized by "digital advancement" and delayed adulthood (Radaev, 2018). Newer interpretations blur the generations, and the term "zillennials" is now gaining popularity online. These are late millennials or early zoomers who cannot clearly identify with either group. Skepticism about the very division into generations is also growing because of the arbitrary nature of their boundaries and the sheer number of theories about these divisions, so in this study a generation is treated as a conventional group of people with a similar experience of growing up.

M. A. Ponomareva uses a similar division, comparing Generations X, Y, Z and Alpha. In her assessment, Generation Z is characterized by flexibility, high technological literacy and constant consumption of information from the internet. For Generation Alpha (since 2011), the digital environment and artificial intelligence have been a natural part of life and learning since childhood, so this generation needs a more personalized and practice-oriented approach (Ponomareva, 2026).

The age boundaries of youth require clear definition. Federal Law No. 489-FZ "On Youth Policy in the Russian Federation" defines youth as citizens aged 14-35 (Federal Law No. 489-FZ, 2020).

M. Prensky wrote about "*digital natives*" and "*digital immigrants*". The former grew up

surrounded by technology and think and learn differently from the latter, who are older people (Prensky, 2001). Empirical reviews did not confirm his hypothesis. Differences within the same group of young people turned out to be no smaller than those between generations, and the notions of innate digital literacy and multitasking among younger generations proved to be a myth (Kirschner & De Bruyckere, 2017).

The relationship between generational characteristics and the economic behavior and careers of young people has been studied only fragmentarily, with individual works focusing on financial literacy or the labor market. Less attention is paid to how schools and universities organize work on the cultural development of young people. M. A. Ponomareva proposes understanding such development not simply as the transmission of values but as flexible interaction among educational organizations based on feedback from young people (Ponomareva, 2026). N. V. Alikperova studied the investment strategies of young people and found that over the past two decades their attitudes toward key life categories have changed significantly under the influence of new values and tools for achieving material well-being (Alikperova, 2024).

Purpose of the study: to identify generational features of digital adaptation and to determine the trends, factors and models of the impact of digital technologies on the behavior, economic strategies and careers of young people in Russia.

Objectives: to clarify the conceptual framework and age boundaries; to compare the digital behavior and competence of generations; to assess shifts in consumption, the labor market and investment in technology; to build a model of internet diffusion and scenarios of digitalization expenditure up to 2030.

Hypotheses:

1: generations differ primarily in the depth of technology use and competence rather than in access;

2: young people's time and spending are shifting from traditional media to digital services such as online learning;

3: digital HR tools and transparent career tracks are associated with the retention of young employees;

4: growth in digitalization expenditure is accompanied by growth in the relative incomes of digital specialists.

MATERIALS AND METHODS

The empirical basis consisted of open secondary data for 2020-2025. The core data set comprises materials of the Institute for Statistical Studies and Economics of Knowledge of the National Research University Higher School of Economics, based on Rosstat data on the use of information and communication technologies (hereinafter ICT) by the population, on expenditure on the development of the digital economy and on the ICT sector. These are supplemented by Mediascope measurements, the NAFI Digital Literacy Index (a test based on the DigComp framework), a VCIOM survey, the Smart Ranking rating of the online education market, Bank of Russia data and a survey of job seekers by HeadHunter and HRlink. For the diffusion model, the International Telecommunication Union series on the share of internet users in Russia for 1993-2024 was used (World Bank, 2026).

Youth is defined within the age range of 14-35 years in accordance with Federal Law No. 489-FZ "On Youth Policy in the Russian Federation", and generations are identified according to V. V. Radaev's classification and compared with international labels. The sources use different groupings (12-24 years for Mediascope, 14-17 and 18-24 years for

NAFI, 15 years and older for Rosstat), but the original groups have been retained.

The comparative analysis by generation and age group covers access, intensity of use, skills and attitudes, as well as a comparison with the EU. The economic and statistical analysis includes the dynamics of expenditure on the digital economy and its share of gross domestic product, the wage premium in the ICT sector, that is, the ratio of ICT wages to the economy-wide average, and elasticity.

The modeling included:

1. the innovation diffusion model, which explains how, at what speed and through which channels new ideas, products or technologies spread in society; F. Bass's model $F(t) = m \cdot [1 - e^{-(p+q)t}] / [1 + (q/p) \cdot e^{-(p+q)t}]$, where p is the coefficient of innovation, that is, external influence, q is the coefficient of imitation, and m is the saturation potential (Bass, 1969), in one-wave and two-wave specifications estimated by nonlinear least squares;
2. three scenarios of digital economy expenditure up to 2030, assuming nominal GDP growth of 7% per year and an expenditure share of 3.3% of GDP in 2025.

The Bass model was built in two versions. The one-wave model assumes that the internet spread in a single continuous wave starting in 1993, so it has only three parameters. The parameter m shows the maximum share of the population that will eventually use the internet. The coefficient p shows how strongly adoption is driven by external factors, such as the emergence of new devices or services, and the coefficient q shows how much people adopt the internet from one another. The two-wave model adds up two such curves. The first, "computer" wave starts in 1993 and has its own parameters m_1, p_1 and q_1. The second, "mobile" wave starts later; its starting year was not set in advance but was estimated from the data, and before that year its contribution is zero. Since the number of internet users is limited and cannot exceed the population, the combined ceiling of the two waves was capped at this level, that is, $m_2 = 100\% - m_1$.

The parameters of both models were estimated by nonlinear least squares using data for 1993-2024. The parameter values were chosen so that the model curve lies as close as possible to the actual data points and the sum of squared deviations of the model from the actual data is as small as possible. Since the result of such fitting may depend on the initial values, the calculation was repeated with different starting parameters, including different starting years of the second wave, and the variant with the smallest error was selected. The accuracy of the models was compared using three indicators. The coefficient of determination R^2 shows what share of the variation in the data the model explains, and the closer it is to 1, the better. The root mean square error shows how far, in percent, the model deviates from the actual data. The Akaike information criterion (AIC) compares models based on the number of parameters and the likelihood function, and the model with the lower value is preferred.

Elasticity was calculated as the ratio of the growth rates of two indicators for 2023-2024; the calculation is presented in the next section, after Table 3.

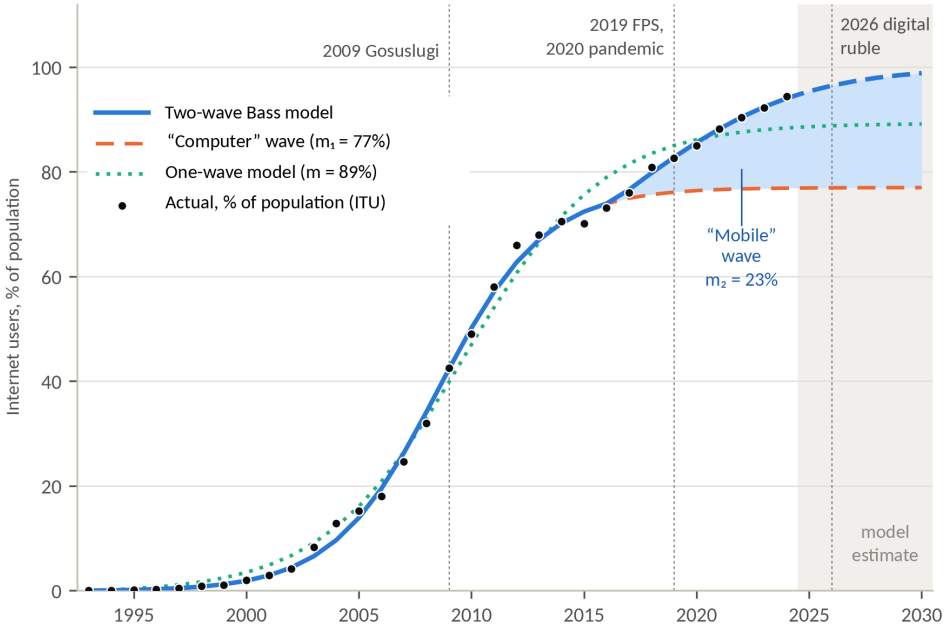
RESULTS

Young people spend much more time online than older generations. Statistics show that in 2025 people aged 12-24 were online for almost 7 hours a day, while people over 65 spent about 2 hours online but watched television for more than 7 hours, so the generations live in different media environments (Mediascope, 2025). Communication remains central to ICC, and most Russians talk to each other via messengers and chat on social

networks every day (Kuzina & Shcherbakov, 2026). However, skills lag noticeably behind access, and only one fifth of young people aged 20-24 have basic digital skills (Popov, 2025).

To understand how the internet spread in Russia, a Bass diffusion model was built, which revealed two waves of diffusion (Figure 1). The first, "computer" wave peaked in the late 2000s and grew mainly because people went online after their acquaintances were already using the internet. The second, "mobile" wave began around 2016 and received an external push from smartphones, mobile banking and the development of the Gosuslugi public services portal. According to the model, almost all residents of the country will be using the internet by 2030.

Figure 1 Internet diffusion in Russia: actual data and the Bass model, 1993-2030



Note: dots show the share of internet users in the population according to the International Telecommunication Union (World Bank, 2026); lines are based on the one-wave and two-wave Bass models; blue shading shows the contribution of the "mobile" wave; values after 2024 are model estimates.

The one-wave model ($p = 0.0015$; $q = 0.319$; $m = 89\%$) explains 99.4% of the variation in the data ($R^2 = 0.994$), but its error can reach about 3 percentage points. Its ceiling of 89% is already below the actual level of 2024 (94.4%), so a single wave cannot explain the growth of recent years. The two-wave model, in contrast, explains 99.9% of the variation ($R^2 = 0.999$), and its error is about 1.2 percentage points. Its Akaike criterion, which assesses the accuracy of the models, is much lower (−268.7 versus −221.5). The values of the criterion are negative because the calculation was based on shares from 0 to 1, and the model with the lower value is considered better, that is, the two-wave model.

The parameters of the two-wave model help to understand how the internet spread. The ceiling of the "computer" wave was about 77% of the population, and its imitation coefficient turned out to be about 700 times higher than the coefficient of external influence ($q_1/p_1 \approx 700$). This shows that people went online on the advice of their acquaintances, and the peak of growth occurred in 2008. The ceiling of the "mobile" wave was about 23%; this wave began around 2016 and has a high coefficient of external influence ($p_2 \approx 0.10$),

which reflects the role of smartphones, mobile banking and Gosuslugi. Its growth peaked in 2018-2019. The model is based on data from previous years, and the calculation up to 2030 only shows the trend and is not an exact forecast.

Many everyday activities have already gone digital: Gosuslugi, transfers via the Faster Payments System, branchless online banks, subscriptions to online cinemas and e-books, and distance learning. Modern Russians can no longer imagine their lives without these services, and companies are adapting and changing the structure of their expenditure, spending more on software, especially domestic software, and significantly less on communication services (Abdrakhmanova et al., 2026).

A comparison of generations (Table 1) shows that they differ not in internet access but in when and how they first encountered technology. The stagnation and reform generations mastered computers as adults, early millennials in their youth on a home computer, and late millennials and zoomers directly through smartphones and social networks; however, growing up with a smartphone in hand does not make anyone more literate. In 2025, the NAFI Digital Literacy Index declined for the first time in seven years, with the lowest score among adolescents aged 14-17 and the highest among people aged 45-54 (NAFI, 2026). Russians are weakest at configuring software, verifying the reliability of information and creating audio and video content, since these skills cannot be acquired intuitively through everyday phone use.

Table 1 Generations of Russian society and their digital adaptation

Generation (according to V. V. Radaev) and international equivalent	**Years of coming of age**	**Years of birth (approx.)**	**Age in 2025**	**First digital environment**	**Digital characteristics**
Stagnation generation (approx. baby boomers)	1964-1984	1947-1967	58-78	Television; computer and internet mastered in adulthood	Spend the most time watching television, about 2 hours a day online
Reform generation (approx. Generation X)	1985-1999	1968-1981	44-57	Personal computer at work, internet in the 1990s-2000s	Highest level of digital literacy among all groups
Early millennials (Generation Y)	2000-2008	1982-1990	35-43	Fixed-line internet, push-button phones, first social networks	"Digital advancement", delayed adulthood, more leisure, fewer bad habits
Late millennials (Generation Y, "zillennials" online)	2008-2016	1991-2000	25-34	Smartphones and social networks	Analog childhood and digital youth; average digital literacy
Generation Z ("zoomers")	since 2017	2001-2010	16-24	Smartphone from childhood, messengers, short videos	Almost 7 hours online a day, most prefer to communicate online, but only about one fifth have basic skills; adolescents have the lowest literacy

Note: periods of coming of age are given according to V. V. Radaev's classification, years of birth are approximate; the international classification is given for comparison. Sources: Radaev (2018); Mediascope (2025); Kuzina & Shcherbakov (2026); Popov (2025); NAFI (2026); VCIOM (2025).

A comparison with the European Union (Table 2) shows that the gap is related not to access but to the depth of skills. Similar shares of Russians and Europeans use the internet daily, and most people can communicate online, but at present only one in ten Russians has basic digital skills, while in the EU this figure is higher. Russia lags behind in digital content creation and especially in digital security. There is also a gap within the country: rural residents have basic skills half as often as urban residents (Popov, 2025).

Table 2 Digital behavior and skills in Russia and the EU, 2024

Indicator, %	Russia	EU	Gap, p.p.
Daily internet users	85 (15+)	88 (16-74)	3
Digital skills at or above the basic level	11	56	45
Communication skills at or above the basic level (share of internet users)	93	98	5
Digital content creation (working in a text editor)	59.3	74.7	15.4
Any digital security skills	–	–	≈60

Note: "–" means no data. Source: Popov (2025), Rosstat data based on the Eurostat methodology.

Digitalization also has a downside. Due to a lack of security skills, in 2025 fraudsters stole almost 30 billion rubles from bank customers using psychological tricks, and only a small part of the money was recovered (Interfax, 2026). This is compounded by massive leaks of personal data, to which the state responds with new security measures, from banning anonymous SIM cards to labeling calls from organizations, while mobile operators are actively launching free services that identify unknown numbers. Caution with personal data and unknown calls, or digital hygiene, has become a new norm of ICC. The second problem is that online communication is gradually displacing face-to-face interaction, as young people increasingly choose messaging and video calls (VCIOM, 2025), and the first stages of job interviews are increasingly held online. For a culture in which face-to-face conversation is considered a condition of trust, it is important to deliberately preserve in-person formats such as mentoring, personal meetings with employers and in-person project defenses.

The structure of consumption has also changed. For example, the online education market continued to grow in 2025, but more slowly than a year earlier. Analysts attribute this slowdown to the high key interest rate and low unemployment, which give people fewer reasons to retrain (Smart Ranking, 2026). Many people still watch television, but they are mostly older people, while young people, who are willing to spend their money on subscriptions, prefer to watch video content on digital services and video hosting platforms (Mediascope, 2025). Open statistics do not break down expenditure by age, so this conclusion is based on personal observation of peers' behavior.

The labor market has also changed (Table 3). In 2024, ICT specialists earned almost twice the economy-wide average, and this gap widened over the year, while the number of people employed in the industry also increased (HSE ISSEK, 2025). All this occurred alongside rapid growth in digitalization expenditure: when digital expenditure increases by 10%, the relative salary of IT specialists rises by about 2.5%, so the more companies invest in technology, the higher the demand for digital specialists and their incomes (Abdrakhmanova et al., 2026).

Table 3 Digital economy expenditure, wages and employment in the ICT sector, 2023-2025

Indicator	2023	2024	2025
Domestic expenditure on the development of the digital economy, trillion rubles	5.5 (A)	6.7	7.1 (B)
Same, % of GDP	3.1	3.3	–
Average wage in the ICT sector, thousand rubles	129.8	162.6	–
Ratio of ICT wages to the economy-wide average, times	1.76	1.85	–
Number of employees in the ICT sector, million people	1.41	1.54	–

Note: (A) calculated from the 2024 growth rate (+22%); (B) preliminary estimate; "–" means no data.
Sources: Abdrakhmanova et al. (2026); HSE ISSEK (2025).

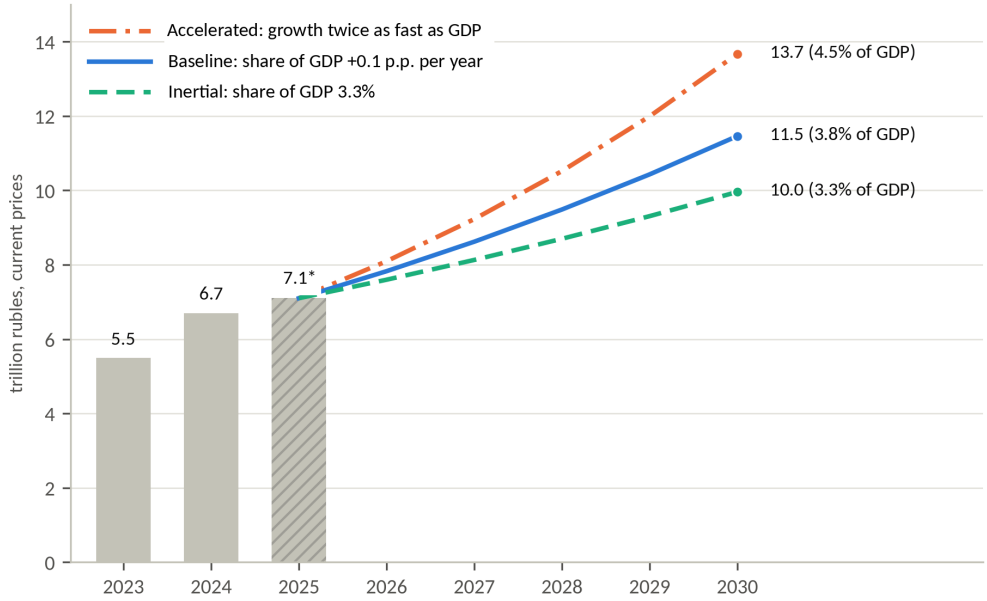
According to Table 3, digitalization expenditure grew by about 22% over this year (from 5.5 to 6.7 trillion rubles), and the ratio of ICT wages to the economy-wide average grew by about 5.1% (from 1.76 to 1.85 times). Dividing the second growth rate by the first gives about 0.23. For greater accuracy, the growth rates were calculated using natural logarithms, as is customary when calculating elasticity, that is, $\ln(1.85/1.76) / \ln(6.7/5.5) \approx 0.05 / 0.197 \approx 0.25$. Thus, every 10% increase in expenditure in this period corresponded to an increase in relative wages of approximately 2.5%.

This indicator is calculated for only two adjacent years. It only shows that in 2023-2024 digitalization expenditure and relative wages in ICT grew simultaneously, but it does not prove that it was companies' investment in technology that caused the wage growth. Both indicators may also be influenced by other factors, such as a general shortage of staff, the replacement of foreign software that left the market with domestic products, and state support for the IT industry. Therefore, the conclusion that the more companies invest in technology, the higher the demand for digital specialists and their incomes turned out to be merely an assumption. It is consistent with the data but needs to be tested over a longer period of time.

Young job seekers expect convenient digital services from employers; such services matter to almost half of candidates under 35 and to a third of job seekers over 45, and electronic HR document management turned out to be the most in-demand tool among employees (CNews, 2026). Amid staff shortages and high turnover, employers are also relying on mentoring, clear career tracks and digital HR services.

A scenario of digitalization expenditure up to 2030 was also calculated (Figure 2). Over five years, this expenditure increased 1.7-fold and in 2024 reached 6.7 trillion rubles, or 3.3% of GDP. Three scenarios were considered: an inertial scenario, in which the share of expenditure in GDP remains unchanged, a baseline scenario with slow growth of this share, and an accelerated scenario. Depending on the scenario, expenditure will amount to between 10 and 13.7 trillion rubles by 2030.

Figure 2 Domestic expenditure on the development of the digital economy in Russia: actual data for 2023-2025 and scenarios up to 2030



Note: the 2025 value is a preliminary estimate; scenarios are calculated assuming nominal GDP growth of 7% per year and an expenditure share of 3.3% of GDP in 2025. Source of actual data: Abdrakhmanova et al. (2026).

DISCUSSION

The results support the position of critics of the "digital natives" concept (Kirschner & De Bruyckere, 2017) and do not confirm M. Prensky's thesis about the "innate" superiority of young people's digital skills (Prensky, 2001). Data for Russia showed that adolescents spend much more time online than other age groups, yet their digital literacy is much lower than that of others, while the leaders are people aged 45-54 who mastered technology at work. This is consistent with the logic of the digital divide: when almost everyone has access, differences shift to skills and to the benefits a person derives from technology. The data obtained confirm V. V. Radaev's conclusion about the "digital advancement" of millennials (Radaev, 2018), but this advancement manifests itself in the frequency and diversity of use rather than in the depth of knowledge. Digital channels do not replace offline life but connect people to it and make it easier, from receiving services to buying theater tickets. At the same time, skepticism about generational labels is not unfounded, since differences within generations, for example by place of residence and level of education, are comparable to differences between generations (Popov, 2025).

The results are consistent with the findings of M. A. Ponomareva, who analyzed educational work in seven schools and about thirteen universities in different federal districts of Russia. A significant part of young people's worldview is now formed in the digital environment, while the ways values are transmitted in schools and universities remain largely traditional. In addition, activities are often fragmented, their effectiveness is assessed by the number of events held rather than by changes in values and skills, and decisions are made without taking into account the cultural needs of Generations Y, Z and Alpha (Ponomareva, 2026). This helps explain why young people's high engagement

in the digital environment has not yet translated into digital competence: security skills and the critical evaluation of information need to be developed purposefully rather than expected to emerge on their own.

Economic indicators make it possible to better understand the information and communication culture of young people. The internet diffusion model describes the first level of ICC, that is, access. NAFI and Rosstat data on skills describe the second level, competence. Economic indicators, in turn, show the third level, that is, the practical outcomes to which the use of technology leads. Changes in the labor market show that digital skills are becoming increasingly valuable. ICT specialists earn much more than the average, and employers are switching to digital HR services. This gives young people a clear incentive to develop their skills rather than simply spend time online, and it influences their choice of profession. Shifts in consumption show what young people spend their time and money on and how ICC manifests itself in everyday economic behavior. Scenarios of digitalization expenditure show how the digital environment will expand and which requirements for digital literacy will grow. Comparing these data reveals the main gap. Investment in the digital environment is growing rapidly, while the level of digital literacy has even declined over the past year, so it is skills, not access, that are becoming the main condition for whether young people will benefit from digitalization.

The first hypothesis is confirmed: access is close to saturation, while differences in competence persist. The second is partially confirmed: young people's time and spending are clearly shifting toward digital services, but the growth of online education is slowing, and open statistics contain no data on spending by age. The third is not fully confirmed: young people do expect digital HR services from employers, but the relationship between these services and staff turnover cannot be verified using open data. The fourth is confirmed: wages and employment in the ICT sector grew together with digitalization expenditure.

Conclusions about the hypotheses should be understood in light of the fact that they are based on secondary data. Such data show that phenomena change simultaneously but do not make it possible to prove that one necessarily causes the other. Therefore, the word "confirmed" indicates that the data are consistent with the hypothesis and do not contradict it. The conclusion on the first hypothesis is the most reliable, since several reliable sources point to it at once (Rosstat, NAFI, Mediascope). The third hypothesis is confirmed only with regard to young people's expectations, since surveys of job seekers are not representative and contain no data on actual staff turnover. The fourth hypothesis relies on data for only two years, so a relationship between digitalization expenditure and specialists' incomes has been identified, but its causes require verification.

Youth policy should shift its emphasis from "connectivity" to security skills and the critical evaluation of information, paying particular attention to adolescents aged 14-17. Education policy needs mandatory modules on digital security and content creation in schools and universities based on the DigComp framework, as well as regular monitoring of students' skills. Drawing on the proposals of Russian authors studying youth behavior, this work should be integrated into a unified system of educational work: moving from one-off campaigns to program-based planning, giving students real channels of influence on decisions through student councils with an advisory vote, using mini-projects based on real employer tasks and strengthening cooperation between school and family (Ponomareva, 2026). In HR policy, electronic HR document management, mobile HR services, transparent career tracks, mentoring, programs for young managers and in-person formats at key stages of hiring are becoming the standard.

CONCLUSIONS

1. It is advisable to consider the information and communication culture of young people as a three-level system: access, competence, practices. In Russia, the first level is almost saturated, and the main differences between generations lie at the second and third levels.
2. Being "digitally born" does not guarantee competence; young people do lead in time spent online, but not in security and content creation skills. These skills will not appear on their own; they need to be developed purposefully. The costs of digitalization, such as fraud, data leaks and the displacement of face-to-face communication, make digital hygiene an essential element of ICC.
3. Time and spending are shifting toward digital services; the online education market is growing but is gradually beginning to slow down.
4. Digitalization increases the relative incomes and employment of ICT specialists, as assumed in the fourth hypothesis, and young people's expectations of employers are linked to digital HR services and career transparency.
5. According to scenario calculations, digital economy expenditure will amount to between 10 and 13.7 trillion rubles by 2030. Its benefit for young people depends on whether investment in infrastructure is complemented by investment in human capital: monitoring ICC based on the DigComp framework, digital security modules in education, digital HR standards and the training of young managers.
6. The formation of ICC requires a managerial approach to educational work in schools and universities through the alignment of goals and resources, consideration of the digital environment in which young people's worldview is formed, and functioning feedback (Ponomareva, 2026).
7. The conclusions of the study are based on secondary data and show a coincidence of trends rather than proven cause-and-effect relationships.

In the context of digital transformation, information and communication culture is becoming one of the key factors in the socialization, economic behavior and professional self-determination of young people. Practices of searching for, evaluating, creating and transmitting information mediate access to education, the labor market, and financial and public services and therefore determine the extent to which young people are able to use the opportunities of digitalization and counter the associated risks. The practical significance of the study lies in the fact that the identified patterns can serve as a basis for decision-making in youth, education and HR policy.

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