

---

332.143

**Reutova Eleonora Viktorovna,**  
National Research University Higher School of Economics,  
Moscow, Russian Federation.

**Reutov Yevgeniy Viktorovich,**  
postgraduate student in the specialty 08.00.05 Economics and National Economy Management,  
Institute of Economics and Management (structural subdivision),  
V.I. Vernadsky Crimean Federal University,  
Simferopol, Russian Federation.

## TO THE ISSUE OF THE DIGITAL GAPS IN THE REGIONAL DEVELOPMENT

« » 2019  
« » 29,5 %, — 36,3 %. 17,1 %

IT-

The article discusses the problem of studying digital divide in the regional development of Russia. The urgency of the problem is due to the aggravation of digital divide in the process of implementing strategies and programs for digital development of regions. It is reasonably indicated that there is an inextricable relationship between digital development and the rates of economic growth of regions. It is the digital basis that currently determines the increase in the added value of the total product in the economy. The article presents a substantive analysis of the current state of research on the problems of digital divide. Due to the lack of a unified approach to the essential conceptualization of the concept of «digital divide» in the scientific and discourse field, a conceptual and meaningful analysis of the phenomenon of the digital divide and digital inequality is carried out. In the course of analyzing a number of indicators of the development of information and communication technologies in Moscow, St. Petersburg, as well as the subjects of the Southern Federal District, it was concluded that there is a pronounced digital divide in regional development. So, if in the Republic of Kalmykia in 2019, «cloud» services were used in the activities of 17.1 % of organizations in the region, then in the Rostov region this figure is 29.5 %, in Moscow — 36.3 %. The conclusion is made that the aggravation of the problem of the digital divide leads to information asymmetry and the development of digital inequality. In fact, the digital divide is one of the most significant social risks in the digital economy. The following strategic directions for

---

leveling digital divide in the regional development of Russia are highlighted: accelerated digitalization of key sectors of the economy with the subsequent practical application of artificial intelligence; provision of subsidies for the accelerated development of IT projects in the regions of Russia; rendering acceleration support to companies — developers in the development of innovative projects and assistance in bringing their products to the domestic market; constant training of personnel in the basic competencies of the digital economy; development of digital culture of Russian citizens.

*Keywords:* digital economy, digital divide, information and communication technologies, regional development, digital development.

[17].

[28], . . . [20], . . . [22], . . . [27], . . . [23]

[30], . . . [31], . . . [35]. [3], . . .

[6], . . . [9], . . . [4], . . . [14],  
[16], . . . [18], . . . [24], . . . [25]

« . . . ».

( [12], 70- [29], [34], [32], [21], 30- XX ) [26].  
 [33].  
 90- XX  
 (The Measurement Of Scientific And Technological Activities — Oslo Manual); (The Knowledge-based Economy);  
 (National Innovation System);  
 (Dynamic National Innovation Systems);  
 (Proposed Standard Practice for Surveys of Research and Experimental Development — the Frascati Manual);  
 (Manual On The Measurement Of Human Resources Devoted To S&T — Canberra Manual)

[7], [8], [13], [15],  
 « [5, 10]. » [11, . 45].



I. ( ) \*

| Регионы                                 | Использование серверов |      |      |      |      | Использование локальных вычислительных сетей |      |      |      |      | Использование «облачных» сервисов |      |      |      |      |
|-----------------------------------------|------------------------|------|------|------|------|----------------------------------------------|------|------|------|------|-----------------------------------|------|------|------|------|
|                                         | 2015                   | 2016 | 2017 | 2018 | 2019 | 2015                                         | 2016 | 2017 | 2018 | 2019 | 2015                              | 2016 | 2017 | 2018 | 2019 |
| Центральный федеральный округ г. Москва | 83,7                   | 79,1 | 74,8 | 72,4 | 70,3 | 80,8                                         | 75,1 | 70,5 | 68,6 | 66,0 | 19,2                              | 29,8 | 34,0 | 35,7 | 36,3 |
| Северо-Западный федеральный округ       | 53,4                   | 58,0 | 57,4 | 58,6 | 58,6 | 67,0                                         | 66,8 | 65,7 | 66,9 | 65,9 | 20,0                              | 21,6 | 23,8 | 26,3 | 28,5 |
| г. Санкт-Петербург                      | 71,0                   | 73,5 | 75,0 | 72,3 | 68,0 | 71,9                                         | 72,5 | 72,4 | 71,3 | 65,8 | 23,0                              | 25,4 | 29,0 | 30,5 | 31,3 |
| Южный федеральный округ                 | 43,0                   | 45,7 | 46,7 | 50,3 | 50,4 | 57,9                                         | 57,9 | 59,8 | 62,7 | 63,3 | 17,5                              | 19,2 | 21,9 | 24,9 | 26,4 |
| Республика Адыгея                       | 46,1                   | 48,7 | 49,4 | 50,5 | 49,2 | 57,6                                         | 59,9 | 61,0 | 62,4 | 62,0 | 17,6                              | 20,3 | 27,1 | 27,6 | 27,8 |
| Республика Калмыкия                     | 40,9                   | 39,7 | 38,5 | 35,1 | 41,9 | 52,0                                         | 48,4 | 47,5 | 47,4 | 50,6 | 14,7                              | 12,3 | 12,7 | 17,8 | 17,1 |
| Республика Крым                         | 66,9                   | 46,7 | 46,9 | 44,4 | 43,9 | 78,6                                         | 54,3 | 56,6 | 55,2 | 52,4 | 23,9                              | 24,3 | 29,0 | 25,6 | 26,6 |
| Краснодарский край                      | 45,4                   | 50,0 | 51,8 | 52,9 | 51,7 | 59,6                                         | 61,0 | 65,1 | 62,5 | 65,5 | 17,8                              | 19,4 | 21,7 | 25,1 | 25,8 |
| Астраханская область                    | 46,4                   | 50,9 | 50,3 | 52,1 | 53,7 | 63,1                                         | 65,0 | 65,5 | 67,8 | 68,8 | 20,5                              | 22,5 | 26,0 | 25,5 | 26,0 |
| Волгоградская область                   | 35,0                   | 40,6 | 39,7 | 46,5 | 46,6 | 51,5                                         | 56,1 | 54,7 | 61,6 | 60,2 | 15,1                              | 17,7 | 20,3 | 22,7 | 25,0 |
| Ростовская область                      | 44,0                   | 44,6 | 46,5 | 53,8 | 54,7 | 59,6                                         | 58,0 | 59,3 | 68,3 | 67,9 | 18,2                              | 18,8 | 20,8 | 26,2 | 29,5 |
| г. Севастополь                          | 41,0                   | 30,9 | 36,2 | 53,1 | 54,0 | 58,0                                         | 38,3 | 43,8 | 63,3 | 63,1 | 18,4                              | 14,9 | 19,0 | 28,0 | 26,4 |

«  
 HetNet,  
 , 100-  
 ,  
 , ,  
 ,  
 [2, . 59–69].

- IT- ; ; ; ;
1. /
  2. — 2019.— 8.— .9–12. //
  3. — 2018.— 2.— .59–69. / . . . //
  4. — 2020.— .221. 1.— .58–68. / . . . -
  5. — 2019.— 10.— .209–217. / . . . // — 2018.—
  6. 5-1 (31).— .118.
  7. 2018.— 11 (157).— .47–56. / . . . // —
  8. — 2020.— .22. 7 (173).— .46–61. // Journal of Economic Regulation.—
  9. 2020.— .11. 2.— .19–36. / . . . //
  10. — 2019.— Vol. 19.No.1.— .108–120. / . . . //
  11. 2018.— 1-1.— .4. / . . . // — 2020.— 1 (6).— .43–58.
  12. , 2000.— 368 . / . . . —
  13. — 2020.— .56. 1.— .18–33. / . . . -
  14. — 2019.— .1. 12.— .88–96. /

15. . . . — 2018. — .10. 3. — .18–29. / . . . // -
16. . . . — 2020. — 6(48). — .67–72. / . . . //
17. (2021–2030 ): 31.12.2020 N 3684- [ -  
]. — : [www.consultant.ru/document/cons\\_doc\\_LAW\\_373604/](http://www.consultant.ru/document/cons_doc_LAW_373604/) ( 03.12.2020). :
18. . . . — 2012. — .8. 39(180). — .29–35. / . . . // :
19. [ ]. — : rosstat.gov.ru/folder/210/document/13204 ( : 11.12.2020).
20. / . . . , . . . // -
21. , . : , , / . . . — : 1985. — 182 . — 2019. — .12. 6. — .26–37.
22. . . . // -
- ( ). : — 2019. — 2. — .28–36.
23. . . . : /
24. . . . : « », 2018. — 172 . / . . . -
- // . — 2019. — 11(53). — .312–315.
25. . . . /
- . . . // : . — 2011. — 33. — .32–37.
26. . . . : . . . /
- . . . : , 2007. — 862 .
27. uz n, . . . (2019). Digital Twins, Digital Shadows and Digital Piracy [Electronic Resource]. — Access Mode: [www.youtube.com/watch?v=Tx9Ws4680vM](http://www.youtube.com/watch?v=Tx9Ws4680vM) (date of the application: 14.12.2020).
28. Borovkov, A.I. (2019). Digital twins: definition, approaches and development methods / A.I. Borovkov, Yu.A. Ryabov [Electronic Resource] // Proceedings of the scientific and practical conference with foreign participation «Digital Transformation of Economics and Industry», pp. 234–245. — Access Mode: [elibrary.ru/item.asp?id=38525740](http://elibrary.ru/item.asp?id=38525740) (date of the application: 14.12.2020).
29. Freeman, C. Technology Policy and Economic Performance / C. Freeman. — Pinter Publishers, 1987. — 155 .
30. Grieves, M. (2014). Digital twin: Manufacturing excellence through virtual factory replication [Electronic Resource]. — Whitepaper. — Access Mode: [doi.org/10.5281/zenodo.1493930](https://doi.org/10.5281/zenodo.1493930) (date of the application: 14.12.2020).
31. Kagermann H. (2016). Industrie 4.0 in a Global Context Strategies for Cooperating with International Partners / H. Kagermann, R. Anderl, J. Gausemeier et al. (eds.). — Herbert Uts Yerlag.
32. Kleinknecht, Al. Innovation Patterns in Crisis and Prosperity: Schumpeter's Long Cycles Reconsidered / Al. Kleinknecht. — Hong Kong, 1987. — 204 .
33. Kuznets S. Modern Economic Growth: Rate, Structure and Spread / S. Kuznets. — New Heaven, 1966. — 529 .
34. Mensch, G. Das Technologische Patt, Innovationen uberwinden die Depression / G. Mensch. — Umschau Verlag, Frankfurt am Main, 1975 — 160 .
35. Schwab K. The Fourth Industrial Revolution / K. Schwab. — N.Y.: Crown Publishing Group, 2017.
36. Trends of Internet development in Russia and foreign countries: analytical report (2020) / G.I. Abdrakmanova, O.E. Baskakova, K.O. Vishnevskij, L.M. Gohberg etc. [Electronic Resource]; Higher School of Economics. — M.: NIU VShJe, p. 144. — Access Mode: [issek.hse.ru/mirror/pubs/share/345060549.pdf](http://issek.hse.ru/mirror/pubs/share/345060549.pdf) (date of the application: 11.12.2020).

#### СПИСОК ЛИТЕРАТУРЫ

1. Aleksandrova T.V. Tsifrovoye neravenstvo regionov Rossii: prichiny, otsenka, sposoby preodoleniya / T.V. Aleksandrova // *Ekonomika i biznes: teoriya i praktika*. — 2019. — 8. — S. 9–12.
2. Bachilo I.L. Tsifrovizatsiya upravleniya i ekonomiki — zadacha obshchegosudarstvennaya / I.L. Bachilo // *Gosudarstvo i pravo*. — 2018. — 2. — S. 59–69.
3. Bodrunov S.D. Rossiya: novyye idei — novyye resheniya / S.D. Bodrunov // *Nauchnyye trudy Vol'nogo ekonomicheskogo obshchestva Rossii*. — 2020. — T. 221. 1. — S. 58–68.
4. Belyatskaya T.N. Tsifrovoy razryv v sovremennom informatsionnom obshchestve / T.N. Belyatskaya, V.S. Knyaz'kova // *Ekonomicheskaya nauka segodnya*. — 2019. — 10. — S. 209–217.

5. Berman N.D. «Tsifrovyye razryvy» i sotsial'noye neravenstvo v seti / N.D. Berman // Postulat. — 2018. — 5-1 (31). — S. 118.
6. Vertakova Yu.V. Prognozirovaniye tsifrovoy transformatsii ekonomiki na osnove operezhayushchikh i signal'nykh indikatorov / Yu.V. Vertakova, M.G. Klevtsova, Yu.S. Polozhentseva // Ekonomika i upravleniye. — 2018. — 11 (157). — S. 47–56.
7. Glaz'yev S.Yu. O formirovaniy ideologii perekhoda k novomu mirokhozayastvennomu ukkladu / S.Yu. Glaz'yev // Ekonomicheskiye strategii. — 2020. — T. 22. — 7 (173). — S. 46–61.
8. Dement'yev V.V. Instituty i tekhnicheskyy progress / V.V. Dement'yev // Journal of Economic Regulation. — 2020. — T. 11. — 2. — S. 19–36.
9. Dobrinskaya D.Ye. Perspektivy rossiyskogo informatsionnogo obshchestva: urovni tsifrovogo razryva / D.Ye. Dobrinskaya, T.S. Martynenko // Vestnik RUDN. Seriya: Sotsiologiya. — 2019. — Vol. 19. No.1. — S. 108–120.
10. Zhadan I.E. Sotsial'nyye riski v tsifrovoy ekonomike / I.E. Zhadan // Gumanitarnyy nauchnyy zhurnal. — 2018. — 1-1. — S. 4.
11. Kvasnikova M.A. Tsifrovoye neravenstvo i yego vliyaniye na sotsial'no-ekonomicheskoye razvitiye regionov v Rossii / M.A. Kvasnikova // Sotsial'no-politicheskiye issledovaniya. — 2020. — 1 (6). — S. 43–58.
12. Klark, Dzh.B. Raspredeleniye bogatstva: teoriya zarabotnoy platy, protsenta i pribyli / Dzh. B. Klark. — M. : Gelios ARV, 2000. — 368 s.
13. Kleyner G.B. Intellectual'naya ekonomika tsifrovogo veka. tsifrovoy vek: shagi evolyutsii / G.B. Kleyner // Ekonomika i matematicheskiye metody. — 2020. — T. 56. — 1. — S. 18–33.
14. Magomedov A.M. Tsifrovaya transformatsiya otechestvennoy ekonomiki i regional'nyye problemy / A.M. Magomedov // Ekonomika i upravleniye: problemy, resheniya. — 2019. — T. 1. — 12. — S. 88–96.
15. Mayevskiy V.I. Mezourovnen' i iyerarkhicheskaya struktura ekonomiki / V.I. Mayevskiy // Zhurnal institutsional'nykh issledovaniy. — 2018. — T. 10. — 3. — S. 18–29.
16. Polozhentseva Yu.S. Metody otsenki urovnya tsifrovizatsii na mezourovne / Yu.S. Polozhentseva, V.V. Maslennikova // Innovatsionnaya ekonomika: perspektivy razvitiya i sovershenstvovaniya. — 2020. — 6 (48). — S. 67–72.
17. Ob utverzhdenii Programmy fundamental'nykh nauchnykh issledovaniy v Rossiyskoy Federatsii na dolgosrochnyy period (2021–2030 gody): Rasporyazheniye Pravitel'stva RF ot 31.12.2020 N 3684-r [Elektronnyy resurs]. — Rezhim dostupa: [www.consultant.ru/document/cons\\_doc\\_LAW\\_373604/](http://www.consultant.ru/document/cons_doc_LAW_373604/) (data obrashcheniya: 03.12.2020).
18. Ratner S.V. Tsifrovoy razryv regionov Rossii kak ugroza sotsial'no-ekonomicheskomyu razvitiyu strany / S.V. Ratner // Natsional'nyye interesy: priority i bezopasnost'. — 2012. — T. 8. — 39 (180). — S. 29–35.
19. Regiony Rossii. Sotsial'no-ekonomicheskiye pokazateli [Elektronnyy resurs]. — Rezhim dostupa: [rosstat.gov.ru/folder/210/document/13204](http://rosstat.gov.ru/folder/210/document/13204) (data obrashcheniya: 11.12.2020).
20. Safiullin A.R. Tsifrovoye neravenstvo: Rossiya i strany mira v usloviyakh chetvertoy promyshlennoy revolyutsii / A.R. Safiullin, O.A. Moiseyeva // Nauchno-tekhnicheskkiye vedomosti Sankt-Peterburgskogo gosudarstvennogo politekhnicheskogo universiteta. Ekonomicheskiye nauki. — 2019. — T. 12. — 6. — S. 26–37.
21. Sakhal, D. Tekhnicheskyy progress: kontseptsii, modeli, otsenki / D. Sakhal. — M.: Finansy i statistika, 1985. — 182 s.
22. Simchenko N.A. Razvitiye otraslevoy kooperatsii v usloviyakh tsifrovizatsii promyshlennogo proizvodstva / N.A. Simchenko, V.I. Filonov // Vestnik Yuzhno-Rossiyskogo gosudarstvennogo tekhnicheskogo universiteta (NPI). Seriya: Sotsial'no-ekonomicheskiye nauki. — 2019. — 2. — S. 28–36.
23. Simchenko N.A. Instituty formirovaniya novogo kachestva ekonomicheskogo rosta: monografiya / N.A. Simchenko, R.M. Nizhegorodtsev, N.P. Gorid'ko. — Simferopol': OOO «Antikva», 2018. — 172 s.
24. Tavaratsyan N.S. Tsifrovoy razryv: opasnost' sotsial'no-ekonomicheskogo razvitiya Rossii / N.S. Tavaratsyan // Teoriya i praktika sovremennoy nauki. — 2019. — 11 (53). — S. 312–315.
25. Chalenko V.I. Neodnorodnost' informatsionnogo razvitiya regionov Rossiyskoy Federatsii / V.I. Chalenko // Regional'naya ekonomika: teoriya i praktika. — 2011. — 33. — S. 32–37.
26. Shumpeter, Y.A. Teoriya ekonomicheskogo razvitiya. Kapitalizm, sotsializm i demokratiya: per. s nem. / Y.A. Shumpeter. — M. : Eksmo, 2007. — 862 s.

14 2020

23 2020