## "The influence of digital transformation on the growth of small and medium enterprises in South Africa"

AUTHORS	Sanele Jeza fo Lawrence Mpele Lekhanya fo
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Sanele Jeza, Master of Business Administration, Department of Entrepreneurial Studies and Management, Durban University of Technology, South Africa. (Corresponding author)

Lawrence Lekhanya, Ph.D., Department of Public Management and Economics, Durban University of Technology, South Africa.

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# THE INFLUENCE OF DIGITAL TRANSFORMATION ON THE GROWTH OF SMALL AND MEDIUM ENTERPRISES IN SOUTH AFRICA

#### **Abstract**

From a global perspective, the business environment has become highly dynamic, unpredictable, and competitive due to external forces – mostly technology – that generate change. The aim of this study is to investigate the influence of digital technologies on South African business sectors. The sample includes small and medium enterprises (SMEs) in the KwaZulu-Natal province. Being qualitative by design, the study used semi-structured interviews for data collection, with eight interviews in the Durban area. SME managers were purposefully selected as participants based on their management positions in the business/company and that they oversee the business operation and understand the influence of digital transformation in the business. The interviews were then transcribed after data collection to determine any recurring themes. In the effectiveness of digital transformation, the study identified themes such as "gaining exposure" and "gaining effective sales figures" as a result of implementing digital transformation, which was indicated by six of eight participants. The findings showed that digital transformation significantly affects building customer relationships and ensuring easy accessibility of the business. The results further indicate online selling and digital marketing as the leading digital platforms successfully implemented by most South African SMEs. Lastly, the study revealed digital maintenance and rapid changes in technology as challenging factors. Moreover, the study recommends that South African SMEs implement more available digital technologies to gain additional exposure.

**Keywords** digital marketing, digital transformation, SMEs, digital

advertising, innovation, South Africa

**JEL Classification** M15, M31, M37

#### INTRODUCTION

Nowadays, businesses operate in an ever-changing world. These changes result from external factors, for example, technologies, which directly and indirectly influence business performance globally. Digital transformation (DT) drives the current global market, especially small and medium enterprises (SMEs). Existing data indicate that digital transformation in SMEs forces businesses to change how they operate; this should warn any enterprise to rethink how they operate to maintain their competitive advantage. Most business organizations apply new technologies to adjust their current value creation path to remain competitive. However, they are facing the need for structural transformations; moreover, they should address obstacles on their way to these transformations (Gomes et al., 2019). According to Vogelsang et al. (2019), DT can significantly influence different branches of industries with decades of decentralized operations. Business organizations in all sectors are feeling the pressure to adopt digital; nonetheless, business now needs to be conducted differently. Customer communication must also be improved to avoid lagging in innovative advantage

with digitally focused competitors and new entrants (von Leipzig et al., 2017). This view is supported by Ablyazov et al. (2018) in mentioning that digital transformation has allowed quicker interaction with company stakeholders, including customers, suppliers, and partners. Therefore, it provided additional business opportunities and expanded chances to grow.

Most studies have mentioned that implementing digital technology comes with changes in the business sector regarding operations and competition. For instance, Kotarba (2018) highlighted that the adjustments of business models to digital technology and social changes in SMEs could be understood as a transition to an updated organizational form. It is necessary for a better fit in the digital economy considering new partners and customers and increased adoption of digital assets. Moreover, Goerzig and Bauernhansl (2018) indicated that transformation toward innovative business, from a development perspective, causes enormous changes in the operation. South African (SA) SMEs should thus seek proper adoption of digital transformation to enhance their working capacity, boost their skills, and produce significant results (Pradhan et al., 2018).

Similarly, Henning (2019) indicated that SA SMEs, and the manufacturing sector in particular, need to adapt to new methods and processes to remain competitive in the ever-changing business landscape. In this regard, Pillay (2016) proved that the SA business sector has started to adopt the digital technologies necessary for Industry 4.0 introduction. However, this leaves the question of why there is a lag in adopting and implementing digital technologies in the SA business sector when the whole world is dominated by digital transformation. Considering the comprehensive potential of digital transformation (a competitive advantage in the market), and after screening numerous academic studies dealing with this and similar topics, further investigation is needed to research the digital transformation concept and its influence on SMEs from a holistic perspective.

#### 1. LITERATURE REVIEW

Several attempts have been made to define digital transformation in the academic field. For instance, Mastilo (2017) defined it as using new digital tools to overcome challenges. For example, one can mention that cloud computing decreases dependence on hardware and enhances trust in cloud-based tools (Genpact Research Institute, 2014). However, according to Ablyazov et al. (2018), a characteristic of the digital transformation of business activity is the resulting dissemination of innovative technologies, as well as the incorporation of both digital and physical systems. Digital business transformation integrates new technologies into business processes (Schwertner, 2017).

According to the Department for Business, Energy and Industrial Strategy (2018), digital transformation significantly affects the business environment by simultaneously creating opportunities and challenges. With the help of digital business transformation, organizations produce new services and goods while finding better options for conducting business activities. All these innovations apply

across organizations of all types worldwide. This view is supported by Weinelt (2018, p. 47), who mentioned that "in this new world, analog incumbents of several successful companies embrace the predation of the digital revolution and feel like they are being more innovative in the markets."

Furthermore, the digital transformation of enterprises is regarded as a new paradigm in the context of the current implementation of technologies to set new developments in the global market (Pihir et al., 2018). Rutihinda (2019) states that digital transformation encompasses much more than information technology (IT) infrastructure transformation. In addition, transformation of the IT infrastructure involves changes to the information network, communication, as well as ways of storing and accessing information. IT departments are typically responsible for managing these changes. In contrast, digital transformation requires reshaping the value proposition of an organization, as well as its business distribution channels, business customer segments, and competition. Included are the supply chain, other stakeholders, and partners.

**Table 1.** Definitions of digital transformation

Author(s)	Definition	
Liu et al. (2011)	"It is the integration of digital technologies into business processes."	
Bharadwaj et al. (2013)	"It is an organizational strategy formulated and executed by leveraging digital resources to create differential value."	
Fitzgerald et al. (2013)	"It is the use of digital technologies to enable major business improvements."	
Lucas et al. (2013)	"It fundamentally alters traditional ways of doing business by redefining business capabilities, processes, and relationships."	
Westerman et al. (2014)	"It is the use of technology to radically improve performance or reach of enterprises."	
Henriette et al. (2015)	"It is a business model driven by the changes associated with the application of digital technology in all aspects of human society."	
Piccinini et al. (2015)	"It uses new digital technologies to enable significant business improvements."	
Matt et al. (2016)	"It is concerned with the changes digital technologies can bring about in a company's business model, which result in changed products or organizational structures or the automation of processes."	

Table 1 indicate the definitions of digital transformation from different authors' points of views.

#### 1.1. Definition of SMEs

There is no unified definition of small and medium enterprises because each economy is unique. Moreover, different researchers elaborate on different standards for specific purposes (van Scheers, 2018). According to Ismail et al. (2011), the usual ways to define an SME are based on, for example, how many people the enterprise employs within the organization or what the value is of any unmovable assets. Then again, Liberto (2020, p. 15) defines SMEs as "businesses that maintain revenues, assets or a certain number of employees below a certain threshold." However, every country has its own definition of SMEs. For example, Pradhan et al. (2018) explain that SMEs refer to those streamlined, non-subsidized, independent firms that employ a particular number of employees depending on the requirements in a country; this is echoed by Ayong and Naidoo (2019, p. 62).

From a SA perspective, the definition of an SME, as stated by Chimucheka (2013), relies on the features:

- There are not more than 200 employees,
- Annual turnover does not exceed R64 million,
- Capital assets do not exceed R10 million, and
- Owners are directly involved in managing the business.

However, Ayandibu and Houghton (2017) define SMEs as those enterprises with fewer than 250 employees. On the contrary, Ahmed (2020, p. 725)

defines SMEs as enterprises with staff numbers "less than certain limits, and they control high sensitivity data." Gono et al. (2019) highlighted that SMEs in SA are either micro, very small, small or medium enterprises (SMMEs), where each sector has its own varying sets of thresholds.

## 1.2. Digital technologies and transformation

Nowadays, social media, mobile phones, and analytics are crucial for business growth and interaction between a company and its new or regular customers (Westerman et al., 2014). Consumers widely use these digital channels to see the latest goods and running specials. For instance, Facebook alone has more than one billion users, and there are more than six billion mobile phones in SA (Modimogale & Kroeze, 2018). Moreover, companies are better at driving revenue through their prevailing assets when they are mature enough in the "digital intensity dimension" (Westerman et al., 2014).

Digital transformation furthermore facilitates the connection process within the organization and with external stakeholders such as consumers, partners, vendors, etc. (Ablyazov et al., 2018). In addition, active entrepreneurs can then simultaneously create and manage numerous business projects. Digital transformation vests the power to fundamentally improve many economic characteristics for business growth (Prem, 2015). Furthermore, active uptake of content through digital transformation allows wide distribution to customers due to increased numbers of available devices and channels (Ismail et al., 2017).

Digital transformation enables innovation practices, improved designs, and new working modes, shaping business value (Nadeem et al., 2018). Companies that effectively manage to implement digital transformation have an advantage and improvement. It can be expected in one or all three areas: improved customer engagement and experiences, streamlined operations, and new avenues of business models (Fitzgerald et al., 2013). Digital transformation similarly uplifts business innovation compared to the nearest competitors (Schwertner, 2017, p. 153). In addition, SMEs are driven to adopt appropriate internet technology to improve their internal processes, improving their product through faster communication with their customers and better promotion and distribution of their products and services (Selase et al., 2019). Therefore, by adopting digital transformation, customer service can be enhanced significantly.

An example would be when client complaints are addressed by the bank establishing a Twitter account for quick assistance, thus aiding customers in not having to physically visit a branch (Westerman et al., 2014). Furthermore, the use of technology can assist SMEs in improving their business competitiveness through the internet, which provides several opportunities to compete equally with large companies (Selase et al., 2019). Then again, SME information processing capabilities can be scaled and expanded through cloud computing services without investing in costly equipment and software or employing computer engineers (Rutihinda, 2019). Ahmed (2020) similarly argued that cloud computing has benefited SMEs. However, some have not adopted digital transformation to its appealing benefits.

Recent trends indicate that technology is one aspect of a business organization that represents extensive expenditure, yet it is also a department where businesses can make considerable cost savings (Prepletany, 2013). Digital transformation has been effective in most enterprises since it allows faster interaction with consumers and partners, therefore, providing added opportunities to improve customer relations. According to Fitzgerald et al. (2013), every company wants the technology to transform their business, recognizing the potential for using digital transformation to achieve transformation. However, most are un-

clear on how to obtain results. Some business organizations in SA cannot still use effective technology and, thus, do not quickly adapt to changes as technology evolves. This view is supported by Lekhanya (2010), who highlights poor marketing.

Moreover, SMMEs do not widely implement marketing strategies in SA. Nonetheless, the Genpact Research Institute (2014) emphasized that in some functions, business executives estimate a radically improved, high impact from technology, stating its impact would be higher than that of other "levers." These levers range from business process reengineering to shared services and outsourcing, and are calculated from improved technology use where relevant. When the market is rightfully digitized, it provides both potential and existing customers who have a smartphone with real-time information relating to available and accessible products or services they need, when they need them, and in a form they need (Ngochi & Kihara, 2019).

The potential impact of digital transformation varies widely among business organizations (Grishikashvili et al., 2014). Digital transformation may have a different impact on different themes of industries. For instance, Berghaus and Back (2016) iterate that those industries with healthy and established business-to-customer (B2C) relationships and customer orientation may be affected by digital transformation prior and more significantly than those organizations with a predominantly B2B focus. According to Ablyazov et al. (2018), digital transformation has provided an added opportunity for SMEs to initiate their entrepreneurial activities and procure tools that will ensure dynamic growth of competition in replicating products, scaling, and international market access. Digital transformation has enabled product or service innovations at a rapid pace, shortened life cycles of goods, and sector disturbances across boundaries, thus requiring new business strategy configurations (Hanelt et al., 2015). Although digital transformation employs digital technologies and capabilities to influence different aspects of the business enterprise to create value, understanding how this impacts the business aspect is paramount to its successful implementation (Morakanye et al., 2017, p. 439).

Many organizations in decentralized branches are now experiencing pressure to digitally transform their operations. For example, it is vital to transform fast if they do not want to lag behind creative and advanced competitors and other market players (van Leipzig et al., 2017). According to Ardjouman (2014), SMEs improve their operations in Africa when they try to achieve sustainable development by introducing new technologies. From a technological perspective, in most firms, and therefore in SMEs, a core role is played in business model innovation (BMI) by advanced technologies, such as social media and big data (Bouwman et al., 2018). Similarly, Goerzig and Bauernhansl (2018) mentioned that digital transformation affects BE, processes, business models, products, and relationships to improve the scale of the enterprise as well as its performance. Additionally, the digitization of BE offers a possibility to fulfill existing customer demands for a highly flexible supply and demand for individual products (Goerzig & Bauernhansl, 2018).

Described as an external force, technology is complex for businesses to predict, which is why managers are often perplexed regarding how to effectively plan for it, specifically in SMEs, where investing in technology is deemed quite pricy and costly to manage (Durowoju, 2017). Furthermore, digital transformation deals with rooted traditions. Thus, organizations should adopt advanced skills (Ismail et al., 2017). Therefore, SMEs face numerous barriers and obstacles in completing digital transformation adoption (Ismail et al., 2011).

Fitzgerald et al. (2013) indicated that, notwithstanding the growing acceptance of the necessity for digital transformation, it is a struggle for numerous SMEs to gain distinct advantages from "new" digital transformation. This is, on the one hand, a result of their lack of management temperament and relevant experience to know how to drive transformation through technology effectively. On the other hand, Durowoju (2017) mentioned that managing technology could be quite expensive and costly; thus, acquiring new technology at a great cost would mean turning from traditional to sophisticated and automatic ways. Modimogale and Kroeze (2018) indicated different categories of barriers that disrupt SMEs from adopting digital transformation, namely:

insufficient information on the strategic use of digital technologies, lack of the necessary internal IT skills-base, perceived high setup cost, and ever-changing ICT environment, as well as geographical factors. In addition, interactions between organizations and digital technology are complicated, with numerous challenges in implementing effective digital change that require attention (Grishikashvili et al., 2014). However, while considering these challenges enormous, transformations can be innovative, prompt, and measurable (KPMG International Cooperative, 2017).

The primary concern of SMEs at present is a recent change in the morphology of business models caused by immense technological advancement, namely digital transformation (Kotarba, 2018). Schwertner (2017) has adopted a broader perspective. It is argued that every business in the business industry is being disrupted by digital business transformation, "breaking down barriers between customers, businesses, and things." This indicates that the arrival of digital technology comes with challenges where business managers must maintain market standards and build innovations. Different business activities have been substantially transformed by the digital revolution, with supporting options for the implementation of new business ideas (Ablyazov et al., 2018). Similarly, Berghaus and Back (2016) mentioned that digital transformation simultaneously affects various areas within an organization. Several stakeholders are involved in delineating a strategy for transformation in, for example, IT, human resources, and marketing. Therefore, there must be a general view of the prioritization of digital transformation in all these areas.

The aim of this paper is to explore the influence of digital transformation on SMEs. This investigation will assist the South African business sector in using the findings to measure the risk and benefits of implementing digital transformation. The purpose of conducting this study was to add findings in the academic sphere.

#### 2. METHODOLOGY

The study selected Durban SMEs to analyze how they adopt digital transformation. The population of this study consists of SME managers in different and decentralized SMEs within the province of KwaZulu-Natal (KZN). All KZN SMEs had an equal opportunity to be selected as the study sample since they share the standard description of SME managers/representatives. Data were collected from the sample population (Durban SMEs) selected from the overall population (all KZN SMEs), with the selected sample representative of the overall population.

SME managers or representatives in this study are the sources of the required information; they are the observers of any obstruction in the business operation and the implementers of change. Therefore, they hold information concerning the implementation and influence of DT in business operations. The sample population in this study is eight SME managers or representatives within decentralized SMEs in the Durban metropolitan area, which is in the KZN province. Managers or representatives of SMEs in Durban were interviewed to express their experiences in digital business transformation, with their management level in their business organizations of origin sharing common characteristics.

This study adopted a purposive non-probability sampling technique; the sample was purposefully chosen based on their characteristics. SME managers/representatives were thus purposeful-

ly chosen for this study based on their positions in the business/company. The study interviewed business managers from eight selected SMEs within the KZN province. All selected SME representatives asked the same questions; however, they were interviewed at different times. In-depth interviews were employed by this study as a data collection tool, using a general interview approach. Semi-structured interview questions were asked from participants, allowing a free flow of responses. Interviews were transcribed, after which qualitative content/textual analysis was performed, guided by a semi-structured questionnaire with a script of interesting issues in business DT, to explore more depth and richness of data.

#### 3. RESULTS

The link between the research objectives, research questions, and findings is shown in Tables 2 and 3.

Table 2 indicate the linking of the research objectives, questions and the study findings (presented in themes).

Table 3 indicate the data from respondents, by means of percentage as per each theme of the study findings.

Table 2. Linking of research objectives, questions, and findings

Research Objectives	Research Questions	Findings/Themes
Effectiveness of digital transformation in CMEs	How effective is digital transformation in the SME	Gaining exposure
Effectiveness of digital transformation in SMEs	business environment?	Effective sales figures
The impact of the digital transformation in SMEs	How does digital technology affect SMEs in the market?	Easy accessibility
The impact of the digital transformation in Sivies		Customer relationship
Extent of implementation of digital transformation in	To what extent do South African SMEs implement	Online selling
South African SMEs	digital transformation?	Digital marketing
	What are the challenging factors experienced by SMEs in implementing digital transformation?	Digital maintenance
Challenging factors of digital transformation in SMEs		Moving with technology
	in implementing digital transformation:	Rapid changing

**Table 3.** Responses rate percentage on findings/themes

Respondents	Findings/Themes	Frequency	% Percentage
8	Gaining exposure	6	75%
	Effective sales figures		
0	Easy accessibility	6	75%
8	Customer relationship		
8	Online selling	5	62.5%
	Digital marketing		
8	Digital maintenance		
	Moving with technology	5	62.5%
	Rapid changing		

Key to used short words:

- BE1 Business Enterprise 1 Just Cars
- BE2 Business Enterprise 2 Display Equipment CO Natal (PTY) LTD
- BE3 Business Enterprise 3 Russells Durban West
- BE4 Business Enterprise 4 KZN Hardware Distributors
- BE5 Business Enterprise 5 Bradlows Durban
- BE6 Business Enterprise 6 Checkone Supermarket (Pty) LTD t/a CHECKOUT
- BE7 Business Enterprise 7 Kings Builders Suppliers
- BE8 Business Enterprise 8 WB Motors
- Q Question

The study found digital transformation very effective in SMEs at present. Most respondents (75%) indicated DT had generated a profound change in their businesses, specifically by improving exposure to potential customers. For instance, BE1 and other BEs asserted this by touching on that they get customers from all areas, even out of Durban, to purchase their stock due to digital technology; therefore, it helps as it motivates their businesses. In the same vein, other BEs like BE2 also highlighted that ever since digital technology arrived on their business platform, it has been a huge change in marketing and exposure to companies, such as creating a good income and service, as well as the increase in the number of customers. In their responses to the questions, they also indicated that turning to digital transformation improves sales numbers and makes them connect with potential customers even from other countries because technology improved business marketing.

The combination of these respondent views generally presents those of SMEs that have implemented digital transformation and are embracing the arrival of the digital age. Most respondent SMEs

seem to agree there is effectiveness in implementing DT. Looking at the evidence, BE1, BE2, and BE8 all talk about the increasing number of customers due to implementing digital transformation. However, it has been noted that they still need to improve and expand their implementation to fully embrace DT.

Regarding the impact of DT, the study identified that technology generates good customer relationships in SMEs. According to most respondents (75%), with digital technology, customers no longer have to physically visit their shops to get goods. They can sit at home and still get whatever they want (online selling). Respondents also outlined that due to technology, it is easy to target specific segments of customers with a potential to buy; costumers now just visit the business web page and browse through the products; therefore, digital transformation creates an advertising advantage.

There are shared views and experiences concerning the impact of digital transformation on SMEs. BE4 and BE1 indicated that customers no longer have to physically visit their shops since there are now available digital platforms where they can view their products. This therefore indicates a positive impact of digital transformation in the business as it improves the advertising advantage as per BE7 and leads to positive turnover in sales. Most customers come to the shop to buy not to view, as they know exactly what they want and what they saw in the digital advertisement. Furthermore, digital advertising makes it easy to target certain segments of customers with the potential to buy, as per BE3. These respondents are of a common view that digital transformation positively influences SMEs, specifically an advertising advantage.

The study has identified that most SMEs have implemented digital marketing and online selling in SA (results of 62.5%), such as business websites, social media marketing, and online selling. For instance, BE1 mentioned using the company website to advertise their products, while BE8 indicated that they advertise their products on Gumtree. BE5 likewise presented that they use online selling, Facebook, SMS, and the company website to connect with different segments of customers. Similarly, BE2 asserted this by mention-

ing that they draw more customers through digital marketing and digital sales. In addition, BE4 stated that their company had implemented online marketing using social media (e.g., YouTube, Facebook, Instagram, and Twitter).

This evidence has shown a common feature of implemented digital tools by different SMEs. The most mentioned features are online selling and digital marketing, which most SMEs indicated they have implemented. As per the above evidence, BE1, BE2, BE4, BE5, and BE8 had common responses that they had implemented digital marketing and sales. This indicates that KZN SMEs have mostly implemented digital marketing, as per the collected evidence. However, as per the literature, other digital features are available that can further improve the companies.

### 3.1. Challenging factors of digital transformation in SMEs

The study revealed that factors such as digital maintenance and rapid technological changes are the main challenging factors of digital transformation in SMEs. Most participants (62.5%) indicated these factors exist in their digital operations. In their responses, BE4 and other BEs outlined that ensuring their social media and websites have the correct workforce to manage them is challenging. In addition, as technology advances, things are moving on to a cloud base, which is somehow good as almost all people now have smartphones with internet access wherever they want. However,

BEs also mentioned that Internet connections are sometimes experiencing problems, for example, maintaining the webpage so that the site does not crash. Also, as a business owner, one always has to keep up with new apps as well as keep up with general technology because there is always something new coming up. The respondents also indicated that maintaining technology is costly as digital technologies are rapidly upgrading. As an external force, technology forces the business to create new working models to maintain the competitive market advantage and that needs a budget.

As much as digital transformation is effective and positively affects the business, it comes with challenges. Based on the evidence, digital maintenance and constant changes are perceived as the most challenging factors in digital transformation implementation. The shared experiences from the respondents reference that these factors concern most SMEs. For instance, on the one hand, BE2 and BE4 shared the same experience of difficulties with web page maintenance. On the other hand, BE1 and BE7 are concerned with the rapid changes in digital features that are forcing them to adapt to the latest versions to maintain their competitive advantage. These are all costly exercises, as per BE8.

Figure 1 presents the link between the study topic, variables, and the themes of the research findings. When DT is properly implemented, as shown in Figure 1, benefits to the business include profitability, income growth, and market value. These

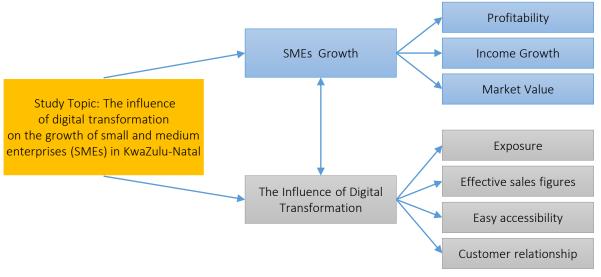


Figure 1. Interaction of the variables

arise from the influential positive factors from DT, namely exposure, effective sales figures, easy accessibility, and customer relationship. The analyzed data established that DT hugely affects building customer relationships and easy accessibility of businesses. These findings correspond to what was indicated by previous authors in the literature review. For instance, KPMG International Cooperative (2017) mentioned that true DT begins with a good customer experience.

Moreover, it guarantees that all units of the organization are targeted at offering perfect client satisfaction. Similarly, new digital technologies, including analytics, social media, and mobile, are indicated by Westerman et al. (2014) to play a significant role in business growth and new and regular customer interaction. Therefore, when SMEs in SA implement appropriately suitable DT, they can embrace positive results and be competitive in the global market.

#### 4. DISCUSSION

The results conclude that SMEs in South Africa embrace the influence of digital transformation and see it as an injection in their sales performance. This clarifies why the previous authors have similar findings in their studies. For instance, Berghaus and Back (2016) mentioned that digital transformation impacts various areas within an organization simultaneously, while several stakeholders are involved in delineating a strategy for transformation in, for example, IT, human resources, and marketing. The indication is that this transformation comes with pros and cons in the business operation depending on the perfection of implementation. For instance (pros), Prepletany (2013) indicated that digital transformation has been effective in most enterprises since it allows faster interaction with consumers and partners, therefore, providing added opportunity to improve customer relations. This supports Ablyazov et al. (2018), who revealed that digital transformation facilitates the connection between the organizational units and external stakeholders (consumers, partners, or vendors). There is a link with the findings of this study, as most respondents presented that digital transformation facilitates customer relationships and connects the business with different customer segments at one time. However (cons), Durowoju (2017) described technology as an external force, which is complex for businesses to predict. Thus, managers are often perplexed regarding how to effectively plan for it, specifically in SMEs, where investing in technology is deemed as quite pricy and costly to manage.

Similarly, Grishikashvili et al. (2014) argued that interactions between organizations and digital technology are complicated, with numerous challenges in implementing effective digital change that require attention. This brings attention to SMEs who are in the process of implementing digital transformation to do thorough research from those who have successfully implemented this transformation in order to do it perfectly. These findings also link to this study's findings, as some respondents indicated that the maintenance of digital transformation is a costly affair and technology is rapidly changing.

The above linking of previous authors and the study results indicate why the previous authors have similar results. These results correspond to the previous findings and indicate why these others have these results. It has been noted that most SMEs embrace the effectiveness of digital transformation in their operation, regardless of some challenges. This draws a constructive conclusion that the overall findings/ results proved that digital transformation is effective when properly implemented. However, the collected data from this study indicate that SMEs in SA have partially implemented digital transformation and still require further development to sustain a competitive advantage globally. As much as some SMEs have implemented this transformation, the agility of implementation in their business models still shows inefficiency compared to the availability of new adoptable digital technologies. This empirical study linked two variables (SMEs and DT) to identify the influence of digital transformation on SME operations and growth. The study identified that digital transformation affects SMEs in different ways and has the power to grow SMEs in the current century. The study respondents asserted this by embracing the arrival of new digital technologies.

Looking at these findings, the purpose of this study has been served and referenced by the results above. The factors that indicate the influence of digital transformation in SMEs has been explored and identified from the findings. In addition, the link between the previous findings and the actual results of this study has been identified. The prospects from this study can be explored by assessing to what extent South African SMEs have implemented digital transformation. That study can be drawn from investigating and quantifying the average of SMEs successfully implementing digital transformation. The study can also assess the efficiency in growth perspective by considering SME profitability, income growth, and market value.

#### 5. RECOMMENDATIONS

Recommendations from the study findings include ways to change/improve digital transformation in SMEs going forward. It is believed that two recommendations can change/improve the current state for KZN SMEs and SA in general. These recommendations are "improving the use of digital transformation" and "implementing more digital channels."

First, every business desires a competitive advantage in the business market. Therefore, every SME must adapt to new business ways by implementing effective digital transformation. SMEs that have successfully implemented digital transformation must improve their digital technology use to gain more exposure and improve customer relationships. With digital transformation, the business can access different target segments and build more exposure country - and even worldwide, which can grow the business and generate more turnover. Taking from the study findings, the status of implementation is unsatisfactory; however, the most effective digital transformation can be adopted by SMEs as a way of accessing markets at a faster and more competitive rate than their competitors.

To better market themselves and find a substantial number of customers, KZN SMEs have to adapt to

more digital platforms. The results from the findings on the extent of implementation indicate that SMEs have only implemented online selling, social media marketing, and web design. However, there are other very powerful digital marketing techniques they have not mentioned, for instance, application development, video production, email marketing, and search engine marketing (SEM), as well as search engine optimization (SEO), branding, and content marketing. These marketing techniques can develop extensive exposure that can grow SMEs immensely. Furthermore, they must improve online selling and do enough research on other countries that have successfully implemented digital technologies.

Every SME must equip themselves and build internal capacity to maintain DT. In so doing, all the challenging factors can be dealt with effectively, such as digital maintenance requiring technological competence. Further to this, rapidly changing technology can be maintained when there is effective internal capacity. The business cannot control external forces such as technology; however, they can be maintained to support business growth and sustainability. Thus, SMEs should fully adapt DT and move with technology, as it changes for their own good. Further to this, every SME must have a business website where potential customers can view products and services.

Second, it is recommended that KZN SMEs adapt to more digital channels to improve customer relationships, leading to their growth in terms of business exposure and improved turnover. There are digital channels besides those in use they can implement, should they be willing to grow. These include branding, social media marketing, content or web marketing, and email marketing, as well as video production, SEO, influencer marketing, and pay-per-click advertising. These digital channels can give KZN SMEs much potential to grow in terms of financial performance and competitive advantage, even in comparison to large enterprises.

#### CONCLUSIONS

This paper aimed to investigate the influence of DT implementation in South African SMEs, using a case study of these in the KZN province. The interest was to assess the effectiveness of implementation,

impacts, current implementation status, and challenges experienced by SMEs through DT implementation. The implications of this study include two variables, namely DT and SMEs in KZN. The investigation of these two variables has been conducted and concluded from the study findings. The linking of these variables shows that SMEs today need DT to grow. Comparing the findings to the related theories from the literature review, the results indicate that DT is an effective way of doing business nowadays. There is some useful knowledge regarding the role played by DT in SME performance. In addition, SMEs that have implemented DT stated that they are embracing the advantage of it, as much as they experience some challenges.

The study results further conclude that future related research should focus on the extent to which the South African business sector benefits from implementing business digital transformation, examining before and after DT scenarios. The pooled results from the study, in general, indicate DT is effective and is an injection to SME growth. Furthermore, the study confirms DT directly impacts SME growth and generates a solid competitive advantage in the business market. For instance, DT develops exposure and extends the chances of business development by building customer relationships. However, as per findings, SMEs in SA are not fully engaged in DT and, therefore, need extensive upgrading in digital operations to gain an innovative and highly competitive advantage.

#### **AUTHOR CONTRIBUTIONS**

Conceptualization: Sanele Jeza. Data curation: Sanele Jeza. Formal analysis: Sanele Jeza.

Funding acquisition: Lawrence Lekhanya.

Investigation: Sanele Jeza. Methodology: Sanele Jeza.

Project administration: Sanele Jeza. Resources: Lawrence Lekhanya. Supervision: Lawrence Lekhanya.

Validation: Sanele Jeza, Lawrence Lekhanya.

Writing – original draft: Sanele Jeza, Lawrence Lekhanya. Writing – review & editing: Sanele Jeza, Lawrence Lekhanya.

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