



**ADOPT DIGITAL TECHNOLOGIES OR SHIP OUT  
OF BUSINESS: COVID-19 EXPERIENCES OF SMALL AND  
MEDIUM ENTREPRENEURS IN THE BULAWAYO  
METROPOLITAN PROVINCE, ZIMBABWE**

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**Abstract:**

This interpretive research study sought to ascertain the technological challenges faced by Small and Medium Enterprises (SMEs) in the Bulawayo Metropolitan Province, Zimbabwe during the COVID-19 pandemic. The thrust of the study was qualitative and semi-structured questionnaires were used to collect data from 30 purposively selected SME owners. Through thematic analysis, the findings revealed that SMEs without technological gadgets faced an array of challenges such as poor communication with business partners, inability to view business transactions, delay in making payments, high operational costs, difficulty in advertising products, and failure to place orders on time. From the research, it was concluded that the COVID-19 pandemic exposed the digital divide amongst SMEs, as those without the technological gadgets and the requisite skills were either forced to close or had minimal business transactions. The study recommended that deliberate policies be put in place to equip SME owners with technological gadgets and internet facilities at subsidised rates and offer free training to prepare SMEs for the digital world.

**Keywords:** digital exclusion, small to medium enterprises, technological gadgets, training

**1. Introduction**

The Corona Virus Pandemic (COVID-19) caught most entrepreneurs by surprise and exposed their lack of preparedness for such eventualities. Most SMEs were operating in

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their comfort zones and when the pandemic hit them, it changed their business landscape. Makaroun, Bachrach & Rosland (2020) assert that the COVID-19 pandemic transformed businesses and forced them to implement technologies that they never thought they needed. Most small businesses that did not have technological gadgets had to shape up or ship out of the business arena as survival in the business arena required possession of technological gadgets and internet connectivity, as face-to-face interactions had been banned (Engidaw, 2022).

## 2. Background to the Study

The Zimbabwean economy is largely driven by SMEs as they contribute more than half of its economy. They are perceived to be the drivers of the economy (Makiwa & Steyn, 2016; Maunganidze, 2013; Siavhundu, Nyabunze & Chinorwadza, 2020). According to the Organization for Economic Cooperation and Development (OECD), SMEs must have access to financing in the right forms and levels to thrive and flourish (OECD, 2020). SMEs contribute to the creation of employment, paying taxes to the treasury, and international trade as well as helping in alleviating poverty, rendering their survival a critical component towards economic progress (Maunganidze, 2013).

SMEs experienced multiple challenges during the COVID-19 period, which threatened their survival, according to Engidaw (2022). It is a fact that many SMEs scaled down as they engaged the survival mode, as a result of reduced revenues (Sonobe et al., 2021). Many governments globally implemented various containment mechanisms to curb the spread of COVID-19, which obligated most businesses to survive through the adoption of green skills (Manyati & Mutsau, 2021). These allowed them to make use of digital platforms for networking purposes with suppliers, buyers, and other business associates (Corvello et al., 2022). Even payments for the products were done using various electronic payment systems. COVID-19 forced SMEs to learn how to navigate through various digital platforms as a way of surviving (Natalia, 2022). It became a prerequisite that SMEs that were technologically savvy would not have challenges in navigating through the available digital systems (Kraft et al., 2022). COVID-19 triggered an emergency amongst SMEs which could only be solved by adopting innovative measures of survival (Corvello et al., 2022). Equally, Maglakelidze and Erkomaishvili (2021) posit that all entrepreneurial activities were favourable through the digital space.

SMEs need to learn digital skills that are relevant to their businesses to reduce digital exclusion (Jere & Ngidi, 2020). In this context, digital exclusion was a result of the failure to adopt digital technologies within businesses, as well as the failure to navigate through and use digital technologies (Nani & Maguraushe, 2022). Harel (2021) suggested that the government can also play a pivotal role in educating SMEs with digital skills as a way of empowering them to survive in times of crises like the COVID-19 pandemic. Therefore, it is important to ascertain the technological issues that SMEs encounter during the COVID-19 pandemic.

### 3. Statement of the Problem

Small and Medium Enterprises (SMEs) are regarded as the cornerstone for employment creation and poverty alleviation as they are a source of livelihood for most individuals and families (Opafunso & Adepoju, 2014; Sobrinho, 2016). Katua (2014), quoted by Dhanah (2016:10), agrees that developing countries have realised that through SMEs, severe poverty can be alleviated. After the outbreak of the COVID-19 pandemic, the Government of Zimbabwe introduced a national lockdown, to curb transmission ([Mavhunga, 2021](#); Dzobo, Chitungo, Dzinamarira, 2020) and this meant that some SMEs stopped operations and had to conduct business from home. Taking into consideration that SMEs were used to face-to-face interactions, the sudden national lockdown had a catastrophic impact on their operations as they had to suddenly think of alternative ways of conducting their businesses. The only other option was to conduct business online. Innovative practices like the adoption of digital technologies ensured the survival of some businesses (Adam & Alarifi, 2021) and thus, SMEs were also poised to survive by adopting digital platforms within their businesses. This study sought to find out the technological challenges, if any, that SMEs faced as a result of the COVID-19 pandemic-induced lockdown. The findings of the study were expected to guide policymakers in coming up with strategies that can assist SME owners beyond the COVID-19 pandemic and in the event of other pandemics.

### 4. Research Objective

To find out the technological challenges faced by Small and Medium Entrepreneurs in the Bulawayo Metropolitan Province, Zimbabwe, as a result of the COVID-19 pandemic.

### 5. Literature Review

#### 5.1 The Impact of the COVID-19 Pandemic on Small and Medium Enterprises (SMEs)

Many countries, including Zimbabwe, introduced some containment measures that included, both partial and full lockdowns, imposed quarantines, a ban on large gatherings, strictly monitored travel, physical distancing, closed borders, curfews and reduced business operating hours (Chirume & Kaseke, 2020b; Manyati & Mutsau, 2021; Natalia, 2022). This greatly impacted the operations of small and medium enterprises (SMEs) negatively, especially in their turnover and profitability (Corvello et al., 2022; Nani & Ndlovu, 2022). Chirume and Kaseke (2020) also elucidated the effects of the implementation of these various relief measures, which resulted in economic challenges rising and having a detrimental effect on SMEs. As an example, these lockdowns caused a drop in sales for already-existing businesses during the COVID-19 crisis, and businesses which were unable to minimise operating costs saw a decline in cash flow (Meunier, Coste & Maia, 2022). It was a huge blow for the SMEs to operate at the peak of COVID-19 since they rely mostly on face-to-face interaction with their clients (Dai, Feng, Hu, Jin,

Li, Wang, Wang, Xu and Zhang, 2021; Harel, 2021). According to the United Nations (2021), the best way of curbing the negative effects of COVID-19 was digital transformation by using technology as a vehicle for sustaining their lives as well as supporting the continuity of their businesses. COVID-19 initiated disruptions within the digital space (Bartik, Bertrand, Cullen, Glaeser, Luca and Stanton, 2020), which can decide whether a business faces growth or decline. Such disruptions could only be circumvented by the use of technological gadgets, which would initiate a swift digital transformation amongst SMEs.

## **5.2 Technological Gadgets and Digital Transformation**

Technological gadgets comprise electronic equipment like desktops, laptops, smartphones and tablets. For full use and realisation of value from the gadgets, other multiple software-related programmes use the gadgets, and the internet becomes a prerequisite for enabling an environment for their use. Access to the internet by all stakeholders is important in ensuring that everyone realises their digital technologies potential, in line with the 2030 Agenda (United Nations, 2021). The internet allows developing countries to connect and be able to conduct business online, as opposed to the traditional face-to-face that the SMEs have been accustomed to, according to Dzindikwa (2022). Gurure and Takavarasha (2020) asserted that Zimbabwe lags in terms of technology. There are many inhibiting factors towards the adoption of technological gadgets and these include limited technological infrastructures, lack of technological competencies and skills to operate the gadgets and the applications, and high internet charges (Sharp, 2022). Internet connectivity is also weak, greatly affecting the efficiency of using technological gadgets and many other applications thereof. Barriers to social participation can be exacerbated through digital exclusion (Watling & Crawford, 2010).

Digital transformation is a continuous ongoing transition process that impacts all human activity domains like technology, society, economy and politics (Kraft, Lindeque & Peter, 2022). The digital transformation started even before the emergence of COVID-19, which ultimately made it easier to accelerate the process, leading to a diversity of opportunities that advances digital inclusion, based on the report by the United Nations (2021). This would leverage quality, flexibility, efficiency, costs and competitive advantage for the SMEs (Mallinguh, Wasike and Zoltan, 2020). In a bid to establish the relationship between the growth and sustainability of SMEs, Zamani (2022) implied that the sustainable growth of SMEs relies heavily on their speed of adapting digital technologies so that they implement digital transformation within their businesses. It is possible because production is bound to increase courtesy of the technology adoption which enables the digital transformation viability (Kraft et al., 2022; OECD, 2017).

## **5.3 Digital Exclusion and the Digital Divide**

While literature positively identifies the adoption of technology as a survival model for SMEs, especially during pandemics like COVID-19 (Corvello et al., 2022), its benefits within developing countries have been minimally realised due to multiple factors that

include poor ICT infrastructure and lack of digital innovativeness skills, (Makiwa & Steyn, 2016). According to the OECD (2017), digital transformation increases the gaps in who has access to digital gadgets and digital technologies (against those without), which results in yet another social imbalance of the digital divide. The digital divide on its own is also a form of digital exclusion (Souza, Siqueira & Reinhard, 2017). Souza et al. (2017) added that digital transformation results in the exclusion of people who do not have the technological gadgets to engage in business activities or who lack the skillset to use and gain value from the technological gadgets. In other words, digital exclusion increases the digital divide and digital inequalities among SMEs (Reisdorf & Rhinesmith, 2020). Once individuals are excluded within the digital space, they will not be in a position to benefit and contribute towards a digitalised ecosystem that enables sustainable and equitable digital society, without any relevance on the macro-environment development and income growth, as opined (Borsenberger, Delahaye & Muriel, 2021).

On the brighter side, Dzindikwa (2022) notes that it is encouraging to observe the high penetration rate of the use of digital gadgets and digital technologies within developing countries, which promotes the adoption of digital technologies. This is a great motivation for why there is a need to reduce the digital divide gap by devising strategic interventions to empower people through digital literacy skills (Kalla, 2016). In the present day and age, SMEs need to keep pace with technology as a basic rule for survival (Mallinguh et al., 2020). The first significant step towards alleviating the digital divide is the accessibility of individuals in the digital space (Ragnedda & Mutsvairo, 2018). As they concluded in their study, Ragnedda and Mutsvairo (2018) proposed a paradigm shift where it also becomes significant to treat digital exclusion more as a social issue than it being a technological issue. During the COVID-19 pandemic, digital gadgets played a pivotal role in enabling businesses to flow, accessing various services and allowing connectivity amongst disturbed people all over the world (Borsenberger et al., 2021).

#### **5.4 Digital Skills Training**

The fact that SMEs rely on face-to-face interactions with their final consumers, means that they were marginally affected by the surging cases of COVID-19 and the containing control measures that were implemented by various governments, according to Harel (2021). Interventions become the universal relief to the challenges. For SMEs to fully use digital gadgets and technologies, they need to be trained with the necessary skills needed (Afolayan, Plant, White, Jones and Beynon-Davies, 2015). Policymakers are trying to develop digital infrastructures to enhance digital accessibility and in the process, they aim to provide content and services which are relevant, as well as offer the fundamental training needed within the digital society (Ragnedda & Mutsvairo, 2018). As a prescription of the United Nations (2021), governments and all key stakeholders need to work towards a universally agreeable model for supporting all efforts in mitigating digital exclusion, thereby closing the digital divide. Such efforts can be hinged on four fundamental dimensions which are access, skills, affordability and awareness, according to the United Nations (2021). To this end, there is a need for customised and

contextualised training sessions as a way of bridging the digital divide (Kalla, 2016). The general motive for training and development in any field is to better individual and group performances in an organisational setup, according to Vinesh (2014).

This study adopted the Task-Technology Fit (TTF), which places more emphasis on increasing efficiency, effectiveness and higher quality, a phenomenon normally called a good fit (Lai, 2017). It focuses on how technology impacts performance. The rationale behind a good fit between the task and technology is to increase the likelihood of usage and also to boost the performance effect since the technology more closely satisfies user demands and preferences for the activity at hand (Goodhue & Thompson, 1995; Spies et al., 2020). By evaluating the relationship between the technology and the tasks the technology is intended to serve, TTF offers a way to measure the effectiveness of technology within a system (Spies et al., 2020). The user will use the technology for these operations as long as it complements his workflow and tasks (Rai & Selnes, 2019). Within the context of this research, the researchers assume that adopting digital skills by SMEs will increase the efficiency and effectiveness of SME business operations and hence boost business performance.

## 6. Methodology

The study was based on the interpretivism paradigm with thirty purposively selected small and medium entrepreneurs. The qualitative approach was deemed the most appropriate as the approach enabled researchers to deeply interrogate the participants and obtain in-depth rich data that would detail their experiences as posited by Saunders, Lewis and Thornhill (2016). According to Merriam and Tisdell (2016), qualitative researchers are interested in how people interpret their experiences and construct their worlds. Cooper and Schindler (2008:164) concur and say,

*“The purpose of qualitative research is based on, “researcher immersion in the phenomenon to be studied, gathering data which provide a detailed description of events, situations and interaction between people and things, providing depth and detail.”*

Before data collection, a pilot study was conducted to test whether the instrument measured what it was supposed to measure and whether participants understood the questions asked. The pilot study achieved the intended objective, after which data was collected from the intended participants with the aid of individually distributed semi-structured questionnaires, which were thematically analysed.

All ethical considerations such as anonymity, confidentiality, protection from harm and informed consent were observed. The purpose of the study was explained to the participants who were also informed that participation was voluntary and they could withdraw at any time without any penalty. Participants were given the following codes, SME 1, SME 2 and so on, to hide their identities. After data collection, member checking was done to ensure credibility and trustworthiness. Before thematic analysis was done,

semi-structured questionnaires were read several times for familiarity before being broken down, examined and conceptualised.

## 7. Results and Discussion

The study empirically investigated the technological challenges faced by Small and Medium Entrepreneurs in the Bulawayo Metropolitan Province, Zimbabwe, as a result of the COVID-19 pandemic. The results were recorded and analysed.

### 7.1 Biographical Variables

The biographical variables collected included age, education, business type and digital gadget used. Below is a table to summarise the biographical variables.

**Table 1: Biographical variables**

<b>Age</b>		
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
<b>Level of education</b>		
No formal education	1	0
Ordinary level	2	0
Advanced level	3	0
Diploma	4	3
General degree	5	10
Masters	6	11
Doctorate	7	5
Other	8	1
<b>Type of business</b>		
Retail	1	9
Manufacturing	2	7
Farming	3	9
Hospitality	4	1
Catering	5	1
Other (specify)	6	7
<b>Digital gadget</b>		
Desktop computer	1	20
Laptop	2	26
Tablet	3	7
Smartphone	4	30
Other (specify)	5	0

Based on Table 1, the following can be noted:

- **Age:** From the 30 responses, 15 SMEs were between the age of 31-40 years. In total, the results indicated that 83% of the SMEs were below the age of 50.
- **Level of business:** From the participants involved, most of them had some form of education, with most of them having a first degree and the minimum is a diploma. This is an indication that the participants engaged were educated and could understand the questions asked.
- **Type of business:** From the participants, retailing, farming and manufacturing had higher representation. For the Others' option, consultancy, beauty therapy and academia had the most responses. This represents the idea that SMEs in Zimbabwe cover many domains of industries.
- **Digital gadget used:** Every SME participant had a smartphone for the conduct of business. Equally, almost all of them had a laptop and a desktop, with just a few owning a tablet. This confirms that the SMEs responded digitally by owning some gadgets in the face of COVID-19.

### 8.1 Age and Level of Education of SMEs

From the study, 83% of the SMEs were below the age of 50. This is perceived as the working age range, which solidifies the submission that SMEs are the backbone of the Zimbabwean economy, Manyati and Mutsau (2021) and it is considered a major source of not only income but also a major contributor to the national treasury. More so, based on the responses, the least participant had a diploma, with the majority having undergraduate studies. This contradicts the study by Chirume and Kaseke (2020a) who affirmed that the majority of SMEs had secondary education only, with a few having a diploma. This can be attested to the type of SMEs which were engaged in this research. Most of them were selected based on the judgement of the researchers.

The use of technological gadgets amongst SMEs is not a new concept as Manyati and Mutsau (2019) in an earlier study, discovered that Zimbabwean SMEs were open to the idea of using technologies within their business operations. The SMEs do agree unequivocally that technology helps them to stay afloat even in times of the COVID-19 pandemic, which allows them to continue operating their businesses remotely. 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 (Nani and Maguraushe, 2022). Thus, the findings concur with Harel (2021) who argued that technologies helped businesses to survive during the pandemic period.

### 8.2 Training

SMEs were worried about their technological skillsets. This was an acknowledgement on their part, of the lack of competencies needed to operate the technological gadgets and realise value from them. One SME participant spoke of skills needed for the placement of orders and said:



*"I sometimes fail to place orders." (SME8)*

Another SME focused on the skills needed to create links for their products and said:

*"I do not know how to create links to advertise my products." (SME17)*

Lack of skills to navigate through technology was an area of concern as another SME said:

*"I need training on how to save the information that I will have collected from clients. I lost most of the figures that I had entered. I also had problems separating my sales from my credits." (SME17)*

This was also concurred by many other studies which were conducted before (Dzindikwa, 2022; Gurure & Takavarasha, 2020; Manyati & Mutsau, 2019; Maunganidze, 2013). The lack of skills inhibited SMEs from realising the full potential of technology in their businesses during the COVID-19 era. Once they acquire the skills of navigating through their gadgets, the SMEs would be able to remedy some of the challenges that they are facing currently like being able to place orders online, trace figures within their gadgets, be able to create links and upload their products and engage in online meetings effectively.

### **8.3 Cost of Internet Charges**

SME bemoan the cost of data. They feel it is out of their reach and this affects the use of digital technologies which heavily relies on the availability of data. One SME participant said:

*"The cost of data in Zimbabwe is very high. It would be most welcome if the price could be reduced for affordability." (SME20)*

As a solution, participants said:

*"There is a need to upgrade the internet so that we have access to the internet." (SME 2)*

Another participant opined that a solution must be initiated by the government through subsidising of internet services.

*"There is a need for subsidies on internet services." (SME 8)*

Although the cost of internet data in Zimbabwe is not considered the highest within the region (The Standard, 2019), it is still out of reach for many considering the

economic environment. This means that they are still not yet in a position where they would effectively make use of their gadgets. Internet data charges must therefore be reviewed downwards so that it can be accessible to all SMEs, which is in alignment with Sharp (2022) who perceived the internet as a key enabler of development in many economies. Affordability of internet charges by SMEs would mean that even during the COVID-19 pandemic, they would stay afloat. The mobile operators can even consider subsidising the data rates.

#### **8.4 No Electricity to Power the Technological Devices**

Zimbabwe experiences high electricity load shedding. This affects many SMEs as they are cut from all technological spaces due to the absence of electricity. One SME participant said the following:

*“Electricity challenges inhibit the efficient use of these platforms. We lose power when we are about to engage in a transaction.” (SME27)*

As alluded to by Makiwa and Steyn (2016), load shedding is an inhibiting factor to the adoption of technology by SMEs as their laptops, desktops and routers go offline, thereby throttling all communication mechanisms. The SMEs will have to acquire other alternative sources of electricity to enable business continuity. SMEs heavily relied on the availability of electricity so that they would keep their businesses in motion during the pandemic era.

### **9. Conclusion**

In conclusion, the COVID-19 pandemic contributed to the digital exclusion since before the outbreak, no one was really worried about ownership of technological gadgets. It was the pandemic that brought to the limelight the technological haves and have nots.

### **10. Future Implications**

Based on the study results, the following recommendations were made:

- SMEs must be engaged in training on the necessary digital and technological skills that would enhance their capabilities. This would necessitate digital inclusion, and SMEs would be able to fully navigate through technology and enhance their businesses.
- The policymakers must also re-look into the costs for most online transactions to lure people to use technology for their business transactions.
- To curb the effects of load shedding, SMEs need to consider other sources of electricity, especially renewable means.

- SMEs need to reconsider their digital transformation viewpoints in light of the current digital wave. Strategic alignments ought to be revisited, to incorporate digital technologies.

## 11. Areas for Further Research

This particular study focused on a smaller sample and used a qualitative study in its endeavour to establish whether the COVID-19 pandemic broadened the digital exclusion of SMEs in the Bulawayo Metropolitan Province, Zimbabwe or not. Another study using the quantitative approach on a bigger sample would yield more generalisable results on the technological situation of SMEs.

### Conflict of Interest Statement

The authors declare no conflict of interest.

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