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THE COVID-19 PANDEMIC: THE INITIATOR FOR DIGITAL INCLUSION OR EXCLUSION OF SMES IN THE BULAWAYO METROPOLITAN PROVINCE, ZIMBABWE

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Abstract:
The study examined whether the COVID-19 pandemic had created digital opportunities for Small to Medium Entrepreneurs (SMEs) in the Bulawayo Metropolitan Province, Zimbabwe or it had actually exposed their lack of digital acumen. The interpretivist paradigm, a qualitative descriptive approach and a case study design were adopted for this study. The research used semi-structured questionnaires to solicit data from 30 purposively selected small to medium entrepreneurs. Data were thematically analysed to discern meaning. The study revealed that the COVID-19 pandemic had led participants to embrace technology, as evidenced by their acquisition of technological gadgets. Furthermore, ownership of technological gadgets had facilitated working from home, in the comfort of their homes; reaching clients irrespective of boundaries; having easy access to information on business transactions; the ability to do business even during the pandemic; ordering and ease of payment of suppliers; convenience and flexibility in doing business and discovering business platforms they were not aware of. The study concluded that the COVID-19 pandemic was the initiator for the digital inclusion of SMEs in the Bulawayo Metropolitan Province, after the realisation that for their businesses to remain operational in this uncertain and disruptive environment, they had to embrace technology. The study recommended that workshops to train and equip SME owners with digital skills be conducted so that in the event of other pandemics, their businesses would remain afloat.

Keywords: digital exclusion, digital skills, digital inclusion, SME owners

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1. Introduction

The Corona Virus Disease (COVID-19), came as an economic and labour market shock to businesses globally, especially Small and Medium Enterprises (SMEs). A study to examine both the short-term and medium-term impact of COVID-19 restrictions on SMEs in China, showed that business activity in China, ground to a halt for a few months in January 2020 and tens of millions of SMEs were shut down. The outbreak of the pandemic had cast a heavy toll on their operations, causing problems of logistics blocks, labour shortages and drops in demand. Eighty percent of the SMEs had temporarily closed at the time of the first wave (Dai, Feng, Hu, Ji, Li, Wang, Wang, Xu & Zhang, 2020). According to Chirume & Kaseke (2020), in Zimbabwe, SMEs which are regarded as a driver of employment creation and growth were affected not only in production but also in demand and supply of goods. The COVID-19 disease disrupted the way SMEs did business and left SME owners in a dilemma of whether to close shop or continue to do business.

2. Background

According to Chen, Jaw & Wu (2016), the COVID-19 crisis has double proved the need for smaller and medium-sized enterprises to digitalise and adopt emerging technologies to be able to compete and stay alive in the ever-changing business environment. Following the declaration by the World Health Organisation (WHO) on February 11, 2020, of COVID-19 as a global pandemic, the Government of Zimbabwe set up an array of measures, including a national lockdown, to curb transmission (Mavhunga, 2021; Dzobo, Chitungo, Dzinamarira, 2020). SMEs were negatively affected by the lockdown. Most of them stopped operations and had to lay off some of their employees. Production in most cases was halted (Nyanga, & Zirima, 2020). These measures resulted in SMEs working remotely from home and as a result, they had to be innovative and see how they could conduct business from home.

The COVID-19 disease is generally viewed from a disastrous perspective. However, from a different angle, the disease brought about some positives. According to Amirudin, Symsul, Marnani, Rahmah & Wilopo (2021), the pandemic has caused innovations to emerge in all respects, including creating their business world, supported by advances in Science and Technology, with the internet which makes it easy for people to access various kinds of information. There is a positive influence with the emergence of new creativity and innovation as an adjustment effort from people. The same authors further assert that various habits that were carried out when conditions were still normal cannot be done now due to the fear of the disease. Some SME owners have had to find new business methods in the form of online businesses. Chen et al. (2016) concur that business operations in SMEs are affected daily, which has forced them to consider the vital role of Information Communication Technology (ICT) in business development.

3. Statement of the problem

According to Zamani (2022), changes in the business environment like what was observed with COVID-19 forced SMEs to adopt technologies they did not feel they needed before. In Zimbabwe, most SMEs were used to the face-to-face way of doing business but with the advent of COVID-19, they had to deviate from their usual way of conducting business to methods compatible with the new pandemic. However, taking into consideration, the way SMEs have been operating, it became imperative for them to think in other terms. The only way to continue in business was to embrace digital technology or ship out of business. Studies on the technologies in SMEs have been conducted. However, there is a dearth of research on whether the COVID-19 pandemic initiated the adoption of digital technologies in SMEs in the Bulawayo Metropolitan Province, Zimbabwe, or not, hence this study.

3.1 Aim of the study

The overarching aim of the study was to establish whether the COVID-19 pandemic had led to the inclusion or exclusion of SMEs without digital technologies. The findings of the study would lead to the adoption of appropriate policy measures to meet the technological needs of SME owners.

3.2 Objectives

The study was guided by the following objectives:

3.2.1 Primary objective

- To find out the technological impact of the COVID-19 pandemic on the operations of Small and Medium Entrepreneurs (SMEs), in the Bulawayo Metropolitan Province, Zimbabwe.

3.2.2 Secondary objectives

- To establish whether Small and Medium Entrepreneurs (SMEs) in the Bulawayo Metropolitan Province perceived the COVID-19 pandemic to be technologically beneficial to their businesses or not.
- To determine the technological implications of the COVID-19 pandemic on the operations of Small and Medium Enterprises (SMEs) in the Bulawayo Metropolitan Province.

4. Literature review

4.1 Role of SMEs

The role of SMEs in providing employment and supplying of goods and services cannot be belittled especially in developing countries because of their socio-economic relevance

(Natalia, 2022). In fact, SMEs are perceived as the backbone of most developing countries as posited by Afolayan, Plant, White, Jones and Beynon-Davies (2015). Therefore, their existence is prudent as they play a critical role in the economic and social affairs of nations. The emergence of the COVID-19 pandemic brought new challenges to the survival of many businesses globally and SMEs were not spared (Corvello, Verteramo, Nocella & Ammirato, 2022; Nani & Ndlovu, 2022). As suggested by Kraft, Lindeque and Peter (2021), the owners of the various SMEs, need to ascertain the digital technologies needed within their businesses so that the digital transformation process can be realised. Therefore, it has been anticipated that digital technologies had a critical role to play in enabling the conduct of business by SMEs during the COVID-19 pandemic era.

4.2 Adoption of digital technologies

According to Moyo and Tengeh (2021), digital technologies refer to several information and technologies, like the most recent electronic content, that innovators in different industries use to grow their businesses. They enable the creation of value for all parties in the digital ecosystem by facilitating the exchange of products, services, or currencies (Corvello et al., 2022). Therefore, one of the many reasons why some SMEs managed to survive during the COVID-19 pandemic was the adoption of digital technologies within their business processes (Belitski, Guenther, Kritikos & Thurik, 2021), which witnessed a significant increase in the role of digital technologies. The digital transformation by SME businesses can be considered as the panacea for capacity development and the various technological trajectories they might need as suggested by Souza, Siqueira and Reinhard (2017). Technology is pivotal in transforming businesses through innovation, and dictates the continued existence of businesses (Abdul et al., 2016). With the high levels of unemployment in developing nations like Zimbabwe, the existence of SMEs cannot be overemphasised beyond their existence as they are critical in mitigating poverty and stimulate growth (Makiwa & Steyn, 2016).

Digital technologies have gone through many structural transformations in the past decade or so, with the emergence of the COVID-19 pandemic ultimately proving instrumental in forcing SMEs in deciding their inclusion or exclusion from business related transactions (Siavhundu, Nyabunze & Chinorwadza, 2020). According to Dai et al. (2020), the bulk of SMEs had to shut down operations temporarily as the pandemic took its toll in threatening lives of many. This solidifies and strategically positions digital technologies as a way of emerging from the pandemic quagmire. The submission by Corvello et al. (2022), that the pandemic was catastrophic is factual, yet it was also an avenue for opportunists to embrace technology and be innovative for survival, a move that could be perceived as the game changer in the next couple of years.

4.3 Digital inclusion

Digital inclusion is the access to and usage of information and communication technology by individuals and groups (Nguyen, 2021; Ragnedda & Mutsvairo, 2018). Ragnedda and Mutsvairo (2018) added that digital inclusion espouses all the digital ecosystem

infrastructure and technologies that include the internet, hardware, software, content, services and digital literacy skills needed. According to Engidaw (2022), SMEs need to embrace digital ecosystems ranging from digital payments, digital marketing, electronic financial systems, digital communication and digital supply chain systems. The prominence of COVID-19 opened avenues for SMEs to use digital technologies during the pandemic and even beyond, as concluded by Maglakelidze and Erkomaishvili (2021). As an example, there were sizeable profit margins noted in surveys conducted in multiple developed countries as small businesses started using digital technologies to do their business processes (Belitski et al., 2022; Martin et al., 2016; United Nations, 2021). This is so because the use of digital technologies by SMEs tend to allow them to respond to unpredictable future pandemics flexibly and be able to mitigate the risks and challenges which might arise (Belas, Gavurova, Dvorsky, Cepel & Durana, 2021). When embraced, digital inclusion brings everyone to digitally participate, thereby reducing the social marginalisation, social inequalities and giving citizens the reasons to participate digitally, as alluded to by Ragnedda and Mutsvairo (2018). At the peak of the pandemic, Belitski, Guenther, Kritikos and Thurik (2022) reckon that the use of digital technologies propelled some SMEs to leverage on value creation as well as value appropriation. This allowed them to manoeuvre and enjoy some profit margins.

The moderating factor in the adoption and use of digital technologies by the various SMEs is the use of an efficient, effective and reliable internet (Makiwa & Steyn, 2016). To buttress this, Makiwa and Steyn (2016) concluded in their research that SMEs would successfully leverage and gain value from adopting ICT by acquiring the necessary ICT skills. It is quite refreshing to note that there are some SMEs who are flexible and devising ways of harnessing technologies available to improve the way they do business and to consolidate the competitive advantage they have (Manyati & Mutsau, 2019). These will reap the benefits of digital inclusion within their business operations.

4.4 Benefits of digital inclusiveness in the face of COVID-19 pandemic

The use of these technologies can bring about a couple of benefits and conveniences to the SMEs. For instance, it enables the survival, growth and flourishing of the SMEs as they can network and market their products online (Abdul et al., 2016). According to Nugroho et al., (2018), technology itself has the potential to bring the buyer and seller closer, and ultimately lead to customer satisfaction. From another perspective, the use of digital technologies yields an insight and clear lens on their organisation's operations as they gain an understanding of the benefits of such digital technologies (Kraft et al., 2021). Gurure and Takavarasha (2020) discoursed that the adoption of digital technologies and other e-commerce related technologies within a business, helps in cutting down the costs, rationalisation of the business processes, inventory management, sales, distribution and after-sales services. Likewise, adoption and use of digital technologies is an antidote for resilience and survival of the SMEs in difficult and trying times like during the COVID-19 pandemic (Corvello et al., 2022).

According to Kraft et al. (2021), easier access to skillsets, easier access to economic opportunities, easier access to funding, enhanced collaboration, networking, and innovation, and reduced "red tape" are all advantages of SMEs implementing digital transformation. In reality, SMEs have to author their own success stories by being flexible to digital solutions because of the challenges they face in accessing credit lines, which inhibit their growth as compared to other big corporates (Mallinguh, Wasike & Zoltan, 2020). This is despite the fact that they significantly contribute towards the growth of the economy (Siavhundu et al., 2020).

5. Theoretical framework

There are multiple models that could be adopted in clarifying how SMEs have adopted digital technology. This study used the technology, organisation and environment (TOE) theoretical framework as was postulated by Tornatzky and Fleischer (1990). The characteristics of technology, the organisation's business preparation, and the environment are identified as significant determinants of technology adoption (Lippert, 2006). According to Hoti (2015), technological context includes both internal and external technology that may be effective in increasing corporate productivity; the organisational context is characterized by the depth and breadth of the business, the complexities of the organisational structure, the expertise, attributes, and financial resources available to the firm and the business's market and dealings with key stakeholders, competitors, and the authorities are referred to as the environmental context. The TOE model is grounded on the premise that the extent to which an organisation can adopt technology is influenced by technology, by the organisation as well as the context of the environment (Tornatzky & Fleischer, 1990). A slew of empirical research studies (Awa et al., 2016; Gurure & Takavarasha, 2020; Hoti, 2015; Jere & Ngidi, 2020; Souza et al., 2017; Zamani, 2022) have been carried out employing the TOE framework as the theoretical foundation for determining how businesses embrace and implement new technology. According to Jere and Ngidi (2020), the TOE model could help in examining the casual factors that in the adoption of new technology innovation by a corporation.

5.1 The technology context

The digital technologies to be adopted must be compatible with systems which are currently in existence as well as the various business processes (Awa et al., 2016). The use and inclusion of digital technologies by SMEs also rely on compatibility, which determines the adoption rate. As Awa, Ukoha and Emecheta (2016) put it, the type of gadgets owned by the SMEs (smart phones, laptops and computers) speaks about the ICT infrastructure. Makiwa and Steyn (2016) also revealed that there are no digital technologies to talk about if the internet charges are exorbitant and out of reach for many SMEs. Technology is too dynamic and the SMEs need to know that they are operating in a fast ever-changing environment and therefore, they also need to align with the changes,

lest they find themselves obsolete and rendered useless and irrelevant (Mallinguh et al., 2020).

5.2 The organisation context

Regarding the organisation context, the objective is to put into context all the determinants of an organisation which are critical in digital inclusiveness. These include the size of the organisation, the structure of the organisation, how it is managed, the communication channels and how decisions are made (Jere & Ngidi, 2020). The type of management within SMEs makes the decision to either advocate for digital inclusion or exclusion, based on their perceptions on digitalisation. Gurure and Takavarasha (2020) alluded to the fact that SMEs within the Zimbabwean context face challenges ranging from lack of techno-skills needed to operate the digital tools and technologies, inadequate infrastructure that can lead to poor connectivity and also even organisational resistance to change. The way a business would adopt digital innovations and include it to solve their business puzzle has to be clearly understood from an organisational perspective, according to Hoti (2015). Unlike big organisations, SMEs can exist because they are less bureaucratic yet flexible, a feature that positions them to embrace technology as compared to other formalised entities (Juniarti & Omar, 2021). Finally, Souza, Siqueira and Reinhard (2017) argue that businesses like SMEs will never realise value from digital inclusiveness unless there is an alignment of information technology (IT) investments with the business strategies. In other words, the IT investment like digital technologies must unlock opportunities and hence value for the business.

5.3 The environment context

The last construct of the TOE framework in this research is the environment. Dzindikwa (2022) opined that the government has a pivotal role to play in inventing policies that will help in the adoption of digital technologies by SMEs, thereby increasing their inclusiveness. This is in resonance with Guo *et al.* (2020) who asserted that adopting digital technologies is fundamental in responding to crises like the COVID-19 pandemic. This is true because technology is so quick that businesses like SMEs need to also maintain pace for inclusiveness, lest they will not survive the competitive business environment (Mallinguh et al., 2020). Exclusion by failure to adopt digital technologies is a major setback for SMEs as they lose competitive advantage, the ground becomes uneven and eventually the excluded SMEs will be weakened (Souza et al., 2017).

Making reference to the TOE framework by Tornatzky and Fleisher (1990), this study synthesised the various studies and developed a proposed framework that helps to ascertain how technology can be beneficial to SMEs in the Bulawayo Metropolitan Province, to help establish the challenges inflicted by COVID-19 as well as determining the technological implications of the pandemic on the operations of SMEs. The theoretical framework is shown in Figure 1 below.

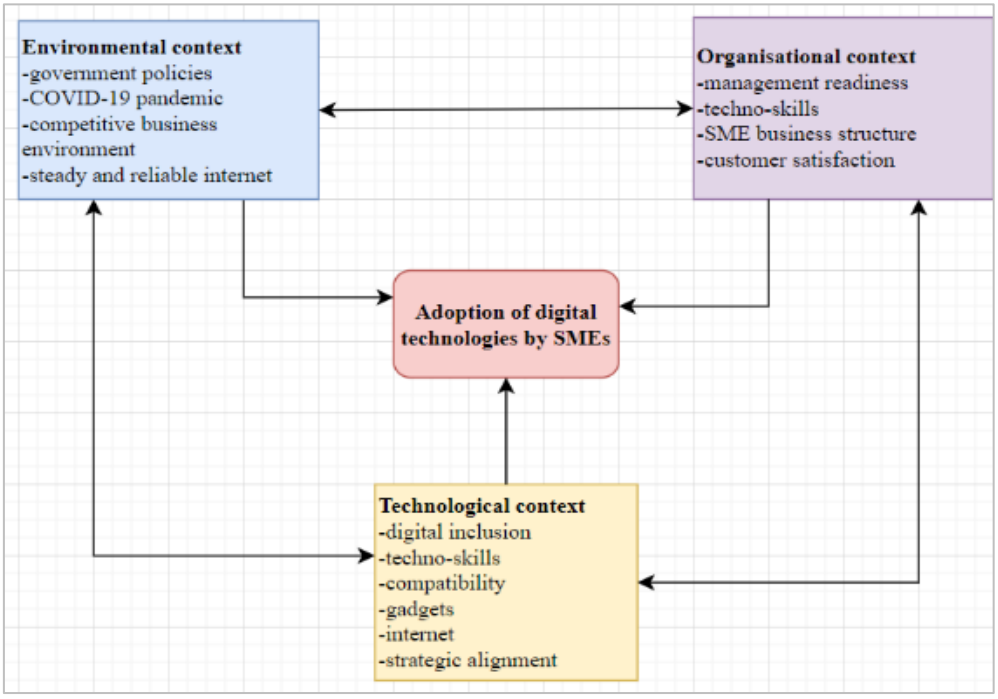

Figure 1: The TOE framework (Tornatzky & Fleisher, 1990)

6. Research methodology

The study situated in the interpretivist research paradigm, adopted a qualitative descriptive research approach and a case study design. The rationale for this methodology was to obtain in depth data on the situation obtaining on the ground regarding the technological impact of the COVID-19 pandemic on SME business operations in the Bulawayo Metropolitan Province in Zimbabwe. The study made use of purposive and snowball sampling techniques to identify 30 participants from whom empirical data was obtained, to gain in depth descriptive accounts of the phenomenon under study. According to Cooper and Schindler (2008:164), qualitative research involves the intensive, in-depth study of a small group or of individuals sharing certain characteristics. Participants in this study were SME owners who bore similar characteristics, such as low digital skills levels; some of them low-income earners; others lack access to affordable broadband connections and lack of motivation to use internet because of the over reliance on face-to-face business operations. A qualitative approach was deemed suitable so as to get insights into how SMEs experienced the technological impact of the pandemic in their natural settings (Taylor, Sinha & Ghoshal, 2014). Semi structured questionnaires with closed and open-ended questions were used to elicit responses. Before the commencement of the actual data collection, a pilot study was conducted to determine how well the research methods worked (Bryman, Bell, Hirschsohn, Dos Santos, Du Toit, Masenge, Van Aardt and Wagner, 2017) so that participants would not have problems in answering the questions; there would be no problems in recording the data and to allow some assessment of the questions' validity of the collected data.

All due ethical processes of data collection such as seeking consent from the participants was obtained. Open invitation letters where the purpose of the study was outlined were distributed. Participants in this study willingly did so and they were advised that they could pull out of the study without any penalties. Other ethical issues such as the right to anonymity, confidentiality and the freedom to withhold sensitive information if they so wished was upheld (Cooper and Schindler, 2008:34-40). Credibility and trustworthiness were established through member checks. Semi-structured questionnaires were read through many times for data familiarisation, after which the data was broken down, examined and conceptualised. Empirical data was screened, coded, condensed and transformed systematically and thematically analysed to address the research objectives (Taylor et al., 2014; Bryman et al., 2017).

6.1 Data analysis and Discussion of findings

6.1.1 Demographic information of participants

Demographic variables for which data was collected included age and highest level of formal education. Demographic data was meant to give insights of the characteristics of the participants, in relation to the phenomenon under study. The total number of participants in this study was 30.

6.1.2 Age of participants

The table below depicts the age distribution of the SMEs who participated in this research.

Table 1: Distribution of participants according to age

Below 20 years	1	0
20-30 years	2	2
31-40 years	3	15
41-50 years	4	8
51-60 years	5	2
Above 60 years	6	3

Based on the results, the majority of participants were aged between 31 and 40 years. Out of the 30 participants, only five belonged to the 51 to above 60 years' category. It is also interesting to note that there were no participants who were below the age of 20 years.

6.1.3 Level of education of participants

The table below shows the distribution of the level of education for the participants.

Table 2: Distribution of participants according to level of education

Doctorate	1	5
Masters	2	11
General degree	3	10
Diploma	4	3
Advanced level	5	0
Ordinary level	6	0
No formal education	7	0
Other	8	1

The results showed that the majority of SME owners had a Master's Degree qualification, with also a sizeable number of them holding the General degree. One participant had an accounting qualification, that is, ACCA. These findings suggest that the participants were well educated and were able to interpret and answer the questions correctly.

6.1.4 Business category

Questions were also asked pertaining to business categories. Results are shown in Table 3. It is important to note that for the type of business, participants could choose more than one option.

Table 3: Distribution according to type of business

Retail	1	9
Manufacturing	2	7
Farming	3	9
Hospitality	4	1
Catering	5	1
Other (specify	6	7

Findings indicated a spread of sectors, with the majority in retail and agriculture. Other sectors included manufacturing, education, hospitality, catering, transport, beauty therapy, financial services and consultancy. This spread gives a good picture of the various categories of businesses affected by the COVID-19 Pandemic.

6.1.5 Number of years of operating the business

To gain more insights on the businesses of the SMEs, questions were also raised on the experience of the SMEs, especially the number of years they have been operating. The data shown in Table 4 was obtained regarding the number of years SME owners have been operating their businesses.

Table 4: Number of years of operating the business

Below 5 years	1	9
5-15 years	2	16
16 - 25 years	3	5
26 -30 years	4	0
Above 30 years	5	0

The results show that the majority of participants have been in business for a period spanning between 5 years to 15 years. This shows a fairly high level of experience in operation. It is also important to note that none of the participants had more than 25 years of operation.

6.1.6 Ownership of technological gadget

To solicit for information that gives an indication about their technological preparedness, the participants were asked to indicate the type of gadgets that they owned and they were free to choose more than one type.

Table 5: Ownership of technological gadgets

Desktop computer	1	20
Laptop	2	26
Tablet	3	7
Smart phone	4	30
Other (specify	5	0

All the participants in this study owned smartphones. Additionally, the majority of them owned laptops and even desktops; an indication that there was a high usage of technological gadgets during the COVID-19 era within the SMEs business operations.

6.1.7 Technological gadgets mostly used

Participants were also required to select from the list that they had been given of gadgets in their possession, the ones that they used most. Participants were allowed to choose more than one gadget.

Table 6: Gadgets mostly used

Desktop computer	1	3
Laptop	2	5
Tablet	3	2
Smart phone	4	27
Other (specify	5	0

The results from Table 6 showed that the gadget that was mostly in use was the smartphone.

6.2 Uses of the technological gadgets

In response to a question on what they used the technological gadgets for, participants gave varied uses as shown by the summary of statements that follow: For communication, to advertise products, to send and receive payments, to buy and sell goods, to check the amount of goods left and to show prices of products.

6.2.1 Benefits of owning a technological gadget

On whether the technological gadgets that they possessed were of use in the COVID-19 era, the majority (29) of the participants answered affirmatively. When asked what the benefits of owning the technological gadgets during the COVID-19 era were, these were some of the responses given in summary. Of note is that participants were free to choose more than one benefit.

- Contact many people at the same time;
- Doing business in the comfort of my home;
- Easy to communicate with clients;
- Cheaper than physical interaction;
- Safe from the pandemic; helped to keep in touch with customers during a period when physical contact was discouraged;
- There was business continuity even not in the office;
- Ease of communication;
- Fast, convenient and time saving;
- Trading continued despite the lockdown.

Responses from some of the participants are captured below. For example:

> *"I have been able to conduct my business from home. My gadget has enabled me to buy and sell online."* (SME 16)

> *"Communication was made easy and convenient as I could make payments and advertise my goods."* (SME 19)

> *"I could operate during lock down."* (SME 21)

> *"I had information on my fingertips."* (SME 22)

> *"With digital technology, there was flexibility, efficiency and the business never stopped."* (SME 25)

> *"Owning a gadget has enabled the flow of business through online transactions; has made entrepreneurs to be innovative, for example, coming up with new ways of marketing the products through web pages and face book.* (SME 30)

The varied responses were a clear indication of how useful the SMEs perceived the use of technology during the COVID-19 pandemic era.

6.3 Implications of the COVID-19 pandemic

The participants were asked what the implications of the COVID-19 pandemic were for their business operations. The implications given were two pronged: for SME and policy makers.

6.3.1 Implications for SMEs

Most of the participants revealed what they needed:

> "*Training on how to use the technological gadgets, for example in putting figures; need training on how to save the data that will have been entered as most of it was lost."*

For an example, one participant said:

> *"I need training on how to save my information that I will have collected from clients. I lost most of the figures that I had entered. I also had problems in separating my sales from my credits."* (SME 11)

6.3.2 Implications for policy makers

The study revealed the following implications for policymakers which are summarised as follows:

> "*Need to upgrade internet; need for subsidies on internet services; need for internet access; technology needs to be adopted by the whole organisation; need for training; data must be cheap."*

Examples of implications for policy makers by SME owners captured verbatim, focused on the following:

> "*The cost of data in Zimbabwe is very high considering that we should be online 24/7. It would be most welcome if the price could be reduced for affordability."* (SME 13)

> *"There is need for fast Wi-Fi connectivity and good network systems."* (SME 14)

> *"Service providers should create links for us to advertise."* (SME 20)

> *"We need technical knowledge and training on how to use the gadgets."* (SME 28)

From the findings pertaining to demographic data, it emerged that the majority of participants were aged between 31 and 40 years and the majority were Master's Degree holders. Based on the results, all the participant SMEs had at least a Diploma as the lowest level of education. These results augment the assertion by Ijirshar and Ayidiowu (2015), that education is the foundation for the success of any business. The study also established that most of the participants were in various business sectors such as retail, agriculture, manufacturing, education, hospitality, catering, transport, beauty therapy, financial services and consultancy, and most of them had been in business for 5 to 15 years.

The study revealed that most of the participants owned various technological gadgets such as smartphones, laptops, desktop computers and tablets and the gadgets that were highly in use were smartphones and laptops. These results are an indication that SMEs realised that since face to face interaction had been banned, they had to come up with alternative, innovative and creative ways of conducting business if they were to remain operational. These findings are consistent with Watling & Crawford (2010) who viewed digital technologies as a vehicle for business opportunities.

These results reveal that SMEs harnessed multiple benefits from owning a technological gadget during the COVID-19 era. Based on the participants' views, the SMEs could afford to do business in the comfort of their homes at a cheaper and affordable cost, even in the midst of travel restrictions and quarantines as they prioritised safety first. The technological gadgets meant that they could communicate with clients. This is in tandem with the benefits of adopting innovative and digital technologies posited by Mallinguh et al. (2020), who advocated that low costs, quality products, flexibility, competitive advantage and efficiency are some of the benefits of adopting innovative technologies by SMEs. Furthermore, these findings suggest that the COVID-19 pandemic led to SMEs embracing technology to remain afloat, an observation in line with that of Bouey (2020), Guo et al. (2020) and Zamani (2022) who suggested that the digitalisation by SMEs strategically positions them in tackling the effects of pandemics like the COVID-19. This will help them in sustaining their businesses during long periods of quarantines and travel bans

7. Conclusions

In conclusion, it is evident that the COVID-19 pandemic was an initiator into digital inclusion for SMEs in the Bulawayo Metropolitan Province, with the majority making use of smartphones and laptops. This study has implications for both SMEs and policy makers. For SMEs, it is clear that there is no going back as far as the adoption of technology is concerned. For them to remain operational in the digital age and amidst pandemics, adoption of technology is the only option. For policy makers, the implication is that they need to provide SMEs with subsidised internet services and training on the use of technological gadgets.

7.1 Contribution of the study to the body of knowledge

This study contributes to the body of knowledge by showing that instead of SME owners watching helplessly as the COVID-19 pandemic ravaged their businesses, they decided to be innovative and adopt digital technologies to remain afloat. The conceptual framework provides the basis under which any organisation can adopt technology, making use of the TOE model. The study for a change, provides a positive perspective of the COVID-19 pandemic on the operations of SMEs in the Bulawayo Metropolitan Province, Zimbabwe.

7.2 Specific recommendations

In light of the research findings, it can be suggested that the Internet Service Providers (ISPs) need to take a patriotic stance and provide affordable yet efficient internet services. This will go a long way in helping the SMEs to embrace and fully adopt all digital technologies at their disposal and for value addition. This is borne out of the fact that some SMEs failed to fully embrace the digital technologies owing to exorbitant data charges needed for a fully functional internet system. Furthermore, training in digital tools and equipment is essential for SMEs to get the skills and competences of navigating through their electronic gadgets. Once they are competent, the SMEs will develop an interest of utilising their skills knowing fully that they derive value from using them especially in times of crises like the COVID-19 pandemic. The government has a huge role in expanding networks for a wider coverage. Everyone, including the rural populace, must have access to the digital space as long as they can afford the data. Such policies if adopted, will ensure that the digital technologies are for democratic inclusion as opposed to exclusion.

7.3 Further research

The study was only conducted in the Metropolitan Province of Bulawayo, Zimbabwe, which may present a limitation in making conclusions about the SMEs sector in general. Future research can be conducted covering the whole geographical spectrum of Zimbabwe to ascertain the effects of digital technologies adoption as a result of the COVID-19 pandemic, on the operations of SMEs.

Conflict of interest statement

The authors declare no conflicts of interest.

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