

REGIONAL DEVELOPMENT ISSUES AND CONSEQUENCES OF THE COVID-19 PANDEMIC: EXPERIENCE AND POSSIBILITIES FOR REMOTE WORK

DACE ŠTEFENBERGA¹, BAIBA RIVŽA², BIRUTA SLOKA³

Ventspils University of Applied Sciences,
Latvia University of Life Sciences and Technologies, University of Latvia (Latvia)

ABSTRACT

We are living in world of dynamic changes, and transformations of global systems and the environment around us leave an impact on how we define our goals, strategies and values at a professional level, and also in everyday life. The ecosystems of innovation and economic development are related to human resources. In that case, some simple questions arise: What? How? Why? But the answer is never too simple. While changes are small and do not interrupt our everyday life, it is simple to overcome; but there are changes that immediately have a big impact on people's lives. And the Covid-19 pandemic is that kind of change. A Smart Specialisation Strategy defines the prospects for economic development for each region. It is necessary to develop and implement strategic plans and policies for development at a regional and national level, and include social capital, cooperation and innovation. And there are usually some companies that lose and some companies that win, due to the different types of crisis and unexpected conditions. The aim of this paper is to analyse how the dynamic environment impacts on regional development and entrepreneurship during the Covid-19 pandemic crisis. The aim of this paper is to study possible changes and solutions in different industries at a regional level, and develop recommendations. The materials and methods used are monographic method (literature studies), statistical data, and the analysis of a survey of companies in the region in order to analyse the transformation process of the regional economic environment. Conclusions: cooperation, innovation and local entrepreneurship at a regional level have an important impact on economic development at a national level.

KEY WORDS: *innovation, regional development, cooperation.*

JEL CODES: R10; M10; M11.

DOI: <http://dx.doi.org/10.15181/rfds.v33i1.2205>

Introduction

The development of all regions creates economic development at a national and global level, and we have to take this into account when planning and organising long-term strategies. We are living in a world of dynamic changes, and the transformation of global systems and the environment around us have an impact on how we define our goals, strategies and values at a professional level and in everyday life. The ecosystems of innovation and economic development are related to human resources. In this case, simple questions arise: What? How? Why? (Sinek, 2009: 76). But the answer is never simple. While changes are small and do not interrupt our everyday life, they are simple to overcome; but there are changes that have a big impact on people's lives immediately. Decisions based on the prospects for tomorrow will have an impact on tomorrow's solutions, and only enterprises that use new approaches guided by the source of the future, rather

¹ Dace Štefenberga – Ventspils University of Applied Sciences, Faculty of Economics and Management, Centre of Entrepreneurship, Innovation and Regional Development, Latvia

E-mail: daces@venta.lv

Tel. +371 268 002 88

² Baiba Rivža – Latvia University of Life Sciences and Technologies, Faculty of Economics and Society Development

E-mail: Baiba.Rivza@llu.lv

³ Biruta Sloka – University of Latvia, Faculty of Business, Management and Economics, Latvia

E-mail: biruta.sloka@lu.lv

than repeating the models of the past, will be more successful and able to provide benefits to society. The Covid-19 pandemic has made changes to our habits, ways of working, and communications, and only those organisations and individuals that are able to adapt to the situation before it occurs, or at the very beginning, will be more successful at different levels, both personal and organisational.

Problem: Challenges identified after the first wave and during the Covid-19 pandemic are related to issues of how to overcome the crisis in different industries and different regions, and appear faster than the ability of organisations and individuals to react to them.

Purpose: To analyse how the dynamic environment impacts on regional development and entrepreneurship in the Covid-19 pandemic conditions, and define the possible changes in the entrepreneurial environment.

Object: Possible changes in entrepreneurship and regional development.

Tasks: To analyse scientific literature on the role of innovation in regional development and entrepreneurship. To analyse data obtained in a survey of opinions of entrepreneurs in the region.

Methods: Scientific publications and results of previously conducted research, a survey of entrepreneurs in the region in 2020, analytical methods of survey data analysis.

1. Aspects of Innovation and Innovative Entrepreneurship in Economic Development and Recent Aspects of the Development of Entrepreneurship

Economic development has gone on over time, from the first Industrial Revolution in 1760 and the findings of Adam Smith, the father of economic theory, to nowadays, the fourth Industrial Revolution, artificial intelligence, the digital transformation, and its impact on society (WEF, 2018: 563). There have been different concepts in this long period of time, and each industrial revolution has started with a different type of invention, which had a huge impact on society and the way of working and living. The first Industrial Revolution started with James Watt's steam engines, and the use of natural resources to mechanise production. The second Industrial Revolution used electricity and electric power to create mass production. The third Industrial Revolution was in the use of electronics and information technology to automate production. Now we are living through the fourth Industrial Revolution. Before, we thought our greatest challenge would be artificial intelligence versus humanity; and then 2020 came, with a bigger challenge, the Covid-19 pandemic, and no one was prepared. Many academic research findings have recently been devoted to these issues (Shepherd, 2020: 1752). Previous industrial revolutions made changes to habits of human resources. Economies worldwide moved more and more from an agricultural economy and living in villages to the production economy and starting to live in cities. Electric power allowed people to work longer. And the internet made things connected worldwide, and created the possibility work from different places; smartphones know more about their owners than they do themselves, and also provide the possibility to work remotely. But Covid-19 changed essential habits away from the unusual mode. If previous industrial revolutions brought people together in bigger cities, providing important advantages to living there, this spring came with compulsory social distancing and the requirement to stay at home and not meet other people, and this was suddenly an advantage for rural regional areas, being a safe environment for living and working remotely, for those who could.

The definition of innovation by A. Schumpeter is 'creative destruction' by national and regional innovation systems (Andersson, Karlson, 2004: 22), multi-industry innovation capacity (Haneda, Ito, 2017: 63; Azar, Ciabuschi, 2016: 329; Taalbi, 2017: 1142). Nevertheless, the Central Bureau of Statistics of Latvia defines innovation as 'the implementation in practice of a new or fundamentally improved product (goods or service) or a new market method or organisational method' (Central Bureau of Statistics, 2018). Today, it is becoming a more and more multi-dimensional systemic approach (Šarmers, 2018: 325; Frynas, Mol, Mellahi, 2018: 82). Now we are back to the concept of 'innovation as change', and we usually think in a more complex way, talking about innovation as change more related to human resources, and the well-being of human resources who generate the well-being of the organisation they are loyal to. Leadership and management are changes in these concepts.

It is related to the historical development of innovation and its cycle (Godin, 2015: 314), and the importance of innovation to regional development (Edgar, Abouzeedan, Hedner, Maack, Lundqvist, 2013: 118). The essence of innovation is to recreate the world according to a particular ideal or vision (Nonaka, Takeuchi, 1995: 75).

Regarding economic theory, we should stress that traditional entrepreneurship focuses on supply-demand as the driving force of economic development (Smith, 1776; Marshal, 1890), but the most important difference for innovative entrepreneurship is that it starts with an idea (Nonaka, Takeuchi, 1995: 125; Dudley, 2016: 67; Burlingham, 2016).

A company develops its innovative idea in the market. An entrepreneur can create his own idea, but it is important for him first to answer the question 'Why?', and inspire others who will believe in the idea and help to drive it with the same enthusiasm (Sinek, 2009). This is done by formations of interest groups, or clustering, networking, openness of ideas, education (higher, technological), creativity, and knowledge formation. At this level of cooperation, some of the most important tasks are the development of creativity and knowledge building. Uldis Pīlēns, a company owner and entrepreneur for decades, has stressed that in moments of crisis, entrepreneurs usually start to become innovators: 'Troubles and problems are the mother of invention' (Pīlēns 2019: 276). Also, in the spring of 2020, we witnessed a lot of changes in traditional entrepreneurship and its ability to adapt to these unstable conditions and yield good results. Nevertheless, the involvement of society is a very important factor in every crisis situation, and shows how successfully the state will overcome it.

2. Regional Development Theoretical Issues

The region was previously seen more as geographical concept (UNIDO, 2019); today, it has been transformed more into an economic and social concept, and several regional factors and systems have been discussed in scientific research for regional development (Fritsch, Schroeter, 2010; Hajek, Henrikes, 2017; Martins, Ling, 2017; OECD, 2013; Anderson & Karlson, 2004; Doloreux, 2004; Pekkarinen & Harmakorpi, 2006; Pīlēns, 2019). If we look at the region as a social concept, then human resources are one of most important resources that make economic regional development successful. Each member of society makes a contribution to development processes individually, and only a balanced, motivated personality can make a contribution to development at an institutional level. In a dynamic environment, there is a set of environmental factors that can be grouped by type of impact and defined as PESTEL analysis. The legal, ecological, technological, social, economic and political environment, constantly changing their influence, form a set of external environmental factors, influencing entrepreneurship at all levels, from micro to mundo.

All aspects of a personality, which Robin Sharma (Sharma, 2019) has defined in four ways as mindset, heart set, soul set, and health set, create a balanced personality: an individual combining intelligence of mind, emotional intelligence, physical intelligence, and even intelligence of the soul. Changes in the way of living, approaches to reducing stress at work, and the creation of a meaningful life balance, became some of the challenges and issues this spring. Regions and rural areas became a safe environment for living and working, including remote work. Institutions learned a lot: how to organise work remotely, including different meetings and conferences, and this helped to reduce the costs of accommodation, transport, etc.

The role of regional development policy in the creation of innovative entrepreneurship actualises the disadvantages of making this policy 'from top down', not involving different organisations and entrepreneurs, who will have to overcome the crisis and solve the problems in the regional policies of the EU and Latvia. The role of knowledge creation in the region is now very important again, because social distancing and going to rural and thinly populated areas provides possibilities for the remote learning process and personal development, to focus on humanity, mindfulness and emotional intelligence. And thanks to new, innovative tools, we can use them for scheduling, planning and working, so that we can save time, money and reduce stress, which is a very important aspect of staying healthy. There are a lot of companies providing and teaching biohacking elements, which is a healthy lifestyle, physical activity and spending time in nature, which is the only way to boost immunity.

The National Research Programme project 'The Economic, Political and Legal Framework for Preserving the Potential of the Latvian Economy and Promoting the Growth of Competitiveness after the Crisis

Caused by the Pandemic (reCOVery-LV)' was organised in Latvia from July to December 2020. Latvia University of Life Sciences and Technologies and other universities and public institutions participated in this state-run research programme, in order to define the challenges and solutions in the regions during and after the pandemic. The authors of this publication participated in projects in the research programme, and carried out research during the project. The project included a questionnaire.

3. Regional aspects of the development of the Kurzeme region and the possible impact of the Covid-19 pandemic

The development of all regions creates economic development at a national and global level. The ecosystems of innovation and economic development are related to human resources and cooperation between actors in the innovation system. The Penta Helix model is more topical for innovation processes in regional development. Local entrepreneurship boosts economic development in the regions, and it is very important to prosperity at a national level. Latvia is a very monocentric state: even before the pandemic crisis, GDP in the regions were the following: Riga region 135% of the average national level of GDP in 2016, Kurzeme 75%, Latgale 51%, Vidzeme 66%, Zemgale 63% (Guidelines for Regional Policy 2021–2027, 2019). During the project, the way the dynamic environment impacts on regional development and entrepreneurship continued to be analysed. The Covid-19 pandemic has made changes to habits: ways of working, communication, and the view of personal development.

Statistical data were evaluated, and a survey carried out during the project. According to the statistics of employment (occupied workplaces) in the Kurzeme region in the first quarter of 2020, there was an increase in industries related to transport, construction, the extraction industry, finance and insurance; and a decrease in industries related to tourism services, ICT, real estate operations, the arts and entertainment. Restrictions on the spread of the virus affect each industry differently, and restrictions also differ between the spring and now: industries where it is possible to work outside or remotely are less affected than industries where there is direct physical contact, such as beauty services.

The assessment of the capacity of regions to adapt to remote working is based on the diversity of tasks performed in different types of occupations, and is the object of further investigation.

The survey was started in August 2020, and will be finished in December 2020. The survey was carried out in all regions of Latvia, but we present the results from the Kurzeme region. By 30 November, 97 completed questionnaires had been received: 61% from service companies, and 39% from production companies. Most of the companies are small or medium-sized enterprises (53% have no more than nine employees, 22% have ten to 49 employees). Most of the enterprises had been working for more than five years, and 46.3% had been working for more than 15 years; 2% were start-ups. The industries the most represented were the following: agriculture, forestry and fisheries 22%; housing and public catering 14.6%; manufacturing 12.2%; wholesale, distribution and retail 8.5%; transport and storage 6.1%; ICT 3.7%.

There were questions in the questionnaire to define what changes are to be expected in regional entrepreneurship overall, changes in particular enterprises, and challenges enterprises will face in the near future.

The representatives of companies mentioned mostly the drop in customer solvency, and the use of digital technologies. In the first wave of the pandemic in the spring of 2020, employees in institutions in Riga and other big cities moved to rural areas or small towns, and even rented facilities for several months to live and work in. Only a good internet connection was needed. It depends on the industry, but many enterprises started to combine possibilities to work remotely and in the office, and during the summer they organised workspace for employees in their homes in order to be prepared for the second wave of the pandemic, or even closed their offices.

Representatives of companies mentioned mostly the extra use of new digital technologies (digital sales and communication with the customer), and more use of digital technology in the enterprise. Global enterprises (especially in the ICT sector) had more possibilities to adapt to the situation and start or continue working remotely, since they had been doing it worldwide partly for years. Studies in institutions of higher education were organised remotely very quickly, and succeeded, and scientific activities were also carried out quite successfully: the co-creation of research by using different teamworking tools (such as Google drive, etc), participation in conferences, and networking were organised remotely, without reducing research activity.

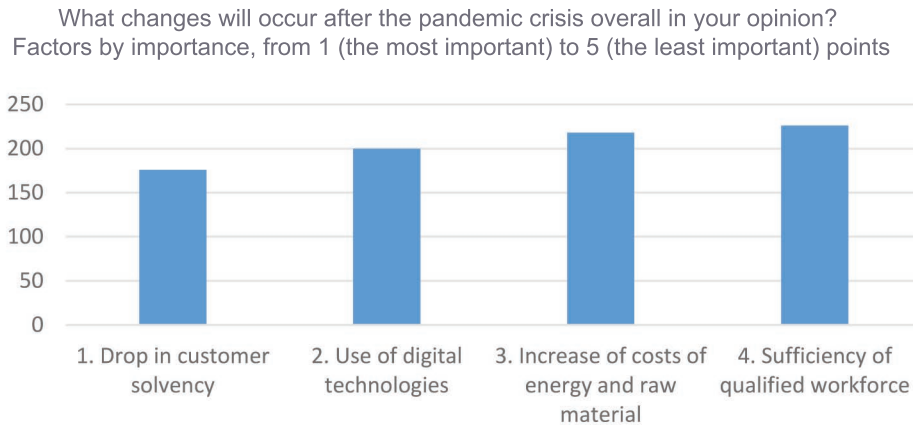


Figure 1. An evaluation of the changes in entrepreneurship, overall, 2020, $n = 97$.

Source: author's work, based on research.

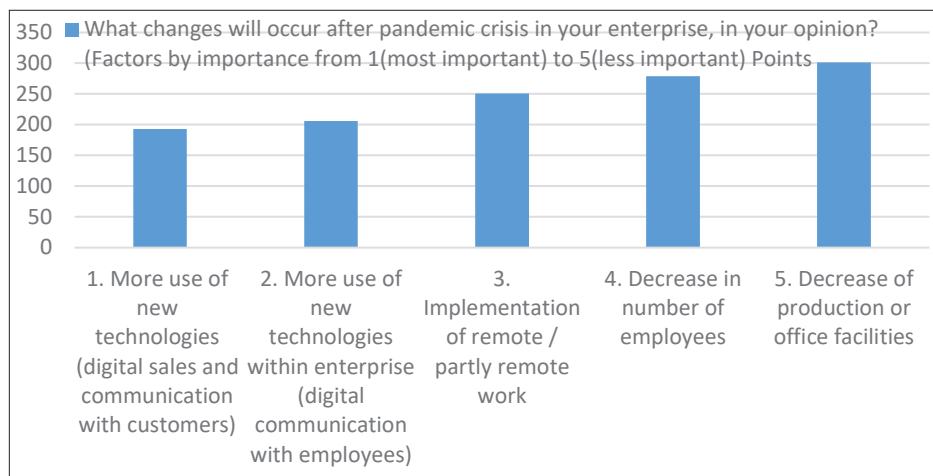


Figure 2. An evaluation of changes in particular enterprises, 2020, $n = 97$.

Source: author's work, based on research.

The challenges mentioned the most were the acquisition of new digital technology, the adoption of new international markets, and the acquisition of new managerial skills. The attraction of investment was mentioned only in fourth place. Unfortunately, large production companies had their supply chains impacted due to the Covid lockdowns in other European countries. Another challenge in big companies is the organisation of production lines in a way to organise the work and the social distancing of employees. Psychological aspects should be considered in all industries, while burn-out, uncertainty and other issues have an impact on every employee. Nevertheless, everyone is responsible for their own personal development, healthy lifestyle, goals and activities. A safe and clean environment at work and living near nature can help.

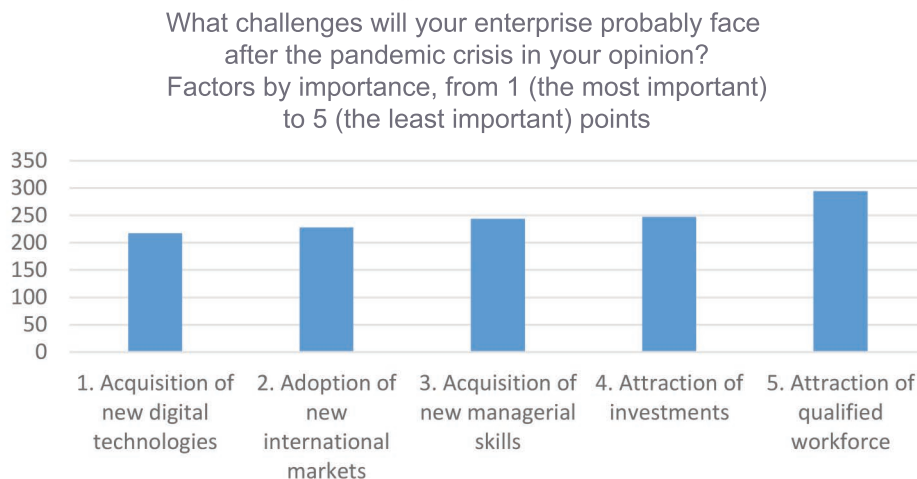


Figure 3. An evaluation of the future challenges for enterprise, 2020, $n = 97$.

Source: author's work, based on research.

Conclusions

Research into entrepreneurs in the region covered the following topics and showed the following trends:

Possible challenges in the economic recovery process that entrepreneurs mentioned most: adopting new digital technologies; accessing new international markets; possible changes in entrepreneurship after the pandemic overall; a drop in customer solvency; the use of digital technologies. Possible future changes in companies: implementation of new technology to cooperate with customers, digital sales and communications; digital technologies in communication and working with employees. Although tourism was very badly affected during the first wave of the pandemic in the spring of 2020, we should mention that it was good for camping sites and other tourism ventures that could offer the possibility to rent small houses in less populated places in rural areas; people from Lithuania and Estonia made a great contribution to the development of tourism in Baltic Sea coastal areas in Kurzeme.

The region is a very good platform for start-ups and business ideas. The role of regional centres in economic development is increasing, because of the possibility to create an environment for living and working close to nature in a relatively safe environment. The use of natural resources in regional specialisation (the potential of the Baltic coast) for nature tourism, recreation and human resource development is a subject for future research, and boosts opportunities for remote working. The contribution of every member of society is crucial to overcome the consequences of the pandemic crisis.

Acknowledgment: this paper was supported by the National Research Programme project 'The Economic, Political and Legal Framework for Preserving the Potential of the Latvian Economy and Promoting the Growth of Competitiveness after the Crisis Caused by the Pandemic (reCOVery-LV)'.

References

- Andersson, M., Karlsson, C. (2004). *The Role of Accessibility for the Performance of Regional Innovation Systems*. Working Paper Series in Economics and Institutions of Innovation 9. Royal Institute of Technology, CESIS – Centre of Excellence for Science and Innovation Studies, 27 p.
- Arnkil, R., Jarvensivu, A., Koski, P., Piirainen, T. (2010). *Exploring Quadruple Helix. Outlining User Oriented Innovation Mode*. Tampere, 131 p.

- Azar, G., Ciabuschi, F. (2017). Organizational innovation, technological innovation, and export performance: The effects of innovation radicalness and extensiveness. *International Business Review*, Vol. 26, No. 2, p. 324–336.
- Boo, E., Abouzeedan, A., Hedner, T., Maack, K., Lundqvist, M. (2013). Using scenario planning in regional development context: the challenges and opportunities. *World Journal of Science, Technology and Sustainable Development*, Vol. 10, No. 2, p. 103–122.
- Buerlingham, B. (2016). *Small Giants: Companies that Choose to be Great instead of Big*. New York: Penguin.
- Calzada, I., Cowie, P. (2017). Beyond Smart and Data-Driven City-Regions? Rethinking Stakeholder- Helixes Strategies. *Regions Magazine*, Vol. 308, No. 4, p. 23–28.
- Centrālā Statistikas pārvalde. (2018). Definīcijas, pieejams <https://www.csb.gov.lv/lv/statistika/statistikas-temas/ekonomika>
- Carrillo, F., Schiuma, G., Lerro, A. (2008). Knowledge-based capital in building regional innovation capacity. *Journal of Knowledge Management*, Vol. 12, No. 5, p. 121–136.
- Crescenzi, R., Filipetti, A., Iammarino, S. (2017). Academic Inventors: Collaboration and Proximity with Industry. *Journal of Technology Transfer*, Vol. 42, No. 4, p. 730–762.
- Dosi, G., Grazzi, M., Moschella, D. (2017). What do firms know? What do they produce? A new look at the relationship between patenting profiles and patterns of product diversification. *Small Business Economics*, Vol. 48, No. 2, p. 413–429.
- Dudley, A. (2017). *Clarity for Solos: Secrets and Strategies for More Forms, Momentum, and Meaning in Your One Persons Small Business*. Florida: USA, 97 p.
- Etzkowitz, H. (2011). *The Triple Helix: university – industry – government innovation in action*. Sweden: Science Policy Institute, p. 1–164.
- Fini, R., Grimaldi, R., Santoni, S., Sobrero, M. (2011). Complements or substitutes? The role of Universities and Local context in supporting the creation of academic spin-offs. *Research Policy*, Vol. 40, No. 8, p. 1113–1127.
- Frynas, J. G., Mol, M. J., Mellahi, K. (2018). Management Innovation Made in China: Haier's Rendanheyi. *California Management Review*, Vol. 61, No. 1, p. 71–93.
- Galvao, A., Mascarenhas, C., Marques, C., Ferreira, J., Ratten, V. (2019). Triple helix and its evolution: a systematic literature review. *Journal of Science and Technology Policy Management*, Vol. 10, No. 3, p. 812–833.
- Godin, B. (2015). *Innovation Contested the Idea of Innovation Over the Centuries*. London: Routledge, 354 p.
- Griffin, R. W. (1999). *Management*. Sixth Edition. Boston, New York: Houghton Mifflin Company, 747 p.
- Ito, K., Haneda, S. (2017). Exchange Rate Uncertainty and R&D Investment: Evidence from Japanese Firms. *The Developing Economies*, Vol. 55, No. 2, p. 56–74.
- Kolb, M., Fröhlich, L., Schmidpeter, R. (2017). *Implementing sustainability as the new normal: Responsible management education – From a private business school's perspective*. *The International Journal of Management Education*, Vol. 15, No. 2, p. 280–292.
- Mason, C., Castleman, T., Parker, C. (2008). Communities of enterprise: developing regional SMEs in the knowledge economy. *Journal of Enterprise Information Management*, Vol. 21, No. 6, p. 571–584.
- Martins, J. T., Ling, S. (2017). Local Enterprise Partnerships: Socialization Practices enabling business collective action in regional knowledge networks. *Knowledge & Process Management*, Vol. 8(3), p. 392–395.
- Nonaka, I., Takeuchi, H. (1995). *The Knowledge Creating Company. How Japanese Companies Create the Dynamics of Innovation*. Oxford University Press, 284 p.
- Ostrom, E. (2010). Beyond Markets and States: Polycentric Governance of Complex Economic Systems. *American Economic Review*, Vol. 100, No. 3, p. 641–672.
- OECD Regional Development Policy. (2019). Available on line: www.oecd.org/gov/regional-policy/regionaldevelopment.htm
- Pīlēns, U. (2019). *(Mans) uzņēmēja kods*. Rīga: Zvaigzne ABC, 431 lpp.
- Prange, C., Schlegelmilch Bodo, B. (2018). Managing Innovation dilemmas. The Cube Solutions. *Business Horizons*, Vol. 61(2), p. 309–322.
- Pekkarinen, S., Harmaakorpi, V. (2006). Building regional Innovation Networks: The definition of an age business core process in a regional innovation system. *Regional Studies*, Vol. 40(4), p. 401–413.
- Sentana, E., Gonzalez, R., Gasco, J., Llopis, J. (2017). The social profitability of business incubators: a measurement proposal. *Entrepreneurship and Regional Development*, Vol. 29, No. 1–2, p. 116–136.
- Sharma, R. (2019). *The 5am Club: Own Your Morning. Elevate Your Life*.
- Shepard, J. M. (2017). When incubators evolve: New Models to assist innovative entrepreneurs. *Entrepreneurship and Regional Development*, Vol. 29, No. 1–2, p. 116–136.
- Shepherd, D. A. (2020). COVID 19 and Entrepreneurship: Time to Pivot? *Journal of Management Studies*, Vol. 57, No. 8, p. 1750–1753.

- Sinek, S. (2009). *Start with Why: How Great Leaders Inspire Everyone to Take Action*, 206 p.
- Šarmers, K. O. (2018). *U teorija. Vadība no topošās nākotnes*. Rīga: Zvaigzne ABC, 447 lpp.
- Šimanskienė, L., Paužuolienė, J., Paužuolis, V. (2015). Characteristics of Innovative Organizational Culture in Small and Medium Enterprises. *Management of Organizations: Systematic Research*, Vol. 73, p. 63–81.
- Taalbi, J. (2017). What Drives Innovation? Evidence from Economic History. *Research Policy*, Vol. 46, No. 8, p. 1437–1453.
- VARAM. (2019). Project of guidelines for regional politics of Latvia 2021–2027.
- World Economic Forum*. (2018). The Global Competitiveness Report, 656 p.

COVID-19 PANDEMIJOS IŠŠŪKIAI IR PASEKMĒS REGIONO PLĒTRAI: NUOTOLINIO DARBO PATIRTYS IR GALIMYBĒS

DACE ŠTEFENBERGA, BAIBA RIVŽA, BIRUTA SLOKA

Ventspīlio taikomųjų mokslų universitetas, Latvijas gyvybės mokslų ir technologijų universitetas,
Latvijas universitetas (Latvija)

Santrauka

Gyvename dinamiškų pokyčių pasaulyje, o globalios sistemos ir mus supanti aplinka lemia tai, kaip mes apibrėžiame savo tikslus, strategijas ir vertybes profesiniu lygmeniu, kasdieniame gyvenime. Inovacijų ekosistema ir ekonomikos plėtra susijusios su žmogiškaisiais ištekliais. Nors nedideli pokyčiai mūsų kasdienio gyvenimo netrikdo, yra pokyčių, kurie žmonių gyvenimą ypač paveikia. Vienas tokių – COVID-19, tapęs staigių ir didelių pokyčių priežastimi.

Pažangios specializacijos strategija apibrėžia kiekvieno regiono ekonominio vystymosi perspektyvas. Būtina parengti ir įgyvendinti strateginius regioninio ir nacionalinio lygmens plėtros planus bei politiką, kuri turi apimti socialinį kapitalą, bendradarbiavimą ir inovacijas. Vykstant pokyčiams visada vieni kažką praranda, kiti, esant krizei ar netikėtai situacijai, iš to laimi.

Šiame straipsnyje siekiama išanalizuoti, kaip regionų vystymąsi ir verslumą paveikė dėl COVID-19 pandemijos prasidėjusi krizė. Siekiama ištirti galimus pokyčius įvairiose pramonės šakose regioniniu lygmeniu, aptarti galimus sprendimus ir parengti rekomendacijas. Rengiant straipsnį, siekiant išanalizuoti regionų ekonominės aplinkos transformacijos procesą, taikyti šie metodai: mokslinės literatūros ir statistinių duomenų, regiono įmonių apklausos duomenų analizė. Taigi bendradarbiavimas, inovacijos ir vietos verslumas regioniniu lygmeniu daro didelę įtaką nacionaliniam ekonomikos vystymuisi.

PAGRINDINIAI ŽODŽIAI: *naujovės, regioninė plėtra, bendradarbiavimas.*

JEL KLASIFIKACIJA: R10; M10; M11.

Received: 2020-11-30

Revised: 2020-12-27

Accepted: 2021-01-10