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Adoption of digital innovations in rural enterprises during COVID-19

Abstract

The COVID-19 pandemic has rapidly affected the operating conditions of companies. Traditional customers and operational models are changing radically in the short term. Digitalization and digital methods provide an opportunity to reorganize working methods and create a new kind of business to replace old methods and business models. Compared to urban businesses, rural businesses have less experience with digital tools and are less likely to adopt digital innovations; this makes rural businesses especially vulnerable. The purpose of this study was to provide insight into how microenterprises and small and medium-sized enterprises in rural areas have addressed the COVID-19 pandemic, the digital solutions they have adopted, and the kinds of challenges they have faced. This study particularly emphasized microenterprises and was based on survey data collected in Finland in the spring of 2020.

1. Introduction

Compared to urban enterprises, rural enterprises are in a disadvantaged position with respect to digitalization. In some areas, rural enterprises have inferior data infrastructures (Salemink, Strijker and Bosworth, 2017) and may have fewer options for broadband services (Ashmore, Farrington and Skerratt, 2017). Rural businesses also have less experience with digital tools and are less likely to adopt new digital technologies than urban businesses (Krumina, Krumins and Rozentale, 2015; Townsend et al., 2016). From this weaker starting point, rural enterprises may experience more difficulties due to the COVID-19 pandemic because this crisis has pushed companies to digitalize their operations at an accelerated pace. This chapter will examine how Finnish enterprises in rural areas have coped with the changing situation and how the COVID-19 pandemic has affected the adoption of digital innovations in the spring of 2020.

The COVID-19 pandemic has challenged the livelihoods of many entrepreneurs, for example, by reducing the number of customers and the amount of cash flow. The pandemic has also affected the poverty rate, employment, and the nature of work (Mofijur et al., 2021). Rural economies, which tend to involve high self-employment and more small and microenterprises, have had particular difficulty adjusting to these sudden changes. In addition, those who have part-time, irregular, or seasonal work are more likely to have been ill-prepared for this situation (Phillipson et al., 2020). The pandemic has created uncertainty because we do not yet know when the situation will be over, even though several vaccines have been created and vaccination has started in December 2020. Among other things, COVID-19 has limited the number of physical contacts, and digitalization could potentially offer a solution to this challenge.

Historically, the COVID-19 pandemic is not a once-in-a-lifetime crisis. Before COVID-19, there were other large-scale crises, such as the outbreak of foot-and-mouth disease in the United Kingdom in 2001 and the financial crisis and recession in 2007–2008 (Phillipson et al., 2020). It is likely that similar crises will occur in the future. Therefore, it is important to understand how to deal with these crises, how to prepare for them, and how to support companies through them. Phillipson et al. (2020) suggested that COVID-19 may stimulate innovative responses and the adoption of new solutions by businesses and rural areas, and attempts should be made to learn from this situation.

The present study explored how companies in rural context have adjusted their operations to cope with the changing situation of the COVID-19 outbreak, with a specific focus on the means of digitalization that companies have adopted or have planned to adopt. In addition, this study explored participants' trust in technology as well as their interpersonal trust because both of these factors affect technology adoption (Lippert and Davis, 2006). To this end, survey data were collected from 149 Finnish companies in the spring of 2020. Most of these companies were located in rural or sparsely populated areas (93%), and most were microenterprises.

Microenterprises are important to the national economy of Europe. For example, 99.5% of companies in Germany are microenterprises, and these microenterprises are important to Germany's economic stability (Roitzsch et al., 2012). Similarly, 93% of companies in Finland are microenterprises, and only 0.2% are large enterprises (Yrittäjät, 2018). Therefore, it is important to study how

microenterprises adapt to changing situations and determine how these enterprises can be supported in the future.

This chapter begins by providing a background on rural microenterprises and their adaptation to change. After the background, we describe how data was collected for the present study. Then, we examine the results regarding how the participating companies reacted to COVID-19. Next, we discuss these results, areas for future research, and the practical implications and limitations of the present study. Finally, the chapter is summarized and the conclusions of the study are stated in the last chapter.

2. Background

2.1 Rural enterprises

The definition of rural business or rural entrepreneurship is unclear and variable (McElwee and Smith, 2014). In this chapter, rural businesses are defined by their geographical locations, in that rural businesses are located in rural areas. However, previous research has recognized aspects of rural business other than location. Rural businesses are usually more reactive than proactive and tend to employ local individuals (McElwee and Smith, 2014).

Finland (Official Statistics of Finland, OSF, 2020, English translation by Räsänen and Tuovinen, 2020) divides rural and urban regions into seven categories (Figure 1), including three types of urban areas:

1. Inner urban area: A compact and densely built area with continuous development.
2. Outer urban area: A dense urban area extending from the boundary of the inner urban area to the outer edge of the area of continuous development.
3. Peri-urban area: A part of the intermediate zone between urban and rural, which is directly linked to an urban area.

A rural area is any area that has not been identified as urban. Finland recognizes four types of rural areas:

1. Local centers in rural areas: Population centers located outside urban areas.

2. Rural areas close to urban areas: Areas with a rural character that are functionally connected and close to urban areas.
3. Rural heartland areas: Rural areas with intensive land use, a relatively dense population, and a diverse economic structure at the local level.
4. Sparsely populated rural areas: Sparsely populated areas with dispersed small settlements that are located at a distance from each other. Most of the land areas are forested.

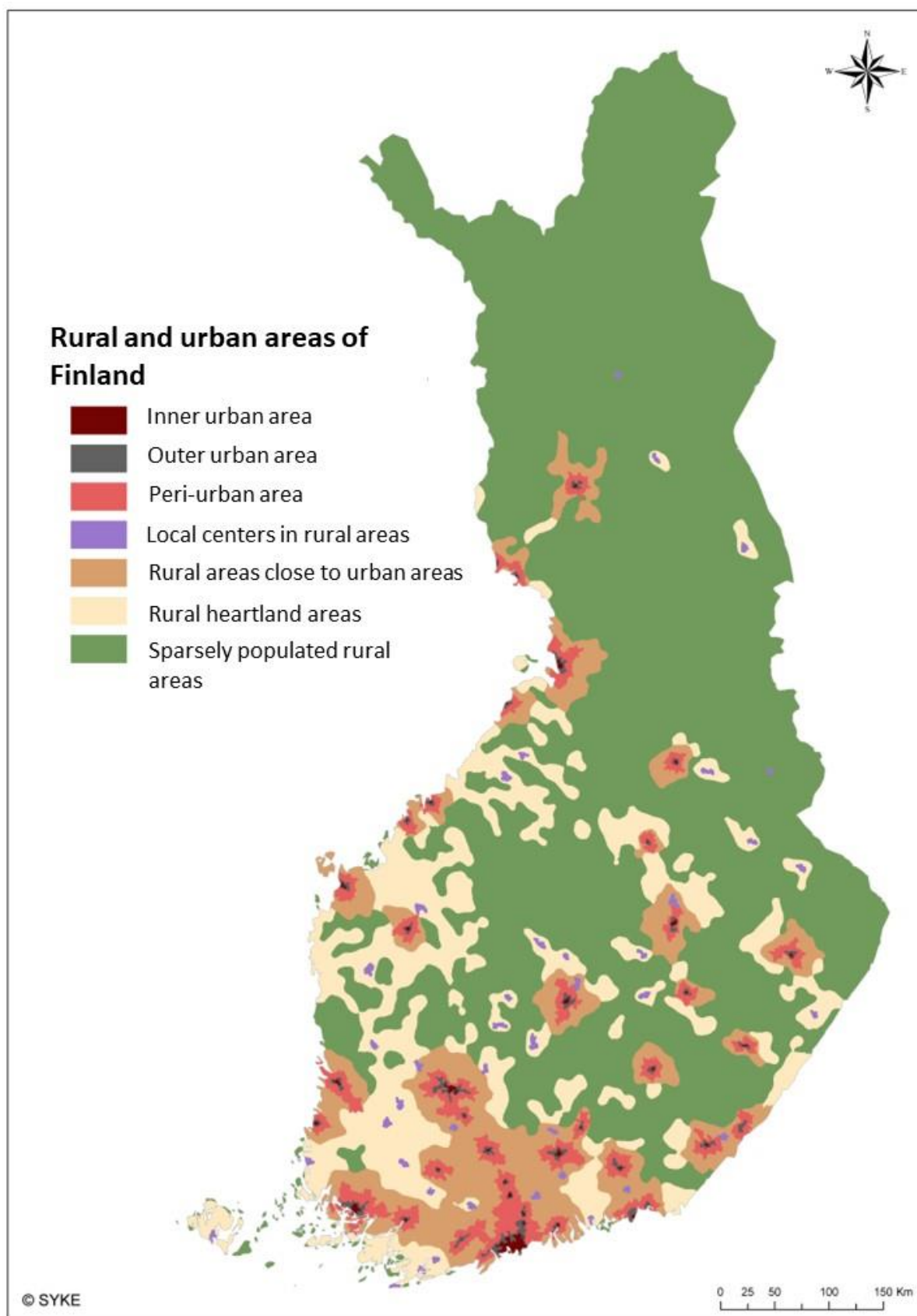


Figure 1. Rural and urban areas of Finland (Helminen et al., 2013, p. 2).

2.2 Technology adoption and trust

Trust can affect the acceptance of change and the adoption and diffusion of innovation. Before a person decides to trust someone or something, they evaluate the risks and the evidence of trustworthiness (Gambetta, 2000; Lewis and Weigert, 1985; Luhmann, 2000). Räisänen and Tuovinen (2020) found that people's willingness to share ideas is affected by their trust issues with change agents and with other individuals. This effect was observed in workshops designed to support the adoption and diffusion of digital innovation in rural microenterprises. The development of trust between individuals and change agents and between individuals themselves could create better opportunities for business development (Räisänen and Tuovinen, 2020).

Lippert and Davis (2006, p. 434) proposed that “technology trust and interpersonal trust, when coupled with planned change initiatives, lead to greater technology adoption and internalization.” Based on this concept, Lippert and David (2006) created a conceptual model of how trust in technology and interpersonal trust affect technology adoption and internalization (Figure 2). This model consists of external factors, such as the national financial situation, that foster or hinder organizational conditions that affect willingness to change and willingness to adopt new technology. Both environmental and organizational factors affect the trust of the individual, the effects of change initiatives, and the internalization of new technology.

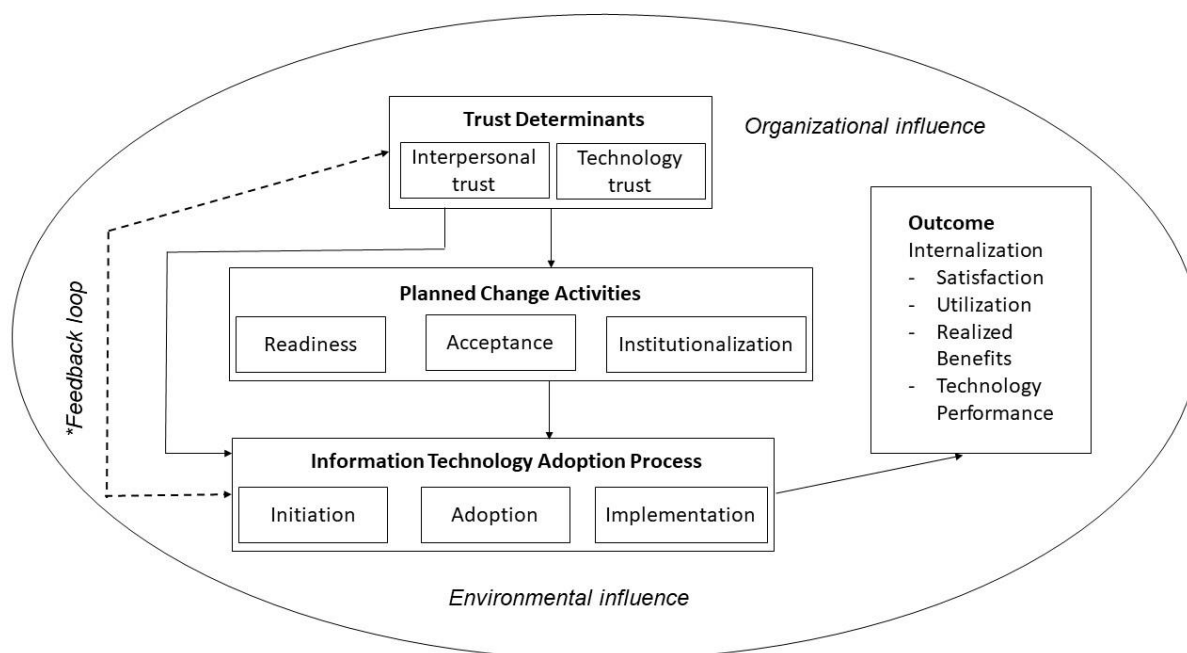


Figure 2. Conceptual model by Lippert and Davis (2006, p. 436).

In addition, Lippert and Davis (2006) proposed that two perspectives influence the adoption of information technology (IT): 1) interpersonal trust and trust in technology and 2) willingness to accept and use IT. Furthermore, the change process has three parts: 1) readiness, in which actions (e.g., new hardware) support the change; 2) acceptance, in which new methods and technologies are accepted and tested; and 3) institutionalization, in which the change becomes routine (i.e., the new normal). Trust determinants, interpersonal trust, and trust in technology affect planned change activities and the IT adoption process. Planned change activities can lead to various outcomes, including satisfaction, internalization, utilization, the recognition of benefits, and assessments of the technology's performance (Lippert and Davis, 2006).

The key to effective technology use is trust in technology (Kivijärvi, Leppänen and Hallikainen, 2013, January). Casey and Wilson-Evered (2012) conducted a study of trust in the context of an online family dispute resolution system and noted that trust is essential to the uptake of technology. In this prior study, trust indirectly affected behavioral intentions to adopt the new system. More specifically, the effects of trust in technology mediated effort expectancy. In addition, Schwartz et al. (2015) and Asadi, Nilashi and Yadegaridehkordi (2017). Asadi, Nilashi and Yadegaridehkordi

(2017) have also highlighted the importance of trust in the uptake of technology. Schwartz et al. (2015) studied trust in technology in the context of a home energy management system. Trust was especially important in this context because the system was in a new class of devices and its energy consumption was not yet well understood. Furthermore, Asadi, Nilashi and Yadegaridehkordi (2017) found that the behavioral intentions of users to adopt cloud computing were affected by the perceived usefulness, perceived ease of use, and cost of the cloud as well as the users' attitudes toward and trust in the cloud.

2.3 Rural microenterprises and digitalization

Currently, the digital divide is an especially pertinent issue in rural areas (Park, 2017; Räsänen and Tuovinen, 2020; Veselovsky et al., 2018; Salemink, Strijker and Bosworth, 2017). Rural areas have lower rates of digital adoption than urban areas; even in developed countries, such as Finland, certain areas are digitally excluded (Räsänen and Tuovinen, 2020). The digital divide negatively affects the social and economic progress of the entire nation (Veselovsky et al., 2018). For this reason, the issues associated with the digitalization of rural companies should be recognized and investigated.

Digitalization and IT can support the operations of rural businesses and help them find new ways of doing business. The use of IT increases information access and could thus allow microenterprises to increase the extent of their business knowledge (Kamal et al., 2010). However, rural microenterprises are often in a disadvantaged position compared to urban microenterprises. Businesses in rural areas often have inferior data infrastructures, and their managers tend to have fewer skills and less education than the managers of larger enterprises (Salemink, Strijker and Bosworth, 2017). In addition, Townsend et al. (2016) found that rural microenterprises tend to have difficulty realizing the value of technology (specifically, social media tools) because they tend to lack the experience, skills, and knowledge needed to use technology effectively.

Microenterprises are usually more flexible than larger organizations. Roitzsch et al. (2012) stated that microenterprises and small and medium-sized enterprises (SMEs) can use this flexibility to cope with change. Entrepreneurs adapt to sudden change through improvisation (Duxbury, 2014). Start-

ups, which do not have long histories or well-established ways of doing things, may improvise more easily than older companies. Roitzsch et al. (2012) suggested that the flexibility of microenterprises and SMEs can be enhanced by self-set goals. They also introduced the idea that management in small and microenterprises often consists of workers who are skilled but lack management training. This may be why these enterprises do not always have the knowledge required to increase flexibility. However, external obstacles to flexibility, such as a shortage of skilled workers or a worldwide pandemic, cannot be changed by the company.

According to Gosenpud and Vanevenhoven (2011), microenterprises in developing countries must do four things to better understand their changing environments: 1) perform an external environment analysis, 2) perform an internal environmental analysis, 3) plan, and 4) network. Although this approach was tailored for developing countries, it could also be useful in developed countries. Environments change quickly in developed countries, for example, due to digitalization and the COVID-19 pandemic. Enterprises in developed countries may be slower to change than those in developing countries, but changes still occur in these companies and should therefore be considered.

3. Research design

The research data used in the present study were collected in Finland from March 25 to June 7, 2020. To collect this data, a survey was shared with companies through e-mail and social media (Facebook and LinkedIn), mostly by local entrepreneur associations. This survey consisted of 25 questions, including 16 multiple choice questions and nine open-ended questions. Due to the difficult situation created by the worldwide pandemic, a survey with a limited number of questions was considered a more practical option than interviews. In Finland, a municipality may be termed a *kaupunki* (i.e., city or town) even if it is small; for example, the smallest *kaupunki* has 1,246 inhabitants (Association of Finnish Municipalities, 2020). As a result, some residents may feel that they are urban even if they live in sparsely populated areas of Finland. For this reason, the survey did not focus solely on rural companies.

One hundred and forty-nine participants responded to the survey. Of the participating companies, 91% ($n = 136$) had 1–9 employees, 7% had 10–50 employees, 1% had 51–250 employees,

and 1% had over 250 employees. Furthermore, 94% ($n = 140$) of the companies had a yearly turnover of 0–2 million euros, 5% had a turnover of 2–10 million euros, and 1% had a turnover of 10–50 million euros. Only 11 participants were from cities, which cannot be considered rural or sparsely populated areas. Overall, the research data represented rural microenterprises relatively well, even though there were few participants from urban areas.

4. Results

The spread of COVID-19 has occurred at different rates in different countries. During the data collection period of March 25 to June 7, 2020, the number of COVID-19 cases in Finland multiplied from 1,190 to 7,082. As of September 25, 2020, there were 9,484 detected cases of COVID-19 in Finland. The Finnish Institute for Health and Welfare has reported 335 disease-related deaths. The status of COVID-19 in Finland during the study period is illustrated in Figure 3. The following sections describe the results of this study.

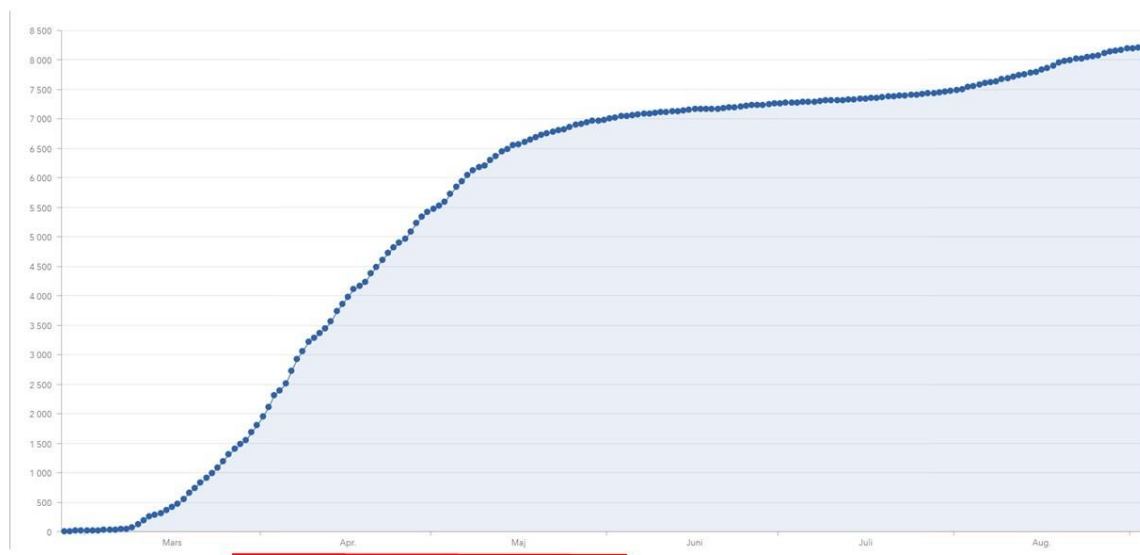


Figure 3. Cumulative increase in the number of COVID-19 cases in Finland (THL, 2020). The red line shows the survey data collection period.

4.1 Situation and changes of the participating companies

Many enterprises are in difficult situation due to the COVID-19 pandemic. In the present study, entrepreneurs were asked to estimate whether their situation were better than, the same as, or worse than they were one year prior. Most of the entrepreneurs estimated that their current situation had worsened. This is understandable, as COVID-19 has resulted in new regulations and recommendations that may be disadvantageous to entrepreneurs. However, 6% of the entrepreneurs reported that their situation had improved.

The industries of the participating companies are described in Figure 4. These industries were divided into seven categories: a) agriculture, forestry, and fisheries; b) manufacturing; c) construction; d) wholesale, retail trade, and repair of motor vehicles and motorcycles; e) services; f) other industries; and g) not reported. The first six of these categories follow the categorization system of the OSF (2010), and the seventh category pertains to companies that did not report their industries. Services include the following industries: transport and storage; accommodation and food service activities; information and communication; financial and insurance activities; real estate activities; professional, scientific, and technical activities; administrative and support service activities; arts, entertainment, and recreation; and other service activities. Other industries include mining and quarrying; electricity; gas and heat supply; refrigeration; water supply; sewerage; waste management and remediation activities; public administration and defense; compulsory social security; education, health, and social services; activities of households as employers; undifferentiated goods-producing and service-producing activities of households for their own use; and activities of international organizations and bodies. Although there are some differences between industries, companies in the service industry are not the only companies in trouble due to the pandemic. The wholesale industry, the construction industry, and other industries also appear to be in difficult situation. This may be because businesses in these industries are mainly rural, as rural businesses tend to be small compared to urban companies.

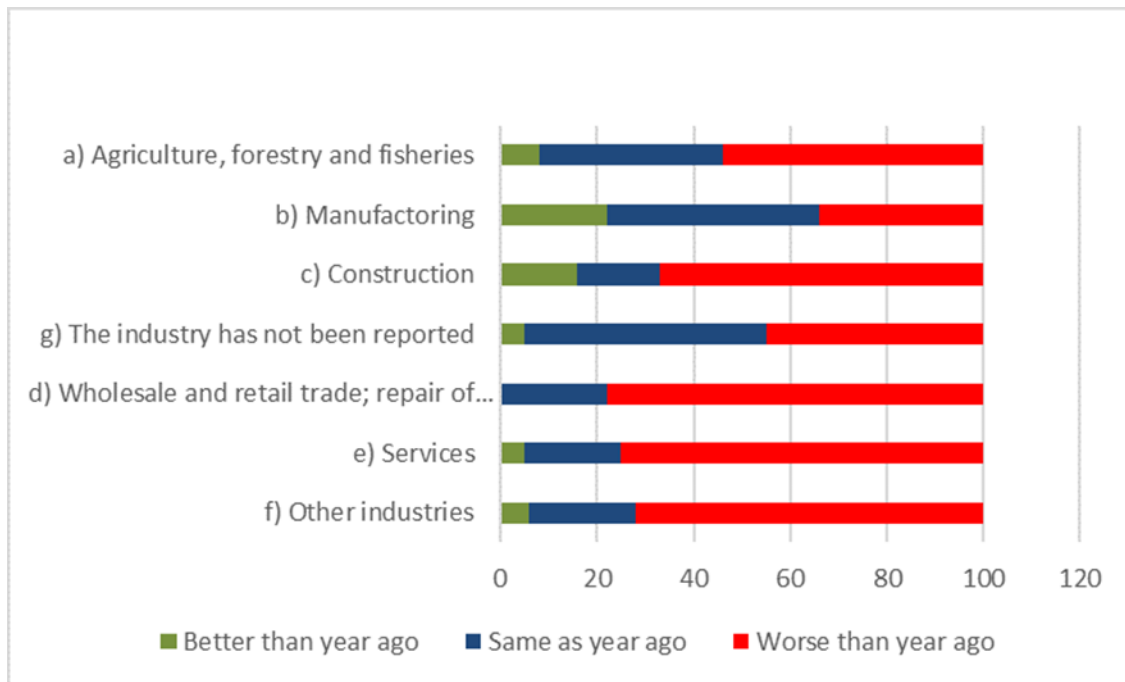


Figure 4. Industries of the participating companies and estimations of their current situation in percentages.

Many participants reported that their companies are currently in serious situation.

“Week more work on the calendar. Then, it ends. No new orders have arrived. Customers closed the money taps one to two weeks ago and failed to pay their bills.”

Some participants noted a need to change and quickly develop new products and services to address the situation.

“The work is practically over, and the salary cannot be paid, so new services must be developed quickly.”

Different companies had different reactions and implemented different changes in response to the pandemic. The participants were asked to describe the changes their companies had made due to the pandemic, and their responses were divided into seven categories (Table 1). One hundred and thirty-nine participants responded to this question. Many of the participating companies had adopted new

digital tools or channels (30%, $n = 41$), but 21% had changed nothing ($n = 29$). Alarming, many companies had to shut down or suspend business (9%, $n = 13$) due to COVID-19.

“On March 16, 2020, due to the ban on gatherings, I had to suspend the company, and I will close it down as soon as I can contingent on the money transfer. Now, it is not possible for me to close down because there is no money to pay for the closure.”

“I returned to school and drove down my business.”

Some participants were clearly concerned about the future, and some were ready to adjust their companies' activities and services in order to survive. However, other participants believed that there was nothing they could do or change about their companies.

“I cannot do anything.”

Changes made by companies	Percent of companies that implemented the change
Nothing	21 %
Growth/hiring new labour	1 %
Planning the future	2 %
Other development or modification	17 %
Retrenchment	17 %
New digital tools or channels	30 %
Increasing precautionary measures (e.g., improving hygiene)	6 %
Ending or suspending the business	9 %

Table 1. Changes made by the participating companies.

The COVID-19 pandemic has accelerated the digitalization of companies in Finland. Nearly half of the participating companies (47%, $n = 66$) reported that they would not have made these changes if not for COVID-19. Otherwise, 38% ($n = 54$) stated that they would have implemented these changes even in

the absence of COVID-19, and 15% ($n = 21$) stated that they might have implemented these changes in the absence of COVID-19.

Change can be difficult, especially when it is due to something beyond one's control, such as a worldwide pandemic. Nevertheless, most of the participants (48%, $n = 69$) did not find the changes they had made to their operations or the implementation of new digital tools to be as difficult as they had expected. Many companies have begun to use new digital tools and applications to facilitate online meetings since the start of the COVID-19 pandemic (Table 2).

Digital tools that have been adopted in the past six months	Percent of the companies that adopted the digital tool
Application for online meeting	72 %
Video sharing service	16 %
Social media channel	27 %
Survey tools	14 %
Paid online advertising	17 %
Online store	17 %
Customer relationship management tool	10 %
Something else	11 %

Table 2. What digital tools have you adopted in the past six months?

4.2 Information and communication technology skills

An analysis was carried out to assess the association between the participating companies' information and communication technology (ICT) skills and the entrepreneurs' estimations of their companies' situation. The results (Figure 5) suggest that companies with lower ICT skills estimated their situation to be worse compared to those with better ICT skills. Many of the changes made by companies during

the spring of 2020 were associated with digitalization. For example, some companies developed web stores and began to use online meeting applications as well as digital marketing. In response to the COVID-19 pandemic, the public was asked to maintain social distancing; naturally, digitalization offered a solution that would allow business to continue in these new circumstances. Entrepreneurs who felt that their situation had improved since one year prior were more likely to report that they would have made the reported changes even in the absence of COVID-19 (Figure 6).

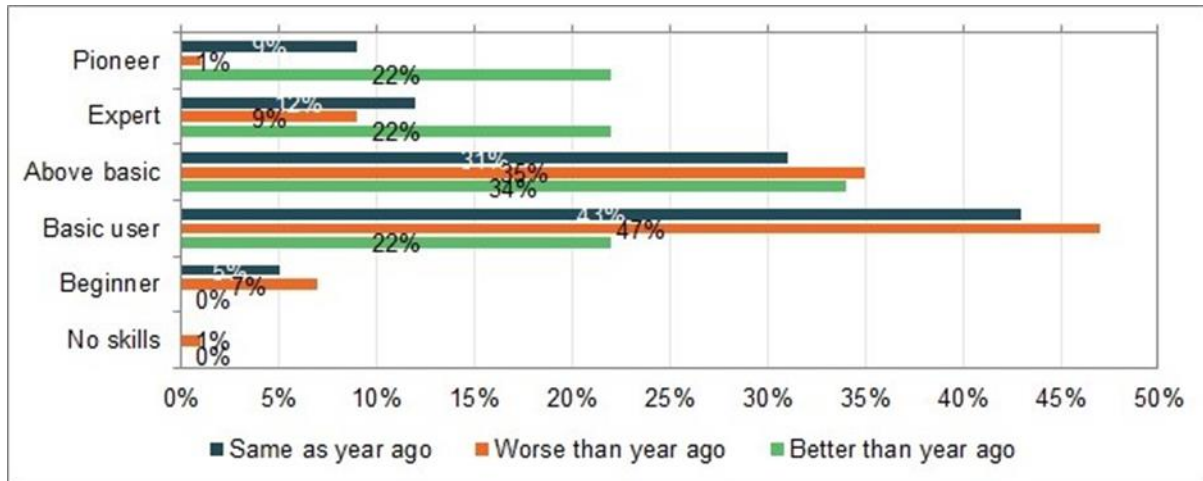


Figure 5. Association of companies' information and communication technology skills with entrepreneurs' estimations of their companies' current situation.

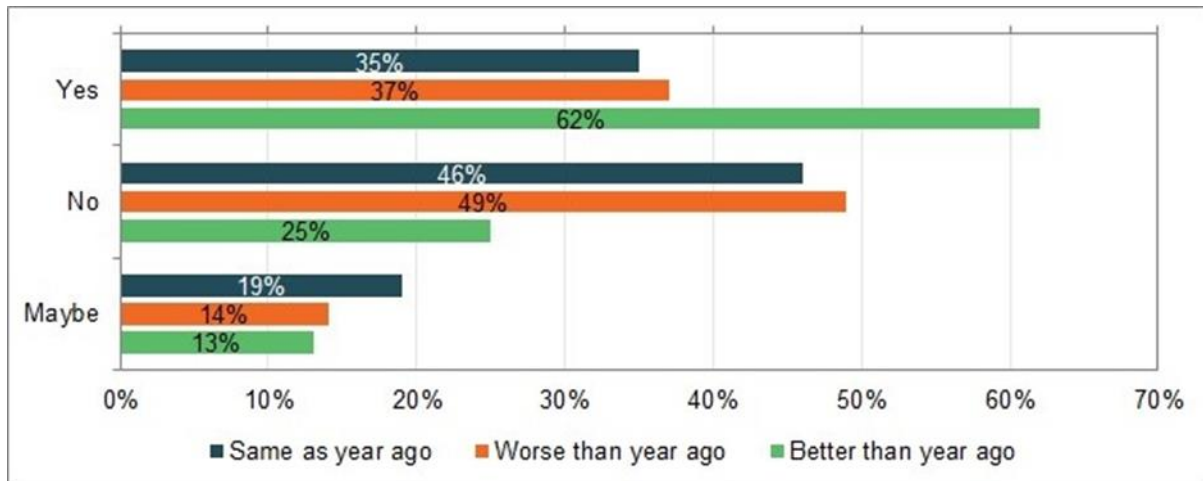


Figure 6. Association of the entrepreneurs' estimations of their companies' current situation with their belief that they would have implemented the same changes in the absence of COVID-19.

Furthermore, we investigated the association between entrepreneurs' estimations of their companies' current situation and the degree to which they found the adoption of new digital tools to be as difficult as they had expected. The results (Figure 7) suggest that companies that estimated that their situation had improved or remained the same since one year prior tended to report that making changes in their companies was not as difficult as they had expected.

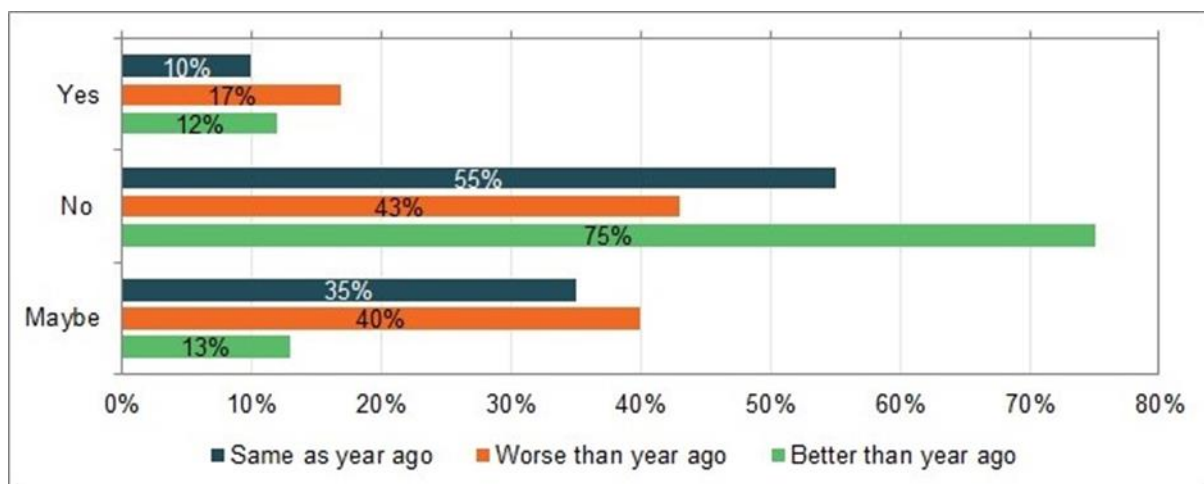


Figure 7. Association of the entrepreneurs' estimations of their companies' current situation with the degree to which they found it difficult to make changes in their companies.

4.3 Trust and technology adoption

In Lippert and Davis's (2006) conceptual model, environmental and organizational factors affect the trust of individuals, the effects of change initiatives, and the internalization of new technology. Lippert and Davis (2006) proposed that trust in technology, willingness to accept and use technology, and interpersonal trust lead to more effective technology adoption. The present study aimed to determine whether trusting individuals cope better with change, particularly in the context of adopting new digital solutions.

An analysis was carried out to assess the association between the entrepreneurs' estimations of their companies' current situation and the degree to which they trusted the digital solutions used by their companies. The results (Figure 8) suggest that those who trusted the digital solutions used by their companies performed better than those who did not trust the digital solutions used by their companies. In addition, those who estimated higher levels of customer trust in their companies' ability to thrive in

a digital environment (Figure 9), trust in their companies' futures (Figure 11), and trust in the future (personal; Figure 13) performed better than those who were less trusting. However, trust in partners (Figure 10) and trust in other people were not clearly associated with performance (Figure 12).

The results regarding trust in one's company and in the future support the hypothesis that entrepreneurs whose company performance had improved or remained the same since one year prior were coping with change and digitalization better than those whose company performance had worsened. However, personal trust in other people did not appear to affect this.

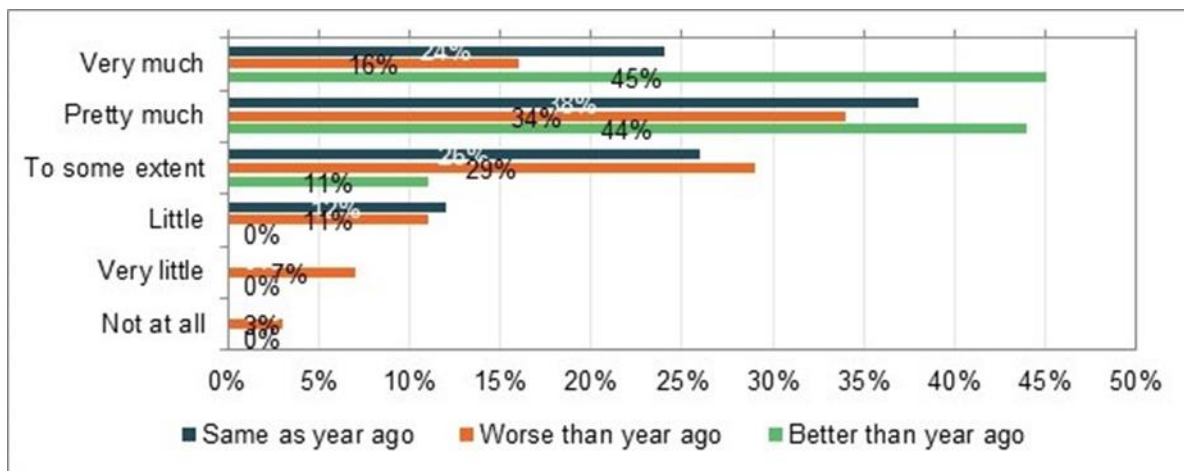


Figure 8. Association of entrepreneurs' estimations of their companies' current situation with their trust in the digital solutions their companies used.

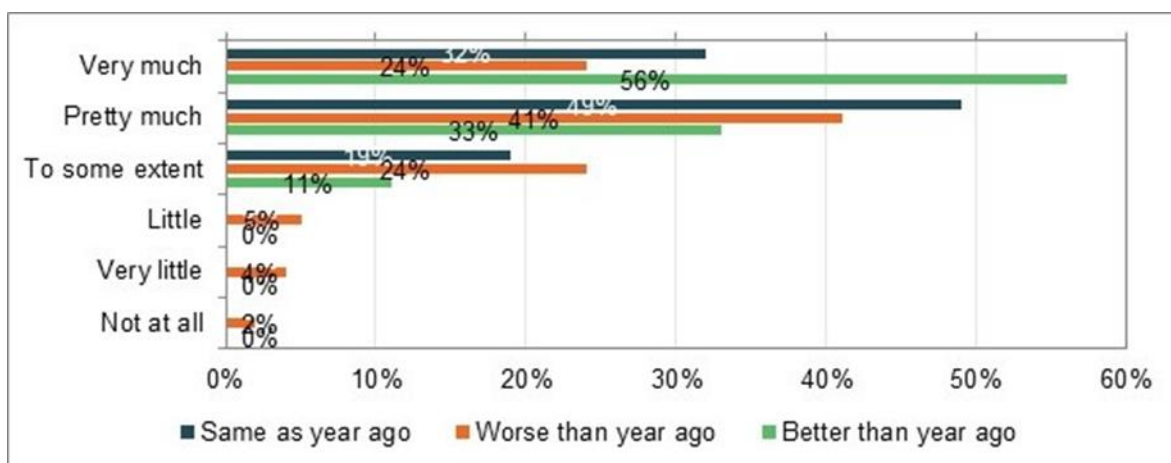


Figure 9. Association of entrepreneurs' estimations of their companies' current situation with the degree to which they believed their customers trusted them and their companies to operate effectively in a digital environment.

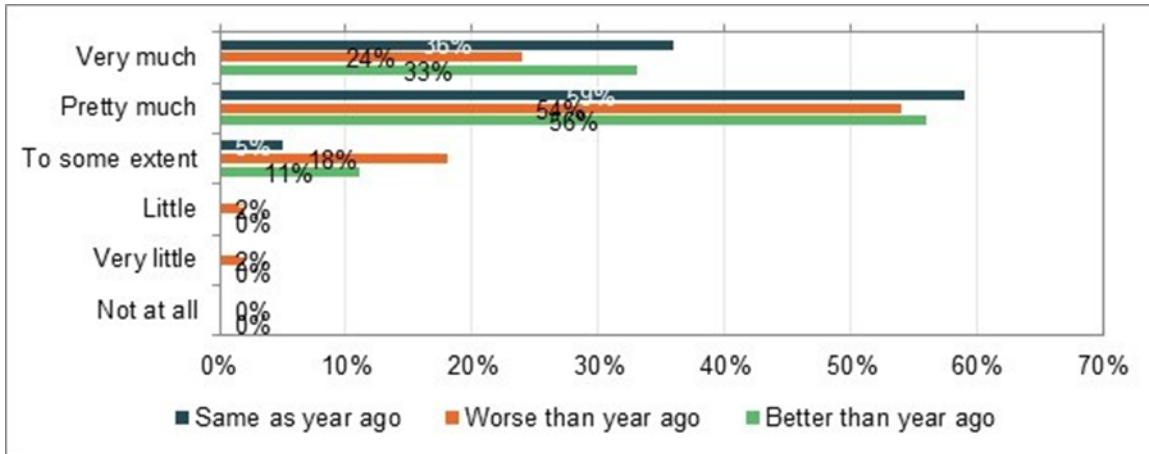


Figure 10. Association of entrepreneurs' estimations of their companies' current situation with their trust in their companies' partners.

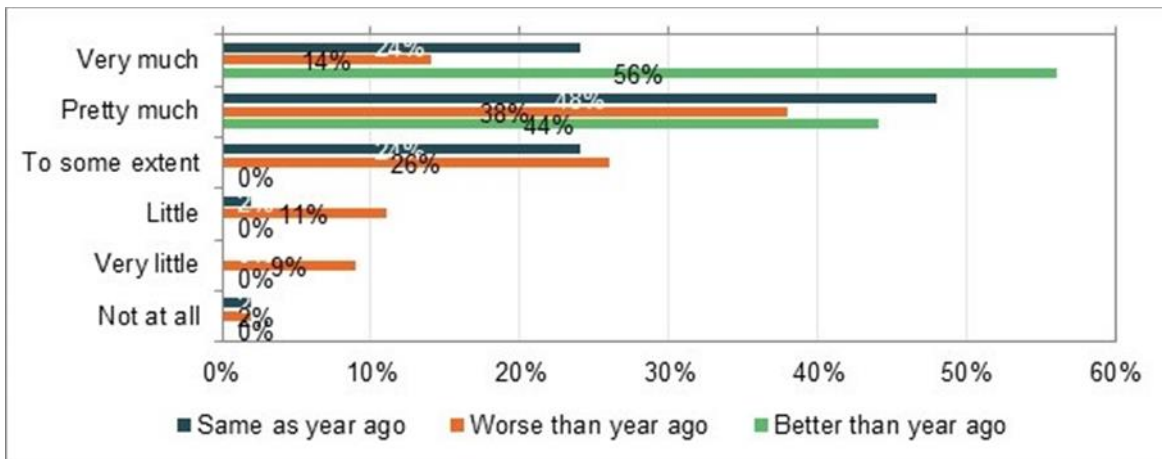


Figure 11. Association of entrepreneurs' estimations of their companies' current situation with their trust in the futures of their companies.

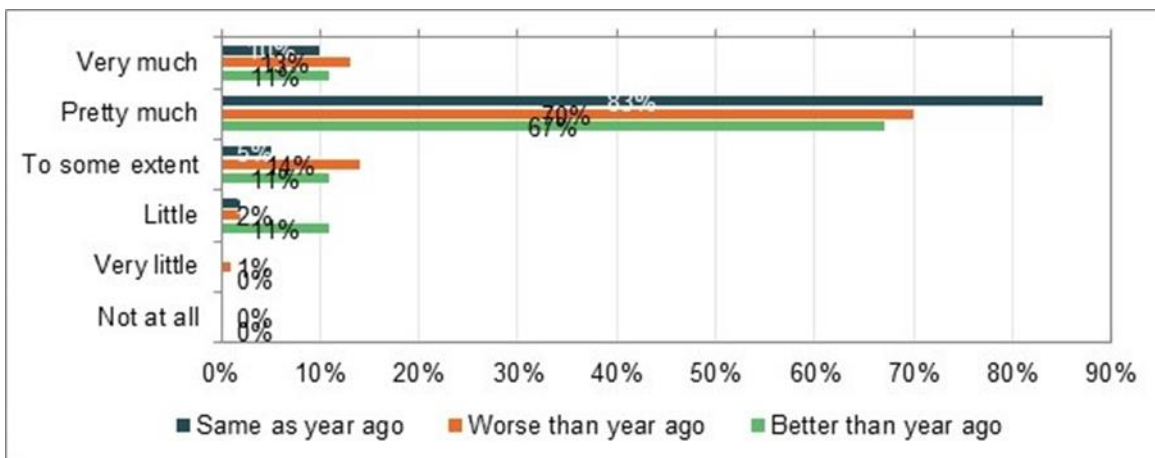


Figure 12. Association of entrepreneurs' estimations of their companies' current situation with their trust in other people.

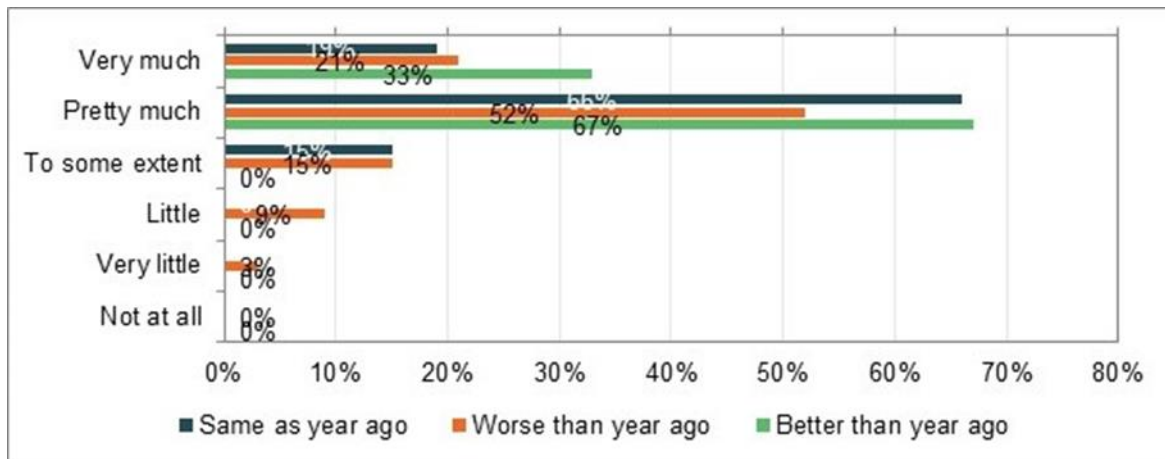


Figure 13. Association of entrepreneurs' estimations of their companies' current situation with their trust in the future.

5. Discussion and conclusions

The major issues caused by COVID-19 have forced many businesses to close entirely but have also accelerated digitalization. Many of the companies that participated in the present study reported that they had adopted new digital tools or channels. Nearly half (47%) reported that they would not have made these changes if not for the pandemic. However, it remains unknown whether these changes will become habitual and continue after the pandemic ends (Phillipson et al., 2020). As of December 2020, there is no clear end to the pandemic in sight. It is possible that the changes made by companies in response to the pandemic will remain in place for so long that they will become everyday business operations even after the crisis has ended. This could help companies in the future, as it is likely that similar crises will occur. In addition, other factors such as global warming are also likely to affect the business and operations of enterprises in the future.

Most of the participants (66%) in this study encountered difficulties in the spring of 2020. The situation created by the pandemic is prolonged, and strict recommendations are in effect in Finland as of December 2020. In addition to companies in the service industry, many companies in other industries reported that they were in difficult situation due to the pandemic. However, this result might have been amplified by the fact that most of the respondents were rural businesses. Rural businesses are typically small, are typically more reactive than proactive (McElwee and Smith, 2014), and may have inferior

managerial skills (Salemink, Strijker and Bosworth, 2017) compared to urban businesses. In the spring of 2020, 21% of the respondents had made no changes to their business. If this study were repeated, it is possible that these respondents will have made some changes to their operations or business since the data collection period of the present study.

The need to change business practices arose somewhat suddenly, but the participating companies seemed to be capable of adopting new digital tools at a fast pace (30%). Björklund et al. (2020, p. 3) noted that “many entrepreneurs described the crisis lowering the threshold for experimentation through creating a sense of urgency.” Therefore, it appears that companies have implemented digitalization and change surprisingly well. Rural microenterprises may benefit from their characteristics of being more reactive than proactive (McElwee and Smith, 2014) and more flexible than bigger organizations (Roitzsch et al., 2012).

Most of the respondents in the present study estimated their ICT skills as basic. The entrepreneurs who reported greater ICT skills tended to estimate that the situation of their companies were better compared to those who reported lower ICT skills. The COVID-19 pandemic created a situation in which face-to-face interactions with customers may no longer be an option. This has increased the frequency of online shopping in Finland (Suuri Verkkokauppatutkimus, 2020). The results of a study by Björklund et al. (2020) suggested that the COVID-19 pandemic has pushed enterprises to utilize collaboration and collective action more frequently. For example, sharing economy platforms could serve as cost-effective means of conducting online sales for microenterprises. A sharing economy application could also support more sustainable business (Räisänen, Ojala and Tuovinen, 2021). If rural enterprises wish to compete in online markets, they will require at least basic ICT skills. Earlier studies have also indicated that rural businesses have less experience with digital tools, are less likely to adopt new digital technologies, and often have difficulty realizing the value of technology compared to urban businesses (Krumina, Krumins and Rozentale, 2015; Townsend et al., 2016). Certain interventions and training programs could help to improve the ICT skills and competitive advantage of rural businesses (for example, see Räisänen and Tuovinen, 2020). However, rural areas also tend to have inferior data infrastructures (Salemink, Strijker and Bosworth, 2017); therefore, infrastructure development should also be supported for rural microenterprises.

Interpersonal trust and trust in technology can positively affect technology adoption (Lippert & Davis, 2006). Therefore, the present study examined the respondents' trust in technology, other people, and the future. The respondents generally trusted the digital tools used by their companies. This is a beneficial characteristic, given that trust in technology positively affects technology adoption. In addition, the present study made several preliminary observations that may be further explored by future studies. The entrepreneurs who reported high levels of trust in digital solutions, their customers' trust in their ability to operate effectively in a digital environment, and the futures of their companies performed better and appeared to cope with change better than those who reported lower levels of trust. These individuals seemed to trust their companies as well as their personal futures. However, they were not necessarily trusting of others, as they did not report very high levels of trust in their partners and other people.

The present study investigated the challenges brought on by the COVID-19 pandemic, examined the solutions implemented by rural microenterprises in response to these challenges, and preliminarily estimated the importance of trust in this context. Various measures have been found to have positive effects on attitudes toward digital innovation (Räsänen and Tuovinen, 2020) and the learning of IT knowledge and skills (Kamal et al., 2010). The background information collected in the present study can be used to plan such support measures for rural microenterprises.

The challenges created by COVID-19 have accelerated the digitalization of companies, and it is possible that future crises will have similar effects. Rural microenterprises are at a disadvantage in such situation due to the typically lower skill levels of their entrepreneurs and management (Salemink, Strijker and Bosworth, 2017). More information is needed to determine how these enterprises can be supported in crises. This information could be collected, for example, through action research during the COVID-19 crisis. In addition, after the crisis has ended, it will be essential to determine whether the changes made during the crisis became permanent and how enterprises recovered from the crisis. In particular, studying successful companies could reveal the recipe for success in a crisis.

As in all studies, there were several limitations in the present study. First, the research survey was carried out over a short period because we aimed to collect authentic data during the COVID-19 pandemic, which appeared as if it might soon be over in the spring of 2020. Longer and more careful

planning could have improved the quality and reliability of the data. Second, more information is needed with regard to trust in the context of the present study, as this study alone did not allow for far-reaching conclusions to be drawn on this subject. Finally, COVID-19 has affected different places differently, and the results of the present study only describe the situation in Finland. For example, different laws, regulations, recommendations, and cultural factors could influence how people react and cope in this kind of crisis.

In conclusion, this chapter discussed how Finnish microenterprises mostly located in rural or sparsely populated areas have coped with the COVID-19 pandemic. Specifically, the present study explored how microenterprises have changed their operations and business as well as the means of digitalization adopted by these companies. Many companies have experienced difficult situations due to the pandemic and have thus adopted digital tools in order to survive. However, it is alarming that many others have done nothing to modify their business in response to this situation. It appears that companies that were more eager to digitalize are now performing better than those that were less eager to digitalize. Furthermore, entrepreneurs' levels of trust in their companies and in the future could predict which companies are more likely to survive this kind of crisis. However, this topic requires further study. In addition, given that it takes time for changes to become habitual, it remains to be seen whether the changes made by companies in response to the crisis will become permanent. Studies should be carried out after the crisis has concluded to assess whether these changes became permanent.

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