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## **Digitalisation in the Regional Context: The Case of E-Government Services in Latvia**

### **Abstract**

This article examines problems related to digital trends in economies and societies from two perspectives: the extension of a digital economy to social dimensions, and the role of digital government services in regional cohesion perspectives in Latvia. This methodological approach could serve as a tool for integrating a number of main goals related to the digitalisation trends in the EU, that require support of societies as well as the improvement of social welfare at the regional and national levels. The contribution aims to offer insight into the concept of social investment and innovation as well as co-creation concept and the impact of digitalisation of public services on regional cohesion. The study observes these implications in relation to the need to expand and adapt the content and approach of the digital services implementation. The further digital development as a precondition for diminishing regional and wellbeing divide, facilitating administrative processes for people and entrepreneurs, as well as e-services availability in Latvia is discussed. The article concludes that efficient decision-making related to social

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investment and innovation for improving social welfare at regional and national levels needs implementation of digitalised services in a wider scale as they inevitably become more important due to the increased digital competitiveness of countries.

**Key words:** Social Investment and Innovation, Regional Cohesion, Digital Government Services, Digital Literacy

## Introduction

Digitalisation of economic and social dimensions has become an unavoidable subject in political and social debates, which are based on current technological, social and economic tendencies. However, as revealed by a literature review carried out by the authors, there is a lack of consensus on the founding principles of the digital economy, its structures and their implementation.<sup>1</sup> Furthermore, scholars have agreed that, digitised information, digitalisation and automation have become a strategic resource for economies, their competitiveness and digital networks, the fundamental organising principle of the economy and society as a whole. In addition, there is a never-ending search for new types of work organisation which would allow for more efficiency of the labour market in a platform economy and the increase of digital competitiveness of the participating parties, as pointed out in the a EU document “A Digital Single Market Strategy for Europe”.<sup>2</sup>

In the EU, the Juncker Commission’s aims at creating a Digital Single Market (DSM) and its completion could generate economic and social benefits to Europe, mainly by creating growth and jobs, improving productivity as well as reducing public spending and improving development of less developed regions in the EU and its Member States.<sup>3</sup> The impact of the digital economy clearly extends to such areas as citizens, their society and its governance.

The implementation of a DSM demands commonly agreed and implemented regulatory conditions for business environments and digital networks. The EU explicitly recognizes the importance of these issues in “Eu-

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<sup>1</sup> G. Valenduc, P. Vendramin, *Work in the Digital Economy: Sorting the Old From the New*, European Trade Union Institute, Brussels 2016, p. 51; Ch. Degryse, *Digitalisation of the Economy and its Impact on Labour Markets*, European Trade Union Institute, Brussels, 2016, pp. 10–30.

<sup>2</sup> *A Digital Single Market Strategy for Europe*, COM(2015) 0192 final.

<sup>3</sup> *The Digital Economy*. OECD DAF/COMP(2012) 22.

rope in a changing world – Inclusive, innovative and reflective societies”<sup>4</sup>. It is also a fundamental element, for example, in the implementation of the *Smart Specialization Strategies*<sup>5</sup> aimed at increasing the level of regional cohesion and to understand the reasons for limited growth in EU regions, especially in support to lagging regions (S3 Platform Research and Innovation Strategies for Smart Specialisation – RIS3).

This article will make an attempt to better understand the numerous challenges affecting implementation of the DSM in the context of the digital economy and related social dimension, social innovation, co-creation and regional cohesion issues.

Current discussions in the article are focused on an assessment of digitalisation trends and its fundamental principles, at the same time considering the impact of social innovation on regional cohesion by reducing the digital regional divide, particularly in Latvia, while applying different measures and viewpoints. By using the results of the available relevant studies, the authors discuss and demonstrate the need to agree in common on regulatory conditions in implementation of a digital services in regional context for further cohesion, and thus an increase in wellbeing at all levels.

Finally, we discuss digital development in Latvia as an indicator of competitiveness and digital government services in Latvia, pointing out reasons for a regional digital divide based on the case of applying e-services in the context of social investment and wellbeing.

## Digitalisation Trends and Social Investment

The trend of digitalisation is transforming both manufacturing and services. As a result, societies and citizens in the EU face significant opportunities and challenges. According to Eurostat, Europe’s high-tech industry and knowledge-intensive services are increasing with record levels of investment in 2016.<sup>6</sup> Many parts of the EU led the world in e-government, demonstrating high levels of electronic engagement with their citizens and in using digital technology to update public services.<sup>7</sup> However, there are high regulatory impediments that do not allow EU Member States

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<sup>4</sup> *Europe in a Changing World – Inclusive, Innovative and Reflective Societies*, EC C (2016) 4614 of 25 July 2016.

<sup>5</sup> *Innovation and Research Strategy for Smart Specialisation. The Initial Position of Latvia*. LR Ministry of Education and Science, LR Ministry of Economy, March 2013, p. 20.

<sup>6</sup> *Digital Economy and Society Statistics- Households and Individuals*, Eurostat, 2017.

<sup>7</sup> *Europe’s Digital Progress Report 2017*, European Commission, 2017.

to reach the levels of many world economies.<sup>8</sup> More broadly, the EU should emphasise the role of openness and collaboration by providing open access to the results of publicly funded research, promoting open science, engaging more transparently with citizens and endorsing open innovation models to tackle societal challenges and long-term goals.<sup>9</sup> Although the EC promised to create a SDM as one of the Commission's priorities, estimating that it could boost the EU's economy by 415 billion euros annually<sup>10</sup> there is a little optimism among stakeholders about achieving this goal. However, critics see the digitalisation and DSM measures favouring old traditional corporatist industries, despite the fact that high quality public services constitute the backbone of citizens' social welfare, as well as a region's competitiveness and entrepreneurship, which currently faces significant challenges. This is acknowledged in the European Digital Progress Report: Review of Member States' Progress Towards Digital Priorities.<sup>11</sup> The challenges of using e-government services are revealed by results of interviews conducted in the framework of the EC H2020 CITADEL project and the outcomes of a study on the use of these services.<sup>12</sup>

Another significant factors that influences social development and wellbeing in the digital era and new business environment in the DSM is the social investment and innovation as well as co-creation concepts, which is the subject of current discussions at the EU level. Recent studies<sup>13</sup> have indicated the potential for social investment and social innovation as well as highlighted differences in outcomes across EU Member States that have implemented different welfare state models. The main comparative theoretical approaches employed regarding the emerging of the social investment paradigm are Neo-Keynesianism and Neo-Liberalism.<sup>14</sup> Social investment should contribute to the development of innovative

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<sup>8</sup> *Science, Research and Innovation Performance of the EU. Strengthening the foundations for Europe's future*, European Commission, 2018, pp. 431–433.

<sup>9</sup> European Parliamentary Research Services (EPRS), Briefing, 25 March 2014, pp. 2–4.

<sup>10</sup> A Digital Single Market Strategy for Europe, COM(2015) 0192 final.

<sup>11</sup> European Digital Progress Report: Review of Member States' Progress Towards Digital Priorities, European Commission, 2017.

<sup>12</sup> CITADEL project is being implemented under the "Horizon-2020" programme, Grant agreement No 726755.

<sup>13</sup> Ch. Grootaert, T. VanBastelaer, *Understanding and Measuring Social Capital: A Synthesis and Findings from the Social Capital Initiative*, World Bank, "Working Paper", no. 24/2001; J. Jenson, *Redesigning Citizenship Regimes After Neoliberalism: Moving Towards Social Investment*, in: *Towards a Social Investment State? Ideas, Policies and Challenges*, eds. N. Morel, B. Palier, J. Palme, Bristol 2012, pp. 61–87.

<sup>14</sup> A. Hemerijck, F. Vandenbroucke, *Social Investment and the Euro Crisis: The Necessity of a Unifying Social Policy Concept*, "Intereconomics", no. 47(4)/2012, pp. 200–206.

approaches related to the social innovation and competitive business environment of the digital market in the EU. It also should contribute to regional cohesion. An in-depth analysis of the scientific literature, legal and policy documents of international institutions elucidates the various versions and meanings of social investments, such as the paradigm of New Institutional Economics, the World Bank's Social Capital Initiative and others. Mainstream scholars view social investment as a strategy highlighting the shifting internal equilibrium between: public expenditure, private expenditure and banking tools that are identified as "social investments". The above approach to social investment is fundamental for the EU social innovation and regional cohesion policies. The most important instruments in reducing regional disparities are the European Commission's funds such as the European Fund for Strategic Investments and the Employment and Social Innovation Programme.<sup>15</sup> However, the contribution of these funds to reduce regional disparities in the current context of digitalisation and high unemployment in EU economies and associated social risks requires new actions by governments and social partners. Governments are looking for new sources of growth to boost the productivity and competitiveness of their economies and industries, to generate jobs and to promote the wellbeing of their citizens. As highlighted in the OECD Ministerial Council Statement,<sup>16</sup> governments have to respond to rising inequality, as it could endanger social cohesion and hamper the economic resilience and inclusive societies. Furthermore, governments will need to anticipate and address the need for regulatory structures development to minimize disruptive effects of challenges in the digital environment such as privacy, new jobs, intellectual property rights, competition and taxation.

The relationship between information technologies (IT) and economic development of peripheral territories and industrial areas has been of interest for scholars. In this respect, more attention should be given to a regional digital divide existing in many economies. The term "digital divide" refers to the gap between individuals, households, businesses and geographic areas at different socio-economic levels with regard to both their opportunities to access information and communication technologies and to their use of the Internet for a wide variety of activities.<sup>17</sup> The

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<sup>15</sup> *European Fund for Strategic Investments*. Official Journal of the European Union, L 169/1 Regulation (EU) No 2015/1017 of the European Parliament and the Council of 25 June 2015.

<sup>16</sup> *Resilient Economies and Inclusive Societies – Empowering People for Jobs and Growth*, OECD, Ministerial Council Statement, 2014.

<sup>17</sup> *Understanding the Digital Divide*, OECD, 2001.

digital assessment of regional development has been subject of scholarly articles<sup>18</sup> with the main conclusion that the lack of digitalisation is not necessarily the cause of social and economic under-development phenomena of regions, but is a consequence of low social and economic status in terms of regional geography and wellbeing. The lack of information technologies and digital infrastructure, as well as digital literacy, such as digital knowledge, skills and practices are likely to reinforce initial social inequalities.

## Social Innovation and Co-creation

The notion of co-creation emerged in the private sector with the motivation to increase high quality service associated with corporate profits. However, the concept is relevant to the public sector. As has been noted by scholars<sup>19</sup> the public sector is dominated by the production of services that due to their discretionary and intangible character, the simultaneous process of production and consumption and the service recipient's central role in the process provide excellent conditions for co-creation.<sup>20</sup> Providers and consumers of public services bring together different resources and capabilities in the joint creation of the value of the service in question and both parties have an interest in maximizing public value creation.<sup>21</sup> It is important to stress that the role of a citizen as a client and a partner in the provision of public services is known as a concept of co-production and/or a concept of co-creation of public services and is foreseen as the next stage of evolution<sup>22</sup> in the relationship between public administration and society.<sup>23</sup> Both concepts involve active participation of citizens in public service delivery by creating sustainable partnerships with citizens. However, the literature makes a distinction between three types of involvement: 1) citizens as co-implementers of public policy, 2) citizens as

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<sup>18</sup> A. Hogan, M. Young, *Rural and Regional Futures*, Routledge, London, 2015, p. 363.

<sup>19</sup> S. Osborne, Z. Radnor, G. Nasi, *A New Theory for Public Service Management?: Toward a (Public) Service-Dominant Approach*, "American Review of Public Administration", vol. 43, no. 2, 1.03.2013, pp. 135–158.

<sup>20</sup> Ibidem.

<sup>21</sup> J. Torfing, E. Sørensen, A. Røiseland, *Transforming the Public Sector Into an Arena for Co-Creation: Barriers, Drivers, Benefits, and Ways Forward*, "Administration and Society" 2016, pp. 1–31.

<sup>22</sup> M. Petrescu, D. Popescu, I. Barbu, R. Dinescu, *Public Management: between the Traditional and New Model*, "Review of International Comparative Management", no. 11(3)/2010, pp. 408–415.

<sup>23</sup> B. Verschuere, T. Brandsen, V. Pestoff, *Co-production As a Maturing Concept*, in: *New Public Governance, the Third Sector and Co-Production*, eds. V. Pestoff, T. Brandsen, B. Verschuere, New York 2012, pp. 1–12, 424, 466.

co-designers and 3) citizens as co-initiators.<sup>24</sup> According to the scholars, the first type is the most frequently represented.

Co-creation depends on the cultural context of a country or administrative region as well as differences between country regions determined by the relationship existing between state and society.<sup>25</sup> Co-creation and citizens' participation in the public sector procedures has gained serious attention in recent years. The interest in co-creation and other ways of introducing social innovation has become more intense as a consequence of the recent economic and financial crises and austerity measures implemented in the public sector of many EU economies. Furthermore, in most records, specific objectives that the involvement must achieve are often not formulated. In addition, according to the abovementioned authors, it appeared that most studies are aimed at the identification of influential factors. These factors can be identified on the organizational side (for instance the compatibility of public organizations, the attitude of public officials or the administrative culture) or on the citizen side (for instance personal characteristics, awareness of citizens and social capital).<sup>26</sup> As a result, systematically gained empirical evidence of the outcomes of co-creation/co-production processes is often lacking.

However, all approaches highlight co-operation between public administrations and recipients of government services or civic society, and emphasises the involvement of recipients of services in the decision-making processes in relation to public policies and public services provision. This form of cooperation has also resulted from the recognition of a citizen as a client of public administration's services and has promoted the improvement of public services provision as one of the principal aspects of the public administration reform focused on the new public governance and management.<sup>27</sup>

The post-industrial civil society paradigm is increasingly strengthening in modern democratic public administration systems; among other principles, it is also characterised by societal equality and participation

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<sup>24</sup> W.H. Voorberg, V. Bekker, L. Tummars, *A Systematic Review of Co-Creation and Co-Production: Embarking on the Social Innovation Journey*, "Public Management Review", vol. 17, is. 9/2015, pp. 1333–1357.

<sup>25</sup> S. Parrado, G. Van Ryzin, T. Bovaird, E. Löffler, *Correlates of Co-production: Evidence From a Five-Nation Survey of Citizens*, "International Public Management Journal", vol. 16, no. 1/2013, pp. 85–112.

<sup>26</sup> R. Putans, *Public Administration's Customer Care*, in: *Baltic Business and Socio-Economic Development 2008*, eds. T. Muravska, G. Prause, Berlin 2009, pp. 300–316, 548.

<sup>27</sup> R. Putans, I. Nartisa, T. Muravska, *Strategic Planning and Management in Public and Private Sector Organizations in Europe: Comparative Analysis and Opportunities for Improvement*, "European Integration Studies", no. 6/2012, pp. 240–248.



opportunities; as a result state power is focusing more on the needs of society, which in turn, results in broad public administration reforms<sup>28</sup> carried out to improve the efficiency of the state power implementation according to the needs of society.

To ensure the systematic improvement of the provision of public services it is essential to understand why citizens as clients are satisfied or not by public services and its delivery, which allows applying the best practices for other services and clients' target groups.

The main critique of the concept related to the definition of a citizen as a client of public administration services relies on the diminished role of the citizens' civic participation and thus the positioning the individuals of the society as passive service recipients.<sup>29</sup> This situation can often be crucial for better-informed decision-making. Besides, the often-uncertain variability of the public administration's client's roles has a negative impact on the work motivation of civil servants<sup>30</sup> in terms of the implementation of public functions and delivery of public services.

Public administration reforms are continuously taking place in many countries implementing new ideas, changing and improving policies, processes, structures and other management mechanisms and instruments, boosting efficiency and solving problems and challenges.<sup>31</sup> The concept of co-creation is strongly connected to the concept of co-production, and these two concepts complement each other well. The close interaction between these two concepts to a large extent changes the roles of contemporary public service provision system's participants: politicians, officials of the governmental institutions and the recipients of public services.<sup>32</sup> However, most studies focus on the identification of influential factors, with little attention given to the results of interaction of the two concepts, which need to be in the centre of future research. Furthermore, quantitative studies are badly needed, counterbalancing the more qualitative and case studies oriented approach that prevails.

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<sup>28</sup> M. Daglio, D. Gerson, H. Kitchen, *Building Organisational Capacity for Public Sector Innovation*. Background Paper, OECD Conference "Innovating the Public Sector: from Ideas to Impact", Paris, 12–13 November 2015, p. 40.

<sup>29</sup> L. Briggs, *Citizens, Customers, Clients or Unwilling Clients? Putting Citizens First. Engagement in Policy and Service Delivery for the 21<sup>st</sup> Century*, Canberra, 2013, pp. 83–94, 220.

<sup>30</sup> C. Andrews, *Integrating Public Services Motivation and Self-Determination Theory: A Framework*, "International Journal of Public Sector Management", no. 29(3)/2016, p. 12, 1–34.

<sup>31</sup> M. Daglio, D. Gerson, H. Kitchen, op. cit., p. 40.

<sup>32</sup> CITADEL project is being implemented under the "Horizon-2020" programme, Grant agreement No 726755.



These changing roles are defined by both the characterizing principles and values of the respective public administration model, as well as by the mechanisms of cooperation among the participants of the process of “producing” and receiving of public services.

National and local governments increasingly aim to involve citizens actively in providing public welfare services and in solving social and political problems and challenges. National governments forge networks of public and private actors that produce and monitor regulatory policies and standards, and the European Union supports regional partnerships aiming to stimulate growth and employment in rural areas. In some countries, there are long traditions of citizens, civil society organizations, and public authorities joining forces and co-creating solutions to common problems.<sup>33</sup>

Additionally, the new public governance is based on innovation and the digitalization of public services’ provision that ensures wider and easier accessibility of public services as well as saving clients’ resources.

## **Collaborative Technologies and Regional Divide in Latvia**

The digitalisation trends and development of a platform economy impact developments of social collaborative technologies and scope of e-participation on societies. Although citizen participation has already been studied by scholars regularly, there is a lot of interest in better understanding the role of customers in certain public sectors in order to provide methodologies and tools for enhancing co-creation in public services where technology is a requirement.

In 2017 the IMD World Competitiveness Centre introduced the IMD World Digital Competitiveness Ranking<sup>34</sup>, which measures a country’s ability to adopt and explore digital technologies leading to transformation in government practices, business models, and society in general. The significance of digitalization is stressed by a strong positive correlation of this ranking with results of the Global Competitiveness Report.

In the World Digital Competitiveness Ranking Latvia holds 35<sup>th</sup> position among 63 countries analysed. At the same time Latvia ranks 41<sup>st</sup> in terms of future readiness, which indicates a country’s preparedness for digital transformation. The three main factors which determine future readiness are 1) Adaptive Attitudes (Latvia – 41); 2) Business Agility

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<sup>33</sup> M. Fotaki, *Towards Developing New Partnerships in Public Services*, “Public Administration”, no. 89/2010, pp. 933–955.

<sup>34</sup> IMD World Digital Competitiveness Yearbook 2017 Results. International Institute for Management Development, Switzerland.

(Latvia – 46) and IT Integration (Latvia – 36). The Adaptive Attitudes indicator shows the willingness of a society to participate in digital-related processes. The Business Agility indicator reflects the ability of firms to transform their business models in order to take advantage of new opportunities. It also relates to the level of business innovation. These are the main areas Latvia would have to improve to advance digital and overall competitiveness, as well as to reduce digital divide (IMD, 2017).

Europe's digital performance is measured by the Digital Economy and Society Index (DESI). According to DESI 2017, Latvia has strongly increased the share of broadband subscriptions and improved delivery of public services. Fixed broadband connections are widely accessible, while only 55% of rural households of Latvia had fixed broadband connections in 2015 (EU-91%). Also, the use of e-Government services has been gradually increasing, which has been greatly facilitated by implementing CSCs in major regional centres of Latvia since 2015. At the same time, according to DESI, around half of the population has low or no digital skills and businesses are exploiting technologies in a limited way. This indicates that much greater cooperation of national government, regional and local administrations with society and businesses is required to co-create better services and increase participation in digital processes.

Discussion related to the demand for high quality public services that constitute the backbone of citizens' social welfare as well as a region's competitiveness and entrepreneurship was elaborated by authors during 2016–2017 in the joint research conducted in the framework of the H2020 CITADEL project “Empowering Citizens to Transform European Public Administration” and International Institute for Management Development in Switzerland. The research has a main focus on electronic government services for non-users.

Latvia has around 2 million inhabitants, of which one third live in the capital. Municipalities have on average 8900 inhabitants. There are a total of 75 CSCs, jointly operated by state and local governments. Of these centres, 3 are operated by various central government agencies, and 72 are municipal service centres located in centres of regional significance. The centres are distributed over rural and non-rural areas and cover all five of Latvia's planning regions.

The authors aimed at selecting a representative group of 8 municipal CSCs, both rural and non-rural, with a sufficient number of customers. The municipal CSCs have been selected as they show institutional homogeneity and provide a similar range of services, unlike those located in larger cities. The CSCs that have been operational for less than one year have been excluded in the research. Seven out of eight CSCs were located

in regions with fewer than 9000 inhabitants. The 8 CSCs selected were: Ape, Auce, Charnikava, Dagda, Roja, Salaspils, Strenči, and Viļaka. After having selection selected the CSCs, we proceeded with the stratified quota sampling in each of the eight CSCs. The stratifications are made based on age, education, income, and gender (Table 1). To avoid bias, all interviews were conducted during lunch time or after working hours (but before closure of the CSC), the period when most customers go to the CSCs. In order to satisfy the quota requirements, it was necessary to visit some CSCs several times. Some additional selection criteria were used such as 1) only included customers who wanted to apply for, or have rendered, government services (State revenue services, social security, etc.), 2) customers using non-digital services only were excluded 3), only Latvian citizens or long-term residents were included.

The 141 short interviews provided a total of 279 text fragments to be analysed. The assessment of reasons for non-use are related to socio-demographic characteristics based on the research done in eight regional CSCs. Five of eight CSCs, where interviews were conducted are located in remote areas close to Latvia's external border: Viļaka CSC, is located near the border with Russia; Ape and Strenči CSCs are located near the border with Estonia; Auce CSC is close to the border with Lithuania; and Dagda CSC is near the border with Belarus. Two of 8 CSCs, Carnikava and Roja, are located near the Baltic Sea. In all cases CSCs are located in centres of regional significance. Broadband connections in these areas are not as good as elsewhere in Latvia and the Internet is not accessible everywhere. According to the Eurostat only 75% of rural households had access to Internet by broadband connection in 2016, which makes a negative impact on the use of Internet and public services, as well as on the computer literacy of inhabitants. People living in these areas are accustomed to having a lower income level and many households can't afford computers and Internet at home. Seven of eight selected regions have from 3444 inhabitants in Strenči to 8884 inhabitants in Carnikava. Only one, the Salaspils region, has 23 432 inhabitants. Taking into account that most of the visited CSCs are located in remote rural areas, this factor makes an impact on the income level and education level of respondents, as well as on the accessibility of computers and Internet, as well as knowledge and skills to use them. Customers visit CSCs and do not use Internet services individually for several non-use related reasons: low or absent skills and competence, and the perceived lack of them. The technology and complexity of entering data to request services, especially in the cases of State Revenue Service or State Social Insurance Agency systems, make these customers afraid, especially to make mistakes. Many of the people reporting lack

of skills also mention not having a computer or a scanner and a scanning service is their reason to visit CSC. Respondents find the system too complicated, and in some cases contrasted this with the simplicity of just visiting the CSC. Yet, we do not find evidence that persons labelling the system as too complicated have already used it before. This means concerns about the complicatedness of the system are likely to be a perception issue rather than an experience-related issue. This is further confirmed by the fact that 16 out of 40 respondents with higher education also mention skills and the complicatedness of the online system as a reason to come to the CSC. Some respondents indicated visiting the CSC in order to obtain information about using the online system. Several respondents mentioned a lack of Internet access as a reason for coming to the CSC and some reported on the complexity of the electronic system. An educational effect is another indicator for non- using e-services. Most non-users have only a degree in secondary education. Another group of reasons related to non-use are convenience and support: a lack of interest or need to use the electronic service. In particular, the fact that it was still possible to submit required documents on a paper, and that the CSC alternative was available anyway and free, makes customers visit the CSC. Respondents also mention geographic proximity of the CSC (close to home and to the place of work) as a reason for using the CSC. A related factor is that respondents can receive in-person help at the CSCs. Staff at the CSCs are seen to be experienced and as knowledgeable. Respondents also cite the possibility of asking additional questions and getting additional help, both about using the system and about the services sought. The following assumptions that produce digital regional divide in Latvia have been made: low income individuals that are unable to have Internet and computer, level of education that affects personal decision-making and peoples' abilities and interest to use electronic services. Taking into account that education level also very often impacts the income level of people, then less educated people are less likely to spend money to buy computers and pay for the Internet. Another factor influencing the use the electronic service is age. The authors have observed that individuals of about 50–65 years old tend not rely on e-services. The complexity of the electronic system and fear of making a mistake, as well as a lack of understanding of the procedure have a strong negative impact on the use of the electronic services. An important factor in rural areas is the desire to discuss the procedure in person and receive help. This is also a way of socializing, especially for older people or unemployed, who have the opportunity to meet other people with similar problems and/or interests and discuss them. Training courses for learning to work with online services rather than just

offering offline alternatives are also required.<sup>35</sup> In addition, simple courses for people to do Internet banking in cooperation with commercial banks would also be needed, and could help to understand how to access and use government services online, as according to the Eurostat 62% of people used internet banking in Latvia in 2016.<sup>36</sup> The state subsidies for cheap Internet and computer access for people with low income in rural areas, and extension of broadband to cover 100% of Latvia are both needed for regional cohesion and to minimize the regional digital divide.

## Conclusion

Development of a concept of the social investment and innovation is a core element in digitalisation public services. The authors suggest to stress in social research a distinct understanding of the co-creation as local, regional, and national governments rely on digital provision of government services.

In the assessment of the current developments related to social innovation and co-creation, the authors concluded that issues of non-use of digital services are not widely discussed. Further research is badly needed to gain a better understanding of why citizens fail to use digital government services.

Since the emergence of the Internet, the digital divide has become an enormously popular concept. Great inequalities in IT implementation, uses and skills exist. The digital divide has several dimensions: social, economic and political. Poor or less educated people, and people leaving in rural areas show low IT indicators. There is evidence that low-income people, communities and regions are only partially digital.

The authors highlighted that digitalisation and technological infrastructure are considered as fundamental factors in competitiveness of countries and regions. The further digital development is a precondition for diminishing regional and wellbeing divide and a facilitator of administrative processes towards better services and achievements in wellbeing of citizens.

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<sup>35</sup> T. Muravska, S. Stacenko, Z. Zeibote, *Digital Single Market Conducive to the Promotion of Social Dialogue and Social Investment in the Regional Cohesion Contextin*, New Challenges of Economic and Business Development – 2017 Digital Economy, Riga 2017, pp. 631-641.

<sup>36</sup> Digital Economy and Society Statistics – Households and Individuals, Eurostat, 2017.

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