

RESTART: Innovative Entrepreneurship Model

The Impact of COVID-19 on MSMEs

(RESTART PR2 T2.2 Output)

SLOVAKIA Mapping Input

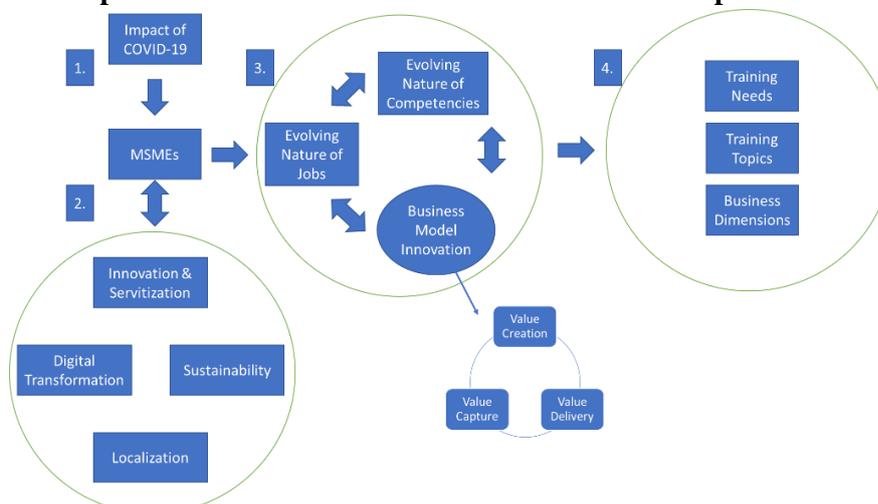
Introduction

The core of the mapping is based on the investigation of the impact of COVID-19 on MSMEs in Slovakia. It has been prepared by Comenius University in Bratislava, Faculty of Management and Slovak Business Agency as the secondary mapping output within the RESTART Project Result 2, Task 2.2 “Gauging pandemic impact on business operations”. The analysis is through the “VET lens” and is not aimed at collecting generic impact but rather identifying the emergence of new and evolving needs for training, upskilling, and retraining due to the impact of COVID-19 on MSMEs. The informed insight contained in this Mapping Input will be used for the next stages of the project, namely: a) PR2 Task 2.3 Match Innovative Biz Models and MSME needs, and b) PR2 Task 2.4 Define Evolving MSME Jobs in Post Pandemic.

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The impact of COVID-19 on MSMEs: RESTART conceptual framework



Research questions:

1. How has COVID-19 impacted MSMEs?
2. What has been the impact of 4 megatrends on MSMEs?
3. What changes have occurred in business models, MSME jobs, and entrepreneurial competencies?
4. How have these changes affected business dimensions, training needs, and training topics for growth and competitiveness?

Topic 1: Impact of COVID-19 on MSMEs

The review of secondary resources on the impact of COVID-19 on MSMEs in Slovakia revealed the following list of inputs:

- **Gross production** - The gross production volume of micro, small and medium-sized non-financial enterprises (MSMEs) decreased by 3,196 mil EUR (4.84%) in 2020 compared to 2019. Gross production of non-financial companies (both MSMEs and large enterprises) fell sharply, especially in the accommodation and catering sector, industry, transport, and other services. On the other hand, the less affected sectors were the trade and information sectors. (SBA, 2021a)
- **Added value** - The added value of non-financial MSMEs decreased by 973 mils. EUR (3.88%) in 2020 compared to 2019. However, the positive result was in the first quarter of 2021, when added value increased at non-financial MSMEs compared to the previous period. The effects of the pandemic on added value were most pronounced (both in MSMEs and large non-financial enterprises) in industry, the accommodation and catering sector, and transport. On the contrary, non-financial enterprises operating in trade, information, and other services sectors reached a total increase in added value compared to the previous year. (SBA, 2021a)
- **Profit** - Non-financial MSMEs reported a lower economic profit of 640 mil EUR (11.78%) in 2020 compared to 2019. The impact of the pandemic on profit generation was most pronounced for micro non-financial entrepreneurs (overall decrease of almost 18%) in 2020 compared to 2019. The lower impact was on medium (almost 11%) and small (more than 3%) non-financial entrepreneurs. The information industry is the industry that made a higher profit during the pandemic in 2020 than in the pre-pandemic year of 2019. However, the most significant decline was recorded by enterprises operating in the accommodation and catering services, construction, and other services sector. (SBA, 2021a)
- **Sales** - 94% of MSMEs recorded a decline in sales during the first wave of the COVID-19 pandemic (April, May). An identical share, 94% of MSMEs, recorded a decline in sales even in the second wave of the pandemic (the 2nd wave of the pandemic was still running during this survey). The most affected sectors by anti-pandemic measures were catering, arts, entertainment, and recreation in both waves. The decline in sales was significantly higher than the aid provided by the state in almost half of the surveyed companies (49%). The worst situation was among entrepreneurs in the gastronomy sector, where close to two thirds (65%) of entrepreneurs recorded a significantly higher decline in sales than state aid. Almost a third (32%) of the companies didn't use state aid for various reasons as of October 20th, 2020.¹ (SBA, 2020a)
- **The number of employees** - On a year-over-year comparison, the average number of employees in non-financial MSMEs decreased by 16,303 persons (2.07%) in 2020. The number of employees employed in micro non-financial enterprises was not as significant as in small, medium (and large) non-financial business entities naturally due to their size. The employees' decline was reached in all sectors except construction one in 2020 compared to 2019 (SBA, 2021a). In general (both for MSMEs and large enterprises), the number of vacancies registered by the employment offices decreased from 90 thousand in February to 66 thousand vacancies in December 2020. The highest decline was recorded in the Bratislava region, where the posted vacancies² were still the largest amongst the rest of Slovakia in December 2020. (Guzi, M. & Fabo, B., 2021)
- **Business resilience** - Almost half of the MSMEs (46%) in the most affected sectors by the pandemic declared that they could not do business for more than 2 months under the current

¹ The survey was done with 1109 respondents (MSMEs) in sectors most affected by the COVID-19 pandemic (accommodation services, catering services, arts, entertainment, recreation, sports, education, retail) between October 13th – 20, 2020

² At profesia.sk portal

restrictions (restrictions in force on October 15th, 2020). Only 22% of the surveyed MSMEs would be able to do business for half a year or more. Most companies at risk were in the catering and accommodation services sector and start-ups. The least vulnerable were MSMEs operating in the retail and education sectors.³ (SBA, 2020a)

- **Anti-pandemic measures** - Up to 95% of the MSMEs in the most endangered sectors felt the negative effects of the adoption of anti-pandemic measures in connection with the ongoing second wave of the COVID-19 pandemic in Slovakia. At that time, 72% of respondents expected a significant negative impact on business, and another 23% of entrepreneurs expected a slightly negative impact.³ (SBA, 2020a)
- **Preferred measures in the short-term** - The most preferred measures to mitigate the effects of the negative development of the ongoing pandemic crisis in the short run were remission of social security contributions (54.7%), the increased compensation contribution for the loss of income (47.3%), the introduction of subsidies for other fixed costs (*e.g., energy*) (29.3%) and increase in the amount of direct subsidy to pay rent (from the current 50% of rent) (26.1%).⁴ (SBA, 2021b)
- **Preferred measures in the long-term** - Preferred measures reflecting the long-term problems of the business environment in Slovakia include a reduction of administrative burdens and red tape (52%), an income tax reduction (47.3%), a partial opening of establishments (46.8%), and a substantial reduction of the VAT rate (*e.g., 10%*) (45.4%). Almost a third of respondents would welcome improved availability of information about support programs (31.1%), and more than a fifth of MSMEs would welcome consulting on how to overcome the crisis period (22.1%).⁴ (SBA, 2021b)

The COVID-19 pandemic impact on MSMEs during the first and the partially second wave was significant. The most endangered business spheres were accommodation, catering, arts, entertainment, recreation, sports, education, and retail. Anti-pandemic measures were reflected in lower gross production, added value generation, profit, sales, redundancies, and overall business resilience. As for bridging these impacts, MSMEs marked as the most requested measures, remission of social security contributions and increasing contribution of income loss compensation according to the SBA 2021 survey. However, the pandemic crises also revealed long-lasting problems in the Slovak market environment. As the most preferred long-term measures, more than 50% of the respondents indicated a reduction of administrative burdens and red tape, more than 40% stated income tax reduction, partial opening of establishments, and a substantial reduction of the VAT rate, more than 30% would welcome improved availability of information about support programs, and more than 20% would welcome consulting on how to overcome the crisis period.

³ The survey was done with 1109 respondents (MSMEs) in sectors most affected by the COVID-19 pandemic (accommodation services, catering services, arts, entertainment, recreation, sports, education, retail) between October 13th – 20, 2020

⁴ The survey was done with 658 respondents (MSMEs) between February 22nd and March 1st, 2021

Topic 2: Impact of 4 megatrends on MSMEs

The review of secondary resources on the impact of 4 megatrends on MSMEs in Slovakia revealed the following list of inputs:

- **Adopting service-based business models** - Business environment aspects such as decreasing profit margins and revenues in manufacturing as well as internal drivers such as financial, strategic, and marketing aspects promote adopting service-based business models. Even though the large companies offer a higher share of product-service combinations than MSMEs, the difference is not significant. Service secondary products of manufacturing output went from 5% in 2000 to 8% in 2014 in Slovakia. (European Commission, 2018a)
- **Servitisation and increased value-added content of services** – Nearly 27% of Slovak MSMEs were servitised in 2018, which ranked Slovakia in 17th place in EU-28 (European Commission, 2018b). Manufacture of motor vehicles, trailers, and semi-trailers were sectors with the highest value-added content of services which went from 6% in 2000 to 18% in 2014. (European Commission, 2018a)
- **Lack of service innovation support schemes** - The state-of-the-art analysis of Things + international project supported by Interreg Central Europe on existing/predicted service innovation support schemes in central Europe countries (Italy, Germany, Austria, Slovenia, Croatia, Hungary, Czech Republic, Slovakia, Poland) suggests that in the programming period 2014-2020 service innovation was not specifically addressed by innovation measures anywhere at a national or regional level using ERDF funds nor by any other internal source. (Tórz et al., 2020).
- **Country-level/aggregated innovation performance** - In an era of digitalisation, innovation is becoming an increasingly important success factor for MSMEs. Although there is already some support in Slovakia for innovative enterprises, Slovakia's innovation performance still lags behind other EU countries (SBA, 2020b). According to European Innovation Scoreboard 2021, Slovakia ranked 24th among the EU-28 countries (European Commission, 2021a).
- **MSME innovation barriers** - MSMEs in Slovakia perceive innovation barriers in the lack of their own available financial resources and in the acquisition and retention of qualified employees. Non-innovating enterprises also reported that low demand for innovation, high innovation costs, difficulties in obtaining government subsidies or grants for innovation, and a lack of collaborative partners are obstacles they must face. (SBA, 2020b)
- **Green Action Plan for MSMEs and the promotion of green entrepreneurship** - The green economy appears to be the most appropriate way to combine economic growth, innovations (eco-innovations), digital transformation, localisation, and sustainability. Strong consumer preferences accompany sustainable growth for environmentally friendly products and services. Slovakia is currently ranked in the overall state of green business just below the average of European Union countries, and has good potential for further improvement. (SBA, 2021c)
- **Stagnation of digital transformation** - Slovakia ranked 22nd of 27 EU Member States in the 2021 edition of the Digital Economy and Society Index (DESI). The country stayed at the same position as in 2020, so its progress in the areas monitored is limited. There is a higher need for enterprises to utilise the potential of big data, AI, and electronic information sharing systems. The digitalisation of education is below its potential, which results in a less prepared workforce. Slovakia lags mainly in digital public services, which would also benefit MSMEs and serve as a best practice. (European Commission, 2021b)
- **Growing localisation** - Localisation and short supply chains present enormous opportunities also for Slovak MSMEs to increase their added value and profitability. Throughout Slovakia,

we can find examples of local agricultural, tourism, and food industry businesses. Often these produce and operate in ecological ways while local authorities can also be involved.

The impacts of the 4 megatrends are also evident in Slovakia, and the COVID-19 pandemic seems to have largely accelerated the changes that these trends are triggering in MSMEs. Servitization is a trend visible in all sectors of industrial production, which contributes up to a quarter of the Slovak economy's GDP and has been increasing significantly in recent years, which is evident in both large companies and SMEs, which are adapting their business models accordingly. These changes appear not to have been triggered by support initiatives, as service innovation is not addressed at the regional or national levels. On the contrary, despite some existing support for innovative firms, Slovakia's innovation performance still lags behind the European average, and Slovakia has even deteriorated within Europe (European Innovation Scoreboard 2019 and 2021), which means that other European countries have a higher innovation capacity. SMEs perceive barriers to innovation mainly in the lack of available financial resources and recruitment and retention of employees. Regarding digitalisation, Slovakia seems to be more or less stagnating, while there is more room for SMEs to implement digital solutions, such as education and public services. The solution seems to be the Green Action Plan that combines economic growth, innovation, digitisation but also localisation and sustainability. However, green entrepreneurship is also below the European average in Slovakia.

Topic 3: Changes in business models, MSME jobs, and entrepreneurial competencies

The review of secondary resources on changes in business models, MSME jobs, and entrepreneurial competencies in Slovakia revealed the following list of inputs among the 3 subtopics:

Changes in business models

- **Digitalisation as a key competitive advantage** - Digital sales channels have become a key advantage in many industries since the pandemic has shifted physical interactions to the online space. For example, mobile banking, contactless payments, or the transfer of interactions from branches to virtual space have expanded significantly in the banking and financial sectors. For many restaurants, food delivery was often the only way out. Retail also reached online sales in sectors where it did not play a significant role before the pandemic. Although companies may not have been able to compensate for the outages fully, they had a better chance of surviving (KPMG.sk, n.d.).
- **Sustainable market approach** – Slovak customers sensitively perceived the stories of small local retailers such as restaurants, cafes, hairdressers and were ready to shop in their stores as a matter of priority, as well as they put pressure on retail chains to have a wide presence of local brands on the shelves. On the other hand, companies have identified the crisis as an opportunity to strengthen their social responsibility and build trust with their customers and business partners by providing financial or non-financial support to health professionals and the most vulnerable ones (KPMG.sk, n.d.). Sustainability is also linked to resilience, which refers to adapting and surviving in the long run. Any business that ignores sustainability is unlikely to do well in this age of conscious consumption (Marr, B., 2021).
- **Overall business performance and its adaptation** – The most common step companies undertook during the pandemic was adapting the provided services to new market needs (41.8%), primarily by entrepreneurs from the education sector (61%). Bridging the consequences of the pandemic with the effect on the business resources was also done by investing the company's financial reserves (41,6%) - mainly by SMEs based in the Bratislava region and companies operating in the education, arts, entertainment, recreation, and sports sector. Moreover, the fragile financial stability has also been reflected in extended maturities and adjusting contractual conditions with stakeholders or even in temporarily closed business operations (SBA, 2020a).
- **Business authenticity** - There is also a growing interest in today's consumers to seek brand authenticity. Customers want companies to be interested in social and environmental issues and not just try to increase their profits. According to this trend, every organisation or company should serve a meaningful purpose with the promise of a positive transformation of its performance (Marr, B., 2021).

Changes in MSME's jobs

- **Job loss** - The number of working people in Slovakia decreased by 2.6% in 2020, with a higher negative impact for men than women. The pandemic negatively influenced all age categories besides people in retirement, but relatively the most impacted were young people under 25 and people with an employment relationship and working on a contract agreement (Valachyová, J., & Senaj, M., 2021). Furthermore, the situation also affected professions dependent on customer support, such as restaurants or accommodation facilities. On the other hand, the crisis had more or less not affected publicly paid workers. Higher qualified professions that do not have to worry about their positions even in a problematic period include specialists in IT, accounting and financial control, nursing, or technology (Hnonline.sk, 2020).
- **Online job vacancies** - The number of new jobs published online in OECD countries fell by an average of around 60% (by April 2020) virtually in all sectors of the economy. Together with Croatia and Denmark, the Slovak Republic experienced one of the sharpest declines in

new jobs published online. At the beginning of the pandemic, job losses were more pronounced for low-skilled jobs, while in later periods of the pandemic, it was more pronounced for high-skilled jobs. The health and social assistance sector recorded a slighter decline than other sectors. On the contrary, the increase in the online job offers was recorded in logistics and distribution, as well as in the transport, mining, construction, and manufacturing sectors, which achieved the highest growth rates during the examined period (OECD, 2021).

- **Remote working and its obstacles** – More than half of the respondents said that the immense support from the employer during the pandemic is flexible working hours. The independence in solving tasks or suitable technical equipment at home helped a third of them. Roughly 29% of respondents also saw a problem with the workspace when working from home and keeping in touch with colleagues. 15% of respondents confirmed that they had a problem with poor communication with their superiors, and 11% had a problem with poor leadership (TASR, 2021).
- **Innovation and the Slovak labour market** - Slovaks are not very flexible and adaptable when it comes to the labour market and employment, according to Trexima Bratislava studies. This fact is also confirmed by the OECD Declaration in which Slovakia is one of the countries most endangered by robotics and, at the same time, occupies unflattering positions in statistics on the willingness of employees to learn in adulthood or at a higher age. For the successful socio-economic development of Slovakia, it is necessary to take an active approach to lifelong learning (Brna, Š. 2021).
- **Need for particular skills and competencies** – If Slovakia doesn't want to be seen as a base for outsourcing the more routine manufacturing processes but as an innovation hub with technologically skilled people, employees need to be equipped with skills and competencies in robotic process automation, data analytics or machine learning, as some of these technological advancements are already happening in workplaces (KPMG.sk, 2020).
- **Future skills demand** - According to an expert⁵, different skills were required before the pandemic than now. Companies are looking for data analysts or cyber security specialists. Soft skills such as teamwork, empathy, and communication skills are also important (TASR, 2020). McKinsey & Company lists the main skills divided into 4 categories that will be in demand in the job market in the near future: 1) cognitive skills; 2) digital skills; 3) self-leadership skills; and 4) interpersonal skills (Brna, Š. 2021).
- **Skills for future jobs** – according to the survey of Slovak based companies HR representatives, the most useful skills for future jobs are change adaptability, critical thinking, technological and digital ability, and willingness to learn. At the same time, change adaptability and critical thinking are the most missing skills among the current employees, as well as creative thinking and flexibility. (KPMG.sk, 2020)

Changes in entrepreneurial competencies of MSMEs' owner-managers

- **Increasing entrepreneurial self-confidence** - According to the GEM survey, the population's entrepreneurial self-confidence, which refers to the belief that the respondent has the necessary knowledge, skills and experience needed to run a business, increased every year between 2016 and 2020, reaching 56,4% in 2020 despite the starting pandemic situation. Hence, the Slovak population seems to be well-equipped in entrepreneurial competencies, but the survey results also show higher business discontinuance and comparably lower opportunity perception than other EU state members. (SBA, 2021d)
- **Requirements for innovation competencies** - MSME entrepreneurs should see the opportunities arising from Industrial Revolution 4.0, be familiar with the principles of the Smart Industry 4.0 concept, make innovative "smart" investments, and be proactive in introducing intelligently managed technologies and systems. The necessary competencies relate to the implementation of smart solutions on existing technologies, the procurement of new

⁵ Zuzana Rumiz - General Manager of Manpower company

technologies needed for the implementation of smart solutions, and the creation of intelligently controlled, interconnected autonomous systems as Slovakia falls behind in innovative performance according to European Innovation Scoreboard 2021 as well as GEM survey results. (Bosma et al., 2021)

- **Development of creative competencies/cooperation with creative industry** - MSME entrepreneurs should develop their competencies and/or collaborations in creative industries to help build innovation processes within their business. These can be reflected in advertising and marketing, architecture, ICT, and design. The creative industries relate not only to the field of culture and creativity but also to many sectors of the economy and play a vital role in digitisation and globalisation. (Ministry of Culture SR, 2020)
- **Hard and soft skills for international business and export** - In today's increasingly globalised market, both hard and soft skills are equally important in international business. Hard skills refer to knowledge of foreign trade techniques and practices of Slovak MSME exporters, thus supporting their further expansion into new and riskier foreign markets. Soft skills are, e.g., negotiation skills in dealing with a foreign partner, communication, presentation, and cultural differences and customs in the territories of interest. (Chmelová, M., 2021)
- **Knowledge and competencies in intellectual property protection** - One of the areas in which MSMEs in Slovakia are lagging is the protection of intellectual property rights (patent, trademark, design), which play an important role in promoting innovation and protecting investment. At the same time, according to the EU Intellectual Property Office (EUIPO), businesses (especially MSMEs) that exploit intellectual property rights perform better. Slovakia's intellectual property protection is the worst compared to neighbouring countries. The situation is particularly critical for MSMEs. (SBA, 2021d)
- **Knowledge and competencies in sustainable entrepreneurship** - There is now an increasing demand for competencies to seize the opportunities presented by the transition to a sustainable, green and social economy. The reason for this is the insufficient innovative performance of the Slovak economy, insufficient use of support funds allocated from European but also domestic sources, and also insufficient promotion of the possibilities and benefits of sustainable entrepreneurship for SMEs. (IPSOS, 2020)

Under the impact of the pandemic, MSMEs had to adapt very quickly to the changing business environment. Changes often affected their very functioning and also their business models. This has, in turn, influenced the demands employers have placed on their employees. At the same time, entrepreneurs themselves had to adapt and were put under enormous pressure. Changes in business models mainly affected distribution channels, with entrepreneurs looking for new ways to sell and deliver their products and services (i.e. value delivery). MSMEs have also had to adapt their offerings to new market needs, with increased attention being paid to the trend toward sustainability and business authenticity (i.e. value creation). Many people lost their jobs, and the number of vacancies decreased. Remote working has become the new standard, but with its drawbacks, and a higher level of digitalisation has highlighted the need for a change in employee competencies. The most important and sought-after are cognitive, technical and digital, interpersonal and self-leadership skills. However, this situation also pointed to the important competencies of entrepreneurs themselves, who should be able to see opportunities arising from Industrial Revolution 4.0 and sustainable entrepreneurship, to make smart investments and implement smart solutions, innovate, have creative competencies, and competencies related to foreign trade and intellectual property protection.

Topic 4: Business dimensions, training needs, and training topics

The review of secondary resources and previous findings for Slovakia revealed the following list of recommendations for business dimensions, training needs, and training topics.

Business dimensions

- **Increased focus on security and basic needs** – Online security is among the top criteria customers have begun to consider when deciding where to shop. In addition, customer experience is also important. Companies should consider security issues when assessing and redesigning customer journeys to meet new customer needs, directly impacting purchasing decisions. The pandemic has negatively impacted premium brands or industries not considered essential. Value for money has come to the fore, and consumers can be expected to remain more discerning about this in the future. (KPMG.sk, n.d.)
- **Strategy and brand building** - MSMEs are moving from mitigating the impacts of the pandemic to building a strategy that can move them forward in the longer term. MSMEs should consider accelerating digital transformation, addressing gaps in IT infrastructure, workforce planning, and digital upskilling. It is also important to consider the economic impact of past pandemic waves when developing strategies, leverage customers' impulses, and think about changes in major markets or business models due to the pandemic. (PwC, n.d.)
- **The overall approach to education and training within MSMEs** - With the transformation of industry and commerce in the wake of the Industrial Revolution 4.0, there is also a need to change education and training. It is increasingly important for both MSME owners and their employees to have up-to-date information and, consequently, the resulting skills and competencies to stay competitive in the market. Business agility, resilience, adaptation to change, and learning organisation are important trends. (SBA, 2021d)
- **New forms of financing** - New platforms and mechanisms have emerged that link businesses with investors and donors (such as crowdfunding, initial coin offering, tokenisation, and special acquisition companies). Many of these new methods are driven by a decentralised financial movement, in which financial services such as lending and trading take place in a peer-to-peer network through a public decentralised blockchain network (Marr, B., 2021).
- **Strengthening social responsibility** - The pandemic was also an accelerator of social responsibility. Companies financially supported health professionals, provided various discounts to the most vulnerable population groups, donated protective equipment, and provided mobile data or faster internet to families with children. In short, companies identified the crisis as an opportunity to strengthen their social responsibility and create trust. This difficult period is an ideal opportunity to demonstrate brand values and show that profit is not the company's only concern. (PwC, n.d.)
- **Digital sales channels** - After most interactions have moved from physical to online, digital channels have become key in many industries. Although they often failed to compensate for the shortfalls of physical operations fully, digitised businesses have had a better chance of survival. Retail, hit hard by the restrictions, reached for online sales even in sectors that did not play a significant role before the pandemic.

Training needs

- **Hard and soft skills acquisition and development** - The pandemic has affected how many MSMEs operate, and they have had to adapt to the situation. This requires not only hard but also soft skills. Hard skills include data analytics, digital and technical skills, and creative competencies. The soft skills needed include leadership and interpersonal skills, change adaptability and flexibility.
- **Raising awareness of new entrepreneurship trends** - New entrepreneurship trends whose adoption has been accelerated by the pandemic are, e.g., sustainability, green entrepreneurship,

servitisation, and localisation. Surveys show that Slovakia is underperforming, and therefore there is a need to spread knowledge about these trends, which could accelerate their adoption.

- **Presentation of best practices** - Experience shows that best practices can be instructive and inspiring. Especially in digitalisation, digital transformation, and innovation, it could help MSMEs show how things can be done differently and in a better way. Often, it is not a question of resources but that SMEs do not compare themselves with the best in the industry and thus do not feel the need to implement new solutions.
- **Support system** - It appears that in some areas, such as servitisation, there is no functioning support system. On the other hand, SMEs are not taking full advantage of some of the available support opportunities, e.g., in digitalisation. Therefore, these opportunities need to be better communicated and presented.

Training topics

- **Digitalisation and digital transformation** - It is widely acknowledged that the pandemic has accelerated digitalisation and digital transformation. While some MSME entrepreneurs have easily coped with the challenge, others have struggled. Moreover, according to the DESI 2021 report, Slovakia is still below the European average in digital performance. Therefore, training should be focused on implementing digital solutions, best practices in this area, and raising awareness of the benefits of new technologies such as IoT, blockchain, AI, etc.
- **Innovation** - Slovakia's innovation performance still lags behind other EU countries, according to European Innovation Scoreboard 2021. Therefore, training should be focused on implementing new innovative solutions, innovation uptake and equipping both owner-managers and employees with the necessary competencies and skillsets. This has also been identified as a core competence of MSMEs' owner-managers.
- **Business model innovation** - Under the impact of the pandemic, MSMEs have often had to change and adapt the way they operate, including changes in business models. Based on the analysis, we identified the need to provide MSME entrepreneurs with a theoretical basis for business model innovation that can significantly assist them in making the necessary changes to build thriving and agile organisations.
- **Green and sustainable entrepreneurship** – Slovakia has good potential for further improvement of green entrepreneurship, which is currently just below the European average. Sustainability and social responsibility are the concepts that are now more relevant than ever, accompanied by strong consumer preferences for environmentally friendly products and services.
- **Online business presence and sales** - For many MSMEs, the way out of the pandemic was to continue their operations online, which mainly involved building and presenting their brand online, online presence, sales and related distribution and logistics issues. Therefore, training should be focused on these aspects.
- **Servitisation** - Servitisation can help MSMEs increase demand, profit margin, and sales. Despite these indisputable advantages, Slovak manufacturing companies lag behind other European countries in servitisation. Training materials should focus on familiarising the public with the concept and equipping them with the necessary knowledge and skills.
- **Localisation** - Localisation is a concept that can be included among the trends that have come to the fore during the pandemic. Customer preferences show that consumers want to buy local food and products and pay more attention to short supply chains. Therefore, there is a need to educate MSMEs in this area and equip them with the necessary skillset.

Under the influence of the pandemic and global megatrends, MSMEs should focus on business dimensions such as security and basic customer needs, while longer-term strategy and branding are also important. A persistent theme is training within organisations under the influence of dynamic



environmental changes, new forms of financing, increased emphasis on social responsibility and the use of digital sales channels. Training needs exist in areas such as the development and acquisition of hard and soft skills, raising awareness of business trends and showcasing best practices. Finally, the support system, especially in the areas of digitalisation and innovation, needs to be better explained and utilised. Based on the above findings, we have identified training topics that relate to digitalisation and digital transformation, innovation, business model innovation, green and sustainable entrepreneurship, which is increasingly being emphasised, online business presence, servitisation and localisation.

List of references

1. Bosma, N., Hill, S., Somers, A., Kelley, D., Guerrero, M. (2021). 2020/2021 Global Report. Global Entrepreneurship Research Association, London Business School, ISBN 978-1-9160178-6-3.
2. Brna, Š. (2021, September 16). *Počíta s vami trh práce?* TREXIMA. <https://www.trexima.sk/pocita-s-vami-trh-prace/>
3. Chmelová, M. (2021, May 27). *Zahraničný obchod a podpora vstupu na zahraničné trhy.* Podnikajte.sk. <https://www.podnikajte.sk/zahranicny-obchod/zahranicny-obchod-podpora>
4. European Commission. (2018a). *STUDY ON THE POTENTIAL OF SERVICISATION AND OTHER FORMS OF PRODUCT-SERVICE PROVISION FOR EU SMES: FINAL REPORT.* Part B, Appendices, Publications Office, <https://data.europa.eu/doi/10.2826/992789>
5. European Commission. (2018b). *STUDY ON THE POTENTIAL OF SERVICISATION AND OTHER FORMS OF PRODUCT-SERVICE PROVISION FOR EU SMES: FINAL REPORT.* Part A, Appendices, Publications Office, <https://data.europa.eu/doi/10.2826/992789>
6. European Commission. (2021a). *EUROPEAN INNOVATION SCOREBOARD 2021.* Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs, Publications Office. <https://ec.europa.eu/docsroom/documents/46013>
7. European Commission. (2021b). *Digital Economy and Society Index (DESI) 2021: Slovakia.* <https://digital-strategy.ec.europa.eu/en/policies/countries-digitisation-performance>
8. Guzi, M., & Fabo, B. (2021). *EMPLOY SLOVAKIA, Final report, 17.06.2021.* (ISBN: 978-2-919816-00-2). ESPON. https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwiul9nRoQL2AhUuRfEDHc6VAf8QFnoECAoQAQ&url=https%3A%2F%2Fwww.espon.eu%2Fsites%2Fdefault%2Ffiles%2Fattachments%2FEMPLOY-Slovakia.pdf&usg=AOvVaw0Q5-ILNgs9SdUAKJpU_u6
9. Hnonline.sk. (2020, December 29). *Čaká nás profesijná revolúcia? Ako pandémie ovplyvní trh práce v roku 2021?* HNONLINE. <https://strategie.hnonline.sk/marketing/2267296-caka-nas-profesijna-revolucia-ako-pandemia-ovplyvni-trh-prace-v-roku-2021>
10. IPSOS. (2020). *Udržateľnosť je v podnikaní prioritou aj napriek pandémie, či recesii.* <https://www.ipsos.com/sk-sk/udrzatelnost-je-v-podnikani-prioritou-aj-napriek-pandemii-ci-recesii>
11. KPMG.sk. (n.d.). *Ako zmenila pandémie zákaznicku skúsenosť. Koronakríza priniesla do zákaznickej skúsenosti niekoľko nových trendov.* KPMG. <https://home.kpmg/sk/sk/home/insights/2021/02/ako-zmenila-pandemia-zakaznicku-skusenost-cx.html>
12. Marr, B. (2021, November 1st). *The 8 Biggest Business Trends In 2022.* Forbes. <https://www.forbes.com/sites/bernardmarr/2021/11/01/the-8-biggest-business-trends-in-2022/?sh=2b3ad5aa21da>
13. Ministry of Culture SR. (2020, November 8th). *Cultural and creative industries.* Ministry of Culture of the Slovak Republic. <https://www.culture.gov.sk/posobnost-ministerstva/umenie-a-kreativita/kulturny-a-kreativny-priemysel/>
14. OECD. (2021). *OECD Skills Outlook 2021: Learning for Life.* <https://www.oecd-ilibrary.org/sites/01a857c7-en/index.html?itemId=/content/component/01a857c7-en#section-d1e31297>
15. SBA. (2020 a). *NÁZORY PODNIKATEĽOV NA DOPADY DRUHEJ VLNY KORONA KRÍZY. Správa z kvantitatívneho prieskumu.* Slovak Business Agency Publisher, SBA, Bratislava, 2021. http://monitoringmsp.sk/wp-content/uploads/2020/11/COVID_2.vlna_sprava.pdf
16. SBA. (2020b). *INOVAČNÝ POTENCIÁL MSP NA SLOVENSKU.* Slovak Business Agency Publisher, SBA, Bratislava, 2021. <http://www.sbagency.sk/sites/default/files/inovacny-potencial-msp-na-slovensku.pdf>
17. SBA. (2021a.). *NEPRIAZNIVÝ VPLYV PANDÉMIE KORONAVÍRUSU NA PODNIKOVÚ EKONOMIKU SR.* Slovak Business Agency Publisher, SBA, Bratislava, 2021.

- <http://monitoringmsp.sk/wp-content/uploads/2021/07/Nepriazniv%C3%BD-vplyv-pand%C3%A9mie-koronav%C3%ADrusu-na-podnikov%C3%BA-ekonomiku-SR.pdf>
18. SBA. (2021b.). *Preferované opatrenia pre podnikateľov na zmiernenie dopadov pretrvávajúcej koronakrízy. Správa z kvantitatívneho prieskumu.* Slovak Business Agency Publisher, SBA, Bratislava, 2021. http://monitoringmsp.sk/wp-content/uploads/2021/03/COVID_2021_final.pdf
 19. SBA. (2021c). *ZELENÝ AKČNÝ PLÁN PRE MSP A PODPORA ZELENÉHO PODNIKANIA V SR.* Slovak Business Agency Publisher, SBA, Bratislava, 2021. http://www.sbagency.sk/sites/default/files/zeleny_akcny_plan_pre_msp_a_podpora_zeleneho_podnikania_v_sr.pdf
 20. SBA. (2021d). *Správa o stave MSP 2020.* http://monitoringmsp.sk/wp-content/uploads/2021/11/Sprava-o-stave-MSP-2020_final-1.pdf
 21. TASR. (2020, October 11). *Koronavírus priniesol veľkú transformáciu trhu práce.* TREND. <https://www.trend.sk/spravy/koronavirus-priniesol-velku-transformaciju-trhu-prace>
 22. TASR. (2021, October 25). *Prieskum: Slováci pociťujú najväčší vplyv pandémie v pracovnom živote.* TERAZ.sk. <https://www.teraz.sk/ekonomika/prieskum-slovaci-pocituju-najvac/585973-clanok.html>
 23. Tórz, A., Rudawska, J., Trzmielak, D., Urbaniak, M., Urbaniak, N., Cazzato, F., Franchin, D., Boesso, I., & Pozzar, F. (2020). *SMART SOLUTIONS FOR SMART PRODUCTS IN CENTRAL EUROPE.* European Union. <https://www.interreg-central.eu/Content.Node/THINGS-Policy-Paper.pdf>
 24. Valachyová, J., & Senaj, M. (2021). *Vplyv pandémie COVID-19 na príjmy jednotlivcov otázky & odpovede.* COUNCIL FOR BUDGET RESPONSIBILITY 2021. https://www.rrz.sk/wp-content/uploads/2021/08/Komentar_pandemia2020.pdf
 25. KPMG.sk. (2020). *Future skills: Is Slovakia ready?* <https://assets.kpmg/content/dam/kpmg/sk/pdf/2020/Future-Skills-Is-Slovakia-ready-results-of-survey.pdf>
 26. PwC. (n.d.). *Ako reagujú spoločnosti na vplyv COVID-19 na ich podnikanie.* PwC. <https://www.pwc.com/sk/sk/covid-19.html>