

Chapter 11

Digitalizing the Micro-Business in Times of Disruption: Insight into Innovative Strategies in the Kazakh Economy

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The aim of this chapter is to provide an account of the innovative strategies devised by microentrepreneurs as a consequence of the COVID-19 crisis in Kazakhstan. To do so, the chapter initially introduces the most recent developments of digital transformation and micro-entrepreneurship in the Kazakh context and building on this overview, it closely examines the innovative practices implemented by a number of microentrepreneurs over the last two years. The outcome is a timely analysis of the country's digitalisation process, the recent approaches to deal with the disruptive consequences of the global pandemic, as well as an insight into the present and future way of doing business of microentrepreneurs in Kazakhstan.

1. Introduction

The advancement of informational and digital sciences allowed the development of sophisticated technologies at a high rate, which is made available to business organisations enabling them to undergo organisational transformation (Vial 2019). Digital transformation is changing the way of doing business: new ways of communication, interaction, operation and value creation are being introduced (OECD 2021). The adoption of these new media and practices is not straightforward and requires unity of intent and collaboration of different actors. Their adoption and use have immensely increased over the last decade and the unforeseen impact of the COVID-19 global pandemic accelerated the process of digital transformation (DT) in emerging economies (Adam & Alrifi 2021, Caballero-Morales 2021, Pryiono et al. 2020.). According to Berman (2012), the business transformation process involves creating new business models; improving operational processes; and enhancing customer experiences. Developing and implementing strategies to better use digital technologies has become essential for every entrepreneur and business, regardless of its size (OECD 2021). The disruptive effects of lockdowns and restrictions made once and for

all, apparent the necessity to embed IT strategies into business models. The increasing importance of digital transformation for small and micro businesses is also reflected in more attention on the topic by academic literature (Fernández-Esquinas et al. 2019, Pelletier & Coultier 2019). However, the existing literature is overwhelmingly focused on economies of the Global North, while the developments taking place in the emerging economies are understudied (Ramdani et al. 2022). The primary aim of this chapter is to illustrate the current transformational process in the field of digital innovation for small and micro entrepreneurship in Kazakhstan while providing a concrete analysis of the practical innovations implemented by a number of microentrepreneurs since the global pandemic outbreak. Finally, this chapter offers hands-on insights into the most recent developments in the way of operating a small business in the country while suggesting critical venues for future research.

This chapter looks at the practice of digital transformation in Kazakhstan, a country where micro, small and medium enterprises make up 96.7% of all businesses and employ 37.5% of the total employed population (OECD 2020). MSMEs contributed to 34.7% of the country's GDP in 2021 and the total number of employed citizens in SMEs grew by 10.6 percent and reached 3.5 million people in the same year (Satubaldina 2022). To facilitate the digital transformation of small business, the country's authorities have promoted a digitalisation process by launching a national programme named 'Digital Kazakhstan' in 2018. Digitalisation is indeed a chance for micro businesses to improve efficiency while implementing new business models, which are less costly and governmental initiatives such as "Digital Kazakhstan" have the potential to accelerate digital transition. However, the process of digital transformation requires a shift in mindset and business culture that does not occur without costs and risks (Oney et al. 2018). In addition, the unexpected and sudden breakout of the global pandemic in December 2019 posed a major threat to small and micro-businesses as retail spaces and markets had to temporarily shut down, service providers could not physically interact with customers, and most industries experienced a significant reduction in product demand, as well as supply chain disruptions. Unlike the medium and large businesses, small and micro-businesses are not endowed with crisis management resources, as well as economic, social and organisational capital to counter the unforeseen hurdles posed by the pandemic.

Given the above-mentioned premises, this book chapter aims at analysing how micro-business owners operating in Kazakhstan cope with the COVID-19 crisis and how they transformed their businesses through digitalisation processes in these challenging times. In the following sections, extant literature on digital transformation, small and micro entrepreneurship in emerging economies and the global pandemic impact on SMEs operations is outlined before turning our attention to the findings of the semi-structured interviews with the microentrepreneurs participating to this study.

2. Literature Review

2.1. Digital transformation in SMEs

Recently, an extensive body of literature on digital innovation in SMEs has emerged (e.g., Crupi et al. 2020, Garzoni et al. 2020, Li et al. 2018, Pelletier & Cloutier 2019, Vial 2021). SMEs globally represent the vast majority of enterprises and substantially contribute to income and employment in both developed and developing economies (OECD 2020). Digital transformation of a small business entails the rearrangement of technology, business models and processes to secure new values for customers and employees in developing the digital economy.

The digital transformation of small firms has increased rapidly over the last decade, digital innovation has changed the way companies conduct business, interact with consumers, suppliers, and other stakeholders and support business models and customer value creation (Matarazzo et al. 2021). An increasing number of consumers have access to multiple media channels through which they can communicate, purchase and deal with small firms and other customers in a faster way. Digitalization thus reshape the conventional relationships between consumers and business, as well as the business processes, organisational capabilities and operational routines (Li et al. 2018).

SMEs are likely to digitise marketing and administrative operations first. The newest digital technologies that SMEs are employing in their operations support different functions, namely marketing (e.g., social media applications, e-commerce platforms), accounting and finance (e.g., mobile secure payment solutions) or human resources (e.g. collaborative platforms and tools). The digital gap between SMEs and large firms decreases as for e-government interactions, electronic invoicing and the use of e-commerce platforms and social media. In contrast, the gap widens for the use of more sophisticated technologies such as data analytics or cloud computing (OECD 2021, Pelletier & Coultier 2019). SMEs tend to outsource solutions to offset costs and internal capabilities. Small and micro businesses increasingly rely on digital platforms to advertise and sell their products and services while optimising their operations at lower costs.

Westerman et.al. (2014b) suggests that digital transformation occurs in three different business domains: the operational processes, business models, and customer experience. Consequently, the impact of this transformation is manifesting itself in these three areas. In addition to these manifestations, Vial (2019) proposes four different

paths to value proposition, which include: new value propositions (e.g., shifting from physical good to services), new value networks (e.g., disintermediation), use of digital distribution and sale channels (e.g., e-commerce through digital platforms), optimization of organizational agility and ambidexterity (e.g., improving the opportunity identification process). Despite the shared consideration of digital technologies as beneficial and necessary for business development and the assumption that each company should embrace digital transformation in today's business environment, SMEs are still facing challenges when it comes to assess the actual IT needs, the alignment of strategy and objectives, the necessary competencies to manage implemented digital innovations, as well as the growing complexity of the emerging technologies and competitiveness of the business ecosystems.

2.2. Microbusiness metamorphosis

The global economic reconstruction has been characterised by a replacement of market relations with contractual (legal and administrative) ones; the increasing importance of distributive channels and the intellectualisation of labour, less division of labour, as well as the transformation of an enterprise as a 'certain sum of contracts' between suppliers, experts, consumers and society (Berdykulova et al. 2014). In today's economy, the microentrepreneur is carrying out both practical and intellectual work, the distribution of its products has become as important as its production thus requiring a broader set of skills to perform business activities. The distribution channels (e.g., online store, Instagram, Facebook, TikTok, etc.) plays an essential role which cannot be overlooked by the business owners.

Until a few years ago, academic literature offered limited empirical evidence on the role of micro-businesses in emerging economies and often relied only on data from formally registered businesses, which did not consider the large number of self-employed or microenterprises operating in the informal sector and notoriously difficult to quantify. A microbusiness is here intended in a range from start-up with both high and low growth potential, to family business that has been operating for many years. More recently and spurred by the increasing attention of international organisations, there has been an important recognition of the role played by micro-enterprises in driving employment and innovation in the emerging economies. In 2019, the International Labour Organization (ILO) published a report titled 'Small Matters', which, unlike previous studies on firms, is based on data obtained through household and labour force surveys, thus including self-employed entrepreneurs and all types of enterprises from micro (2 to 9 employees) to medium/large (50 or more employees). The report highlights the global relevance of micro and small enterprises (MSEs) and the crucial role they play to

achieve the Sustainable Development Goals (SDGs). Furthermore, the report outlines digital transformation opportunities and barriers for MSEs in emerging economies and identify the following ones: increased access to information and an improved ability to communicate; the ability to trade and to access markets more easily and over greater distances; access to a variety of financial services with low barriers to entry; new pathways to enterprise formalisation; digital transformation and entrepreneurship as fundamental shifts in value creation; and synergies with the development and diffusion of green businesses and technologies. With regard to the barriers faced by MSEs, the report distinguishes digital divides and locally incomplete digital infrastructures; multifaceted digital skill shortages; and low adoption readiness, risk averse cultures and gender barriers among others (ILO 2021). It is also crucial to highlight the development of a critical stream of academic literature, which emphasises the necessity to explore the informal sector entrepreneurship. This research focuses on businesses that at the beginning of their operations do not register their entity or do not report some or all of their production and/or sales to the tax authorities when they should be compelled to (Ketchen et al. 2014; Siqueira et al. 2016), and found that enterprises who are starting-up informally and initially avoid paying taxes and comply to onerous regulations, perform better at a later stage than the enterprises who are registered from the very beginning of their operations (Williams et al. 2017). These findings lead us to reconsider some of the assumptions of the orthodox literature on informality, which sees informal entrepreneurship as underproductive and advocate for tougher policies in order to eradicate the informal sector (Oviedo *et al.* 2009).

2.3. The pandemic test

Despite the hardships that the Kazakh economy has been enduring as a consequence of the global health crisis, SMEs operating in Kazakhstan have increased in terms of total number, productivity output and employed citizens (Satubaldina 2022). In this historical moment and due to the shortage of work opportunities, informal entrepreneurship has most likely increased globally (ILO 2021). The figures show an increase of 15.2% in the total number of SMEs operating in Kazakhstan, signalling an outstanding resilience of small entrepreneurs to economic shocks and the potential of entrepreneurship as a source of employment and sustainment in times of crisis. The negative repercussions of the lockdowns and temporary closures on SMEs have been alleviated by a series of measures, such as the three-year moratorium on taxation and inspections of small and microenterprises, as well as the deferral of loans to SMEs in affected industries, launched by the government a few months after the COVID-19 outbreak (E-gov 2021). As hinted at in the introduction, the national authorities have also launched an ambitious programme

of digital transformation named “Digital Kazakhstan”, which aims at improving society’s living standards by adopting digital technologies and paving the country’s path towards a digital economy. This programme has been implemented in the period 2018-2022 and it foresees the “transition to the digital state and knowledge-based economy”, as well as the creation of an innovative ecosystem, where technological entrepreneurship development and the evolution of human capital assets are favoured (Government of the Republic of Kazakhstan 2018). Digitalisation is indeed a chance for micro businesses to improve efficiency by implementing new business models, which are less costly. The introduction of digital technologies potentially leads to a reduction in fixed costs while creating a competitive advantage, which allows the enterprise to survive and most likely grow (Melnyk & Salin 2018, Peppard 2016). However, the process of digital transformation requires a shift in mindset and business culture that does not occur without costs and risks (Oney et al. 2018).

The unexpected and sudden breakout of the global pandemic in December 2019 posed an unprecedented obstacle for SMEs, while their intrinsic characteristics provide them with a greater ability to adaptation and change in a dynamic global economy, they are simultaneously vulnerable to external shocks due to their limited resources (Durst & Henschel 2021). The COVID-19 crisis proved to be a critical litmus test for small and microenterprises, the probability of failure in these disruptive times is high among small firms while, on the other hand, such a shock may have accelerated the process of digital transformation, which equip them with the necessary means to endure the difficulties and thrive on the long term. Thus, the disruptions caused by the COVID-19 emergency have increased the necessity and importance of digital transformation and functioned as an accelerator. Micro and small entrepreneurs have moved their business activities online and devised innovative solutions to keep their business afloat during lockdowns and to overcome the supply chain ruptures. The online platforms played a major role in allowing the business owners to reach new suppliers and customers. It is likely that these transformations will be irreversible and permanent as the small and micro firms have survived thanks to them and the market conditions have adjusted to the new reality. Given these premises, the aim of this chapter is to explore and analyse how Kazakh microentrepreneurs responded to the disruptions brought about by the global pandemic and what sort of innovative strategies and measures they have been adopting in their business operations.

2.3. The study context

Kazakhstan’s economy has been heavily relying on extraction of mineral resources such as gas and crude oil. This sector used to account for over 60% of total exports and over 50% of government revenue until a decade ago but with the steady decline of the

international oil prices began in 2014, these figures respectively dropped to less than 50% and 30% (Atakhanova 2021). The national government had to start a process of economic diversification and redirect significant investment in the trade and production sectors, which led to an increase in their shares in the Kazakh economy and placed SMEs at the centre of a sustainable development plan for the country's future (OECD 2020). Despite the efforts of the central government, the approach to diversification has been imposed as a “top-down” policy leaving the regional administrations with no say in how to use organisational, financial and human resources locally. As a consequence of the centralized management system, this approach has not yet delivered the desirable results in areas beyond the two major cities Almaty and Astana and more peripheral, where growth is still driven largely by resource extraction (Anderson et al. 2018).

The focus on Kazakhstan is particularly interesting based on the fact that the country has regained independence from the Soviet Union in 1991 and entrepreneurship has been growing since then but still represents something new for its citizens. In less than twenty years Kazakhstan managed to establish a business environment that, compared to other emerging market economies, has been seen as being relatively supportive (Teal *et al.* 2011). In Kazakhstan micro, small and medium enterprises made up 96.7% of all businesses and employ 37.5% of the total employed population (OECD 2020). MSMEs contributed to 34.7% of the country's GDP in 2021 and the total number of employed citizens in SMEs grew by 10.6 percent and reached 3.5 million people in the same year (Satubaldina 2022). By taking a closer look at the composition of this group of enterprises, the number of microenterprises consisting of 15 or less employee stands out with 76% of the total SMEs (See Table 1). This figure shows that micro-businesses constitute the very texture of the socio-economic environment in Kazakhstan and contribute to render its business environment dynamic and in constant evolution while bolstering the national economy.

Table 1: Distribution of SMEs in Kazakhstan as of 01.01.2019

Firm size	Number
Individual entrepreneurs and farms	1 188 629
Small	377 925
Medium	2 782
Total	1 569 341

Despite the increasing relevance of entrepreneurship in the regional context, scant research has been carried out on the topic in

Kazakhstan. Thus, the field of entrepreneurship studies would greatly benefit from more diversity and studies conducted in underrepresented regions of the globe. In the next section, the research approach, methods and analysis of the data resulting from the semi-structured interviews with the microentrepreneurs are illustrated.

3. Methodology

3.1. Research approach

This book chapter is based on an exploratory qualitative approach to understanding how microentrepreneurs operating in Kazakhstan transformed their business as a consequence of the COVID-19 pandemic emergency. Data were collected using semi-structured interviews. This type of interview is suitable when the planned study includes an exploratory element (Saunders et al., 2009). An interview guide supported the interview process. The focal topics of interest were specified at the outset of the study; that is, they were derived from the extant literature. In line with the process focus taken in this study, the interview guide had two main sections. In the first section, questions related to the ways the business was affected by lockdowns and restrictions during the COVID-19 crisis. While the second one addresses the innovations introduced in the last two years of operation and how the business transformed in the same period of time. The whole guide starts with a series of demographic questions and concludes with two questions related to the allocation of a firm's resources in its current operation and the desirable measures necessary to overcome challenges faced by the firm.

3.2. Data collection

The level of analysis was the microenterprise. To be selected the firms, or individual entrepreneurs, had to fulfil the following criteria, namely, being a company that falls under the category microenterprises (*micropredprinimatel, individualny predprinimatel*), and should be operating in the territory of the Republic of Kazakhstan. There were no limitations regarding start-ups or more mature micro-businesses. Thus, the firms were selected purposefully (Patton 2002). Business owners and/or managers represented the unit of analysis of the study. These individuals were considered suitable participants for the present study because they possessed the necessary knowledge and experience concerning the topic under investigation within a current real-life setting. Suitable entrepreneurs and interviewees were identified by using an advertising post on

social media to which the business owners voluntarily responded either directly by getting in touch with the author, or indirectly by contacting author's contacts, who then forwarded the interested entrepreneurs' contact details to the researcher. Using these contacts, the entrepreneurs were briefly informed about the study and invited to participate in a Zoom/Skype interview.

The selection process resulted in 12 interviews that were conducted between September 4 and 20, 2022. As Eisenhardt (1989) identified a saturation degree of newly gained knowledge at approximately 12 interviews, I decided to reach that number of interviews. Each interview lasted between 30 and 50 minutes. The interviews were conducted in both Russian and English language. Informed consent to use the interview data for the present research purposes was given by all research participants in written and/or verbal form, and confidentiality is ensured at all times. The totality of the firms involved in the study employs less than 10 employees, which indicates that this book chapter examines microenterprises. This figure reflects the most prevalent company structure found in Kazakhstan as shown in the introductory section. As for the sector, different areas of the service and retail sector were included, which increases external validity (Gray 2017).

3.3. Data analysis

The overall approach to data analysis followed the thematic analysis principles. Thematic analysis can be synthesised as a search for topics that appear to be important to the understanding of the phenomenon under investigation (Braun & Clarke 2006). Thematic analysis also includes coding of qualitative data into clusters of similar entities and the identification of consistent relationships and patterns between themes. This approach to data analysis allowed me to reduce the data by segmenting, categorising and grouping relevant concepts within the data set under examination. The first step of the data analysis process involved transcribing the interviews' recordings, noting down the major ideas and thus familiarising with the data. Once the transcriptions were completed, the author generated codes to highlight "interesting features of the data in a systematic fashion" (Braun & Clarke 2006, p. 87). The generated codes were following the two macro topics outlined in the interview guide. The codes were then analysed and grouped into subthemes as presented in the next section. A number of meaningful statements representing the data were extracted to illustrate the research participants' opinions, ideas and feelings. The analysis process was completed by using the in-built tools in Dedoose, which assisted the author in capturing the most relevant data from each interview, comparing the data, finding patterns and divergences, as well as drawing conclusions.

4. Findings

4.1. Shift in organisational culture

Through the thematic analysis of the semi-structured interviews with the microentrepreneurs, two major areas can be identified as the critical venues of digital transformation: organisational culture and development of human capital. The former refers to the fundamental assumptions that a given group has invented, discovered or developed while learning to solve problems of adaptation to the ecosystem and internal integration. This dimension regards norms and values shared by the participants of a business venture and resulting in ways of action or behaviour. Organisational culture represents a key aspect of business innovation and its transformation a necessary condition to the development of a pro-innovative character. The latter venue is intended as the knowledge, skills and experience that entrepreneurs invest in and accumulate throughout their lives, enabling them to recognise and exploit business opportunities. Knowledge and skills are acquired through formal and informal education and training, and their increase potentially leads to a higher probability of perceiving and achieving a greater variety of opportunities (Becker 1964). Thus, the entrepreneur's ability to understand, identify, interpret and apply new information, as well as to discover new opportunities, is directly influenced by the acquisition and retention of knowledge (Roberts 1991, Venkataraman 1997).

The most critical change in organisational culture consists of shifting to the online format as a consequence of the restricting measures implemented by the national government to tackle the COVID-19 spread. This change was generally shared by the totality of research participants while highlighting different aspects that were particularly challenging to address at the individual level. As most of the businesses were predominantly operating offline and through a face-to-face interaction with the customers, the lockdown measures forced them to switch to online platforms to provide services or sell their products. A psychologist, a mental coach and a yoga teacher participating in this study mentioned that they had to transfer all their work online within just a few hours, as one of them put it "*there was a moment where the whole environment has begun to go online.*" The new format required a shift in the professionals' approach to the clients. The lack of physical presence has prompted them to learn how to engage with their clients behind the computer's screen, though this shift has not occurred without difficulties. The transfer of working activities from the office to remote modalities has affected a large number of employers and employees and the content of their work. Professionals working in the mental health field, for example, witnessed a change in the problematics and challenges shared by

their patients, who now had to cope with the consequences of isolation and the uncertain scenarios brought about by the global pandemic. Initially, the shift to the online format has heavily impacted their business operations as not the entirety of their client base switched to the remote sessions. To alleviate these effects and save the small businesses from closure, the Kazakh government passed a contingency plan which established a tax exemption moratorium for all microentrepreneurs and small business owners from January 2020 to December 2022 (E-Gov 2021). In most cases, the online regime was partially maintained after the easing of restrictions with almost the totality of the businesses working on a 50/50 regime with half of their services continuing remotely.

4.2. A digital opportunity

The advantages of the digital shift were highlighted by two business partners who have recently acquired a small business selling skincare and cosmetic products in Kazakhstan. The couple decided to take over the business and close the physical store in the city of Almaty run by the previous owner, to fully operate online. During the first months of operations, they have realised that *“it’s not really important to have the offline store anymore, it’s much faster to just open an Instagram page and establish a direct contact with the customers”*. This way, they could also extend their pool of customers *“by focusing not only on people who live in Almaty, but all over Kazakhstan, where there is no access to certain kinds of products.”*

Over the last five years, online stores and social media platforms have come to dominate the local marketplace (Barykin & Smirnova 2021) and the pandemic only accelerated this trend, which led a lot of small business owners to invest increasing resources on digital marketing, online advertisement, and social media management (SMM). A research participant explained well the challenging equation characterising the Kazakh small business environment *“I think the biggest struggle for me is gaining more followers. Followers turn into clients. We can only grow if we engage with more people online.”* On this note, it is especially interesting to emphasise that most of the respondents stated that their company’s resources were mostly reinvested in digital literacy or online learning activities aimed at acquiring the necessary tools to thrive in the current business environment. Microentrepreneurs shared a feeling of increasing competition due to the recent surge of digital enterprises in Kazakhstan, and in order to maintain their competitive advantage on other microbusinesses, they chose to undertake formal online learning to learn social media marketing, engage with new customers and promote their business activity. In this context, it is relevant to mention the increasing interest of entrepreneurs towards social media, which engage more and more youth worldwide, such as TikTok. As one of the participants acknowledges *“it is a very*

powerful tool to reach out to a young audience and we have recently signed up for an expert consultation on how to run a business on the platform.”.

4.3. Supply chain reshuffling

In addition to an increasing attention to social media engagement, microentrepreneurs have been spending a greater amount of time conducting market research. In order to stand out from competition, business owners noted that they have to allocate more resources to research new products in international and local markets. In some cases, a new item has the effect of drawing the attention of new customers thanks to its popularity in international markets or, as in the case of the introduction of male skin care products, because it seeks to overcome common misconceptions and stereotypes present in the Kazakh society. As a consequence of the disruption of the global supply chain amid the pandemic, as well as the decreased movement of people worldwide, another interesting phenomenon resulted from the interviews. A number of microentrepreneurs undertook a ‘localization’ of their good supply chain and in other cases, of their targeting customers. Cross-border trade and the expansion of global supply network has been increasing over the last decade in Kazakhstan but socioeconomic shocks, such as the global pandemic and the outbreak of Russian invasion and war in Ukraine, have led to supply chains becoming more localised, ensuring less disruptions in case of limited movement of people and goods, and higher shipping costs. In a world where the costs of moving goods and people have suddenly increased, micro businesses had to prioritise resilience over efficiency. As one of the entrepreneurs describes: *“While we used to import coffee from Russian suppliers, we now moved our orders locally and most of the coffee is coming from Kazakh suppliers”*. Further, the manager of a ski travel agency noted: *“We switched the focus group from foreign tourists to local ones and we increasingly promoted our tours on social networks to promote domestic tourism”*. These changes came as a surprise to the business owners, who readily had to respond to this new challenging scenario. However, they have been able to identify opportunities in previously unexplored terrains, which may potentially bring about long-term benefits and alternatives to their firms, as well as preventing them from suffering in the event of another crisis of such magnitude.

5. Conclusion

To summarise the findings of this study on the basis of the interview study, this chapter illustrates how micro-businesses coped with the

sudden and unexpected COVID-19 crisis and which digital transformations they have been implementing over the last two years. From the analysis of the collected data set, two major areas of innovation can be discerned: the first one deals with aspects related to organisational culture, such as the increasing reliability on the platform economy for service and retail promotion and distribution, as well as the implementation of innovative digital solutions. The latter one is related to the development of human capital like the increasing investments of resources on the acquisition of digital skills, or market research, with a tendency to localise the supply chain. Furthermore, the findings suggest that the COVID-19 crisis was a challenging test for the microentrepreneurs' ability to adjust to the new business scenario. Thus, this chapter contributes to the field of small entrepreneurship, digital innovation and crisis management with a novel perspective by using a dataset from Kazakhstan, which expands the existing literature dominated by studies conducted in Western economies.

The main takeaways for decision-makers of small entrepreneurial firms are the following:

- The organisational culture plays a fundamental role in the digital transformation process of a small business and it is a prerequisite to implement a successful innovative strategy
- Online platforms provided a number of opportunities during the COVID-19 crisis that can be leveraged by small entrepreneurs to reach new and diverse customers
- Investments in internal R&D are increasingly important in a digital competitive environment and the "localisation" of supply chains and markets offer opportunities at lower costs which are also more sustainable in the long term.

As for future avenues of research, the replication of this study across different geographical areas would be useful to examine whether the cultural background and/or geographical location affects the entrepreneur's response to the COVID-19 crisis and whether similar kind of innovative strategies have been devised to tackle it. Future research on small entrepreneurship and digital innovation may also benefit from the inclusion of additional participants (e.g., customers, online platform providers) to better assess the perception of digital transformation from their perspective. By moving the lens on Kazakhstan, it is possible to note as the significant leap in the development of the digital economy over the last two decades has not always been supported by an equal investment and effort to provide access to the internet for all, especially in rural areas outside of the major urban conglomerations. This great divide between centre and peripheries, as well as the mismatch between the magnitude of business digitalization and institutional investments suggest that a lot has yet to be done for supporting digital entrepreneurship and the digital transformation of business in Kazakhstan.

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