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EXPERIENCES AND CHALLENGES OF DIGITAL TRANSFORMATION IN THE INFORMAL BUSINESS SECTOR IN A RURAL SOUTH AFRICAN TOWN

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ABSTRACT

South Africa has one of the highest unemployment rates in the world. This unemployment is more pronounced for those living in rural areas. As a result, many unemployed rural people turn to informal trading as a gateway to employment and economic activity. The study aims to explore the experiences and challenges of digital transformation in the informal business sector in a rural South African town. A case study design was used. Data was collected through interviews with a sample of 20 purposefully selected informal traders. The data was then analysed thematically. The study revealed that there is a lack of knowledge on digital transformation among formal traders. The study further revealed that the challenges concerning digital technology include a lack of ICT skills, network and internet connectivity problems, mistrust of technology, and fear of fraudulent activity. The study recommends greater expansion of digital technology support and training to informal traders. This study further recommends that digital technologies must be developed with the end user in mind. Moreover, the study recommends greater internet and connectivity investment in rural areas. Lastly, the study recommends the development of greater security features for digital technologies aimed at informal traders with low literacy levels. The study contributes to knowledge on the benefits and enhancement of the potential of digital technologies to assist small businesses against the background of high unemployment in the rural town of Mthatha, Eastern Cape Province, South Africa.

KEYWORDS: Experiences, challenges, digital technologies, Informal traders, Mthatha

JEL CLASSIFICATION: M13, Q01, L25

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INTRODUCTION

South Africa has an overall unemployment rate of 46.2% in the fourth quarter of 2022 (Statistics South Africa, 2023). South Africa's youth unemployment is estimated to be at an all-time high of 66.5 percent and presents the latest figure of unemployment amongst the youth for the beginning of 2022 (Statistics South Africa, 2023). Entrepreneurship has been proposed in numerous studies and government policy documents to be a gateway out of this unemployment and limited livelihood opportunities (Odeku & Rudolf, 2019). One of the entryways to this entrepreneurship is informal trading. Informal trading can be understood as the economic activity of entrepreneurs selling legal products and services within a location believed to be public property within the informal sector (Dzomonda & Fatoki, 2019). Furthermore, the informal sector includes employees, employers, self-employed people, or family business workers who work for private sector enterprises with 20 or fewer employees and in enterprises that are not registered or incorporated and do not keep a set of accounts separate from the household budget (Wegerif, 2020; Tshabalala & Beharry-Ramraj, 2021). Digital transformation refers to the changes that digital technology may bring about in a company/trader's business model, such as changing products or organizational structures or process automation (Zhang, Long, & vonSchaewen, 2021). These shifts can be seen in the growing demand for Internet-based media, which has resulted in the transformation of whole business structures (Khambule, 2022).

The benefits of digital transformation include enhanced well-being; more effective data collection, use, and sharing; improved market intelligence; faster and more successful innovation; new opportunities for complementary investment; creation of value for small businesses and sustained protection against digital disruption (Vial, 2019; Gertzen et al., 2022). In the informal business sector, digital transformation has the potential to necessitate new techniques of collaborating with stakeholders, developing new service delivery mechanisms, and building strong types of partnerships (Panagiotopoulos, Klievink, & Cordella, 2019). The world over has had to undergo significant changes in how they carry out their operations and functions. Technology is a vital factor at the centre of these changes (Vial, 2019). Digital transformation is a term used to describe how national governments, multilateral organizations, and industry associations have had to adapt and adjust to new technologies that provide strategic foresight in how they go about their operations (Lisienkova, Chelekova, Mitrofanova, Shindina, & Titova, 2022).

This study defines youth as "persons in the transition from childhood social and economic dependence to adulthood social and economic dependence," as propounded by Johnson & West (2022). Studies indicate a delay in these transitions leads to a delayed transition from childhood into adulthood. Informal trading has been identified as a key gateway into this social and economic dependence for South African youth (Wegerif, 2020). Research suggests that informal trading is a positive development in the small business sector as it contributes to the creation of jobs (Khambule, 2022). Furthermore, informal trading is believed to have the potential to expand a country's economic base, thus contributing to the creation of a globally competitive country (Nomoyi, 2016). The informal sector includes employees, employers, self-employed people, or family business workers who work for private sector enterprises with 20 or fewer employees and in enterprises that are not registered or incorporated and do not keep a set of accounts separate from the household budget (Wegerif, 2020). These informal businesses have the potential to lift participants out of poverty and to create enduring economic activity, which is a springboard to the livelihoods of youth and their families.

The Eastern Cape Province has one of the highest provincial unemployment rates in South Africa with a rate of more than 47% (Statistics South Africa, 2022). This situation is claimed to be more exacerbated for youth. Mthatha is the former apartheid homeland capital town of the Transkei homeland. It is located in the OR Tambo District Municipality in the Eastern. It is argued to be the main economic hub of the OR Tambo District Municipality (ORTDM). Mthatha is the main economic hub of the ORTDM where unemployment statistics sit at 33.4 % (Statistics South Africa, 2022). This is very worrisome for unemployed youth in the area. It is against this background that this qualitative study aimed to explore the perceptions of informal traders in Mthatha on the benefits of digital transformation in their informal businesses in Mthatha, Eastern Cape.

PROBLEM STATEMENT

South Africa faces the challenge of high unemployment, reflected in the 47% unemployment rate in the Eastern Cape and the OR Tambo District Municipality (Statistics South Africa, 2022). High unemployment can be addressed through the informal business sector and digital transformation (Vial, 2019), but the informal sector still relies on the exchange of physical cash, physical interaction between the seller and the buyer, and a physical retail space (Vial, 2019) without making much use of digital technology which has the potential to enhance their business and create employment opportunities. To address this situation, the study investigates the perceptions of informal traders of the benefits of digital transformation in Mthatha, Eastern Cape as a case study.

1 THEORETICAL CONSEQUENCES AND CONCEPTUAL FRAMEWORK CONSEQUENCES

1.1 Theoretical Consequences

There is a further multiplicity of definitions for digital transformation, for instance, the Organization for Economic Development (OECD) defines digital transformation as "the the conversion of analog data and processes into a machine-readable format. Digitalization is thus the use of digital technologies and data as well as their interconnection which results in new or changes to existing activities" (OECD, 2018).

In a study gauging the impact of information and communication technology (ICT) on economic growth in West Africa, Adeleye & Eboagu (2019) discovered that ICT development has a statistically substantial positive relationship with economic growth. These benefits to economic growth include the expansion of opportunities for those with access to internet-enabled devices to part take in the economy. The study further found that the output elasticities of the three ICT indicators are significantly different. This is because each organization uses its criteria and indicators of technology acceptance. For Willemse (2020) leapfrogging is the idea that sections with underdeveloped technical or economic bases may advance quickly by implementing contemporary systems without taking any intermediate steps. This can work for other organizations, but not necessarily for all. It is thus crucial that this is kept in mind as organizations and small businesses endevour to digitally transform their operations. Aiding this is that mobile subscription has the largest output elasticity across all specifications and has the biggest potential to enable Africa to skip traditional developmental stages of digital transformation (Ezeani, 2022).

The informal economy comprises all economic activities outside formal trade. The International Labour Organization (ILO) (2022) points out that the 'informal economy' encompasses 'all economic activities by workers and economic units that are – in law or practice – not covered or insufficiently covered by formal arrangements. Furthermore, the ILO reports that in emerging economies and developing countries, nearly 70 percent of workers are in the informal economy (ILO, 2022). The ILO further reports that almost 90 percent is even more in sub-Saharan Africa and South Asia. In these places, the informal economy safeguards employment and income where there are not enough formal jobs, thus allowing young people to enter the labor market. However, with low wages and no social security, there is a greater risk of poverty (ILO, 2022). In the lowest-income Sub-Saharan nations like the Central African Republic and the Democratic Republic of the Congo, the informal sector is a significant marvel that accounts for up to 90% of jobs (Batuo, 2015).

Gaglio, et al. (2022) conducted a study in South Africa to explore the correlation between the use of digital communication technologies, innovation performance, and productivity. The study was conducted with a sample of 30 small, medium, and microenterprises in South Africa. The findings demonstrate that selected digital communication technologies including the use of social media and of a business mobile phone for surfing the internet have a positive effect on innovation, and that innovation conditional on the use of these technologies has a positive effect on labour productivity. As an implication for practice, it is suggested that public initiatives to promote inclusive digitalization must take into account the digital technologies that are most useful and accessible to small businesses, particularly those that operate informally (Galdino, Kiggundu, Jones, & Ro, 2018).

Liere-Netheler, Packmore & Vogelsang (2018) conducted a study on the drivers of digital transformation in the manufacturing industry. The study noted that this transition to digital transformation affects the operational value creation process, enables new ways of doing business and leads to fundamental changes in organizations. Furthermore, though digital transformation is at the

centre of necessity in the manufacturing industry progress has been significantly slow (Vogelsang, Packmohr, & Hoppe, 2019). In their study in the manufacturing industry, (Liere-Netheler, Packmohr, & Vogelsang, 2018) found that companies are motivated by goals, aspiration, advice and needs of their customers. Perhaps the impetus for the low transition is over reliance on customer feedback. There is some evidence to indicate that though customer feedback is important, it is argued that it can lag innovation and perhaps the slow transition to digital technologies (Fundin & Bergman, 2003).

On the benefits of digital transformation, studies highlight enhanced well-being; more effective data collection, use, and sharing; improved market intelligence; faster and more successful innovation; new opportunities for complementary investment; creation of value for small businesses and sustained protection against digital disruption ((Vial, 2019).

Ulas (2019) describes digital technologies in terms of its benefits. He takes the position3 that digital technologies should understood as developments regarding smartphones, cloud computing, big data, artificial intelligence, robotics systems, internet of things, 3D printing, virtualization, cyber security, sensor technologies, advanced robotics systems, automation, etc. which all is intensely used in many fields of economic and social life. Regarding SME's, Statistics SA (2021) postulates that SMEs consist of 99,83 % of total enterprises, 72,7 % of total employment, 50,6 % of total value added, and provide 55,1 % of exports, take an important role in the economy (StatsSA, Quarterly Labour Force Survey, 2021). The paper further argues that The fact that SMEs can perform a cost-benefit analysis of digital technologies and be aware of those technologies is significant in smoothening their transition into digital technologies.

The world over is battling extremely high unemployment levels, especially among youth. South Africa has a very high unemployment rate of 46.2% (StatsSA, Quarterly Labour Force Survey, 2021). this is among the highest in the world accounting for millions of people. The situation is aggravated for youth between the ages of 15-35 as unemployment sits at more than 65 % in South Africa (StatsSA, Quarterly Labour Force Q 1, 2022). This high unemployment rate which is coupled with a high NEET rate is indicative of low economic activity among South Africa's youth. A study conducted in Iraq on the role of the informal economy in reducing unemployment revealed that the informal sector is one of the most prominent sectors that work to employ both skilled and unskilled labour, because the working mechanism within this sector is not subject to the procedures of education, learning, certificates, and other things typical of the labor market, and that workers in this sector do not pay taxes and are not considered employees (Dadoosh, 2022).

A study conducted in South Africa revealed that the state's imposition of taxes, legislation, and other restrictions deepened the difficulty of individuals obtaining a work contract that guarantees them a decent living (Khambule, 2022). It can thus be argued that the informal sector stimulates economic activity for those who are affected adversely by these taxes, legislation, and other restrictions. This can be argued to then be one of the key benefits of part-taking in the informal economy for those who are excluded from the mainstream (Sammar IqbalAshraf, Anwer, & Saeed, 2022).

Studies indicate that there is great importance to understanding and resolving the challenges faced by the informal sector. The informal economy is an important phenomenon in African countries, accounting for up to 90% of the jobs in the lowest-income Sub-Saharan countries such as the Central African Republic and the Democratic Republic of the Congo (Galdino, Kiggundu, Jones, & Ro, 2018). Willemse (2020) revealed that small income and the limited ability of the government and the formal business sector to provide sufficient employment opportunities to people in the economically active age categories are two of the main reasons propelling informal trading in South African cities (Willemse, 2020).

Furthermore, there is much disagreement regarding how to define informal employment or the informal sector. It is difficult to assess the scope of informal economy activities and create suitable management mechanisms in the absence of a precise definition (Chen & Carré, 2020). A further challenge is that informal employment has been described as a precarious employment environment. Informal employees are those who do not have a written contract of employment, are not registered for income tax or value-added tax, and do not receive basic benefits such as pensions or medical aid contributions from their employers (Willemse, 2020). This exposes them to vulnerabilities that include a lack of regulation, protection, and policy guidance.In a study by Vogelsang, et al (2019) which was done to identify the major barriers to digital transformation, it was revealed that the barriers to digital transformation could be grouped into 5 main types. These are (a) missing skills; (b) technical skills; (c) individual barriers and (d) organizational and cultural barriers and lastly, (e) environmental barriers. The missing skills refer to information and communication technology skills which citizens and workers may not be in possession of. It is equally important to take careful note of the process through which the digital transformation happens (Bloomberg, 2018). The second barrier is a lack and lag in technical skills. When citizens do not have the technical skills to use digital technologies, then digital transformation is impossible. Technical skills relevant to digital transformation include pprogramming language, knowledge of common operating systems, software proficiency, technical writing, project management and data analysis (Adeleye & Eboagu, 2019). The third barrier was individual barriers. These are barriers to digital transformation which are located in individual persons transitioning into the use digital technologies (Batuo, 2015). These individual barriers include acceptance of the digital technology devices to be used; the adoption of these, fear, transparency, fear of job loss, discomfort with the new technologies, just to mention a few (Vogelsang, Packmohr, & Hoppe, 2019). The fourth barrier is organizational and cultural barriers. These include the type of organization undergoing digital transformation; strategy; change and resistance thereof; cultural barriers, risks presented by the transformation and perhaps low investment in the transformation. The fifth barrier was environmental factors. This speaks to the legal, policy, legislative and standards and norms environment under which the sought digital transformation occurs (Chen & Carré, 2020).

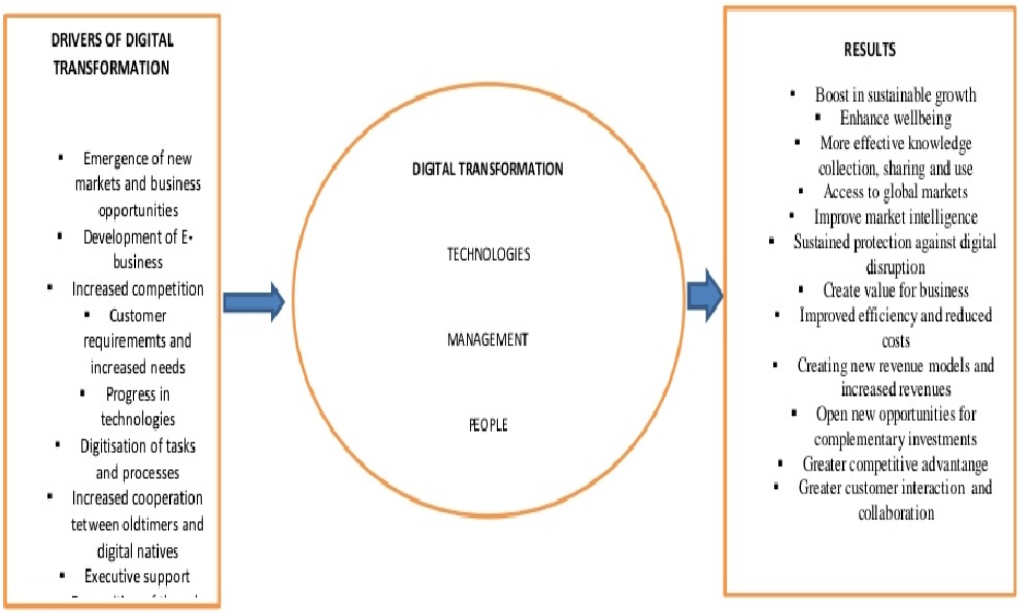
1.2 Conceptual Consequences

The study adopted Verina and Titko's (2019) conceptual framework for digital transformation. To develop the framework, Verina & Titko performed a textual analysis of digital transformation literature to study the key elements, components and categories of digital transformation. Thirty (30) definitions of digital transformation were also studied and as a result of content analysis of these definitions and digital transformation literature, three categories of digital transformation in business resulted. These were (1) the transformation of processes and management and (3) the transformation of people.

For Verina and Titko (2019), digital transformation is indicative of the continuous need for evolution and adaptation in business practices. It is argued that digital transformation transforms processes, business models, customer experiences, technologies, data, leaders as well as employee experiences (Verina & Titko, 2019).

For Verina and Titko (2019), the drivers of digital transformation include the emergence of new markets and new business opportunities, development of e-business, increased competition, customer requirements, and increased needs, progress in technologies, and digitization of tasks and processes and recognition of digital technologies among leaders. The quest for digital transformation has benefits for the management of technologies and people. The benefits then of digital transformation include boosting sustainable business growth, enhanced business wellbeing, access to global markets, improved market intelligence faster and more successful innovation, and greater customer interaction.

Figure 1 **Conceptual Framework for Digital Transformation**



(*Source*: Verina & Titko's (2019) Authors' depiction)

2 METHODOLOGY

This section outlines the methodology that was employed:

1.1. Research aim

The study aimed to explore experiences and challenges of digital transformation in the informal business sector in a rural South African Town.

1.2. Research questions

Promised on the gaps identified in the literature, the study was framed around answering the following question:

- What are the digital transformation challenges experienced by informal traders in Mthatha, Eastern Cape?
- What are the perceptions on the benefits of digital transformation among informal traders in Mthatha, Eastern Cape?

1.3. Research design

The study used the case study design using the qualitative approach to research. This was to allow an in-depth understanding of challenges and benefits of digital transformation within the selected context.

1.4. Research sample

A sample of 20 informal traders operating in the central business district (CBD) of Mthatha were selected to partake in the study. Non-probability purposive sampling was used in this study. The criteria

for inclusion were that participants should be of any gender and sexual orientation, active in the informal economy, and operating in the Mthatha Central Business District.

1.5. Research instrument

Semi-structured in-depth interviews were used to gather data. The interview consisted of semi-structured and open-ended questions. The semi-structured interview is an interview that consists of a few key questions that directly address the focus area and allow for follow-up questions, to enable the researcher to get more in-depth knowledge on the particular question or idea (Acharyya & Bhattacharya, 2019).

1.6. Research participants

Table 1 **The demographic profile of the participants**

VARIABLE		NUMBER	PERCENTAGE (%)
Gender	Males	9	45
	Females	11	55
Age cohort	18-35	13	68
	35 and older	6	32
Average age	18-35	27	
	35 and above	43	
Race	Black African	20	100
Highest grade completed	Grade 8	1	5
	Grade 9	4	20
	Grade 10	1	5
	Grade 11	8	40
	Grade 12	4	20
	Higher Education	2	10
Average school leaving age		17	
Family composition	Nuclear family	3	15
	Single Parent	8	40
	Extended family	9	45
Community type	Rural	12	60
	Urban	8	40
SAMPLE SIZE = 20			

(*Source*: own research)

Twenty informal traders in Mthatha CBD were interviewed. Nine were male and 11 were female. All twenty participants were black Africans. Their average school leaving age was seventeen years. Three came from nuclear families, eight came from single-parent families and nine were in extended families. Twelve came from rural areas and eight came from urban areas. The following themes emerged from the thematic analysis: digital illiteracy; lack of ICT skills; network and internet connectivity problems;

mistrust of technology and fear of fraudulent activity were the digital transformation challenges faced by informal traders.

1.7. Data collection

The data was collected from face-to-face open-ended interviews with informal traders in Mthatha, Eastern Cape, South Africa. The participants were made aware of the purpose of the study as well as their role in the study. They were also asked to sign consent forms for participation in the study as well as their consent for the recording of the interviews.

1.8. Data analysis

The data was analyzed thematically using thematic analysis as promulgated by Braun & Clarke (2006). The data was recorded and then transcribed for analysis. Following this, the researcher gained familiarity with the data through reading through it to observe common words and similar ideas that emerged from the data. The second step was to generate initial codes. This encompassed searching for consistent patterns observed in the data. Thirdly, the researcher searched for emerging themes. The fourth step was to review the themes by identifying patterns that were significant in the data. The fifth step was to review the themes and the sixth and last one was to define and name the themes.

1.9. Trustworthiness

To ensure the trustworthiness of the study, the criteria of credibility, dependability, confirmability, and transferability was used. To ensure credibility, the study will be subjected to review by peers who offered feedback that informed the development of this paper. To meet the criteria of dependability, thick descriptions of methodologies and techniques used to collect and analyse the data were done. To ensure confirmability, the researcher will subject the study to readers other than himself. The reason for this is to remove the possibility of biases. To ascertain dependability, the researcher developed and used the same data collection instrument throughout the study and with all participants. This was done to ascertain that the data is collected in a manner that is consistent throughout the study.

3 RESULTS

3.1 Level Of Knowledge On Digital Transformation

The participants were asked a sequence of questions to examine their knowledge about digital transformation. These questions were asked to determine how informal traders in Mthatha understand digital transformation and its utility in their businesses. Inadequate knowledge of digital devices beyond computers, the digital divide, and the transition from analogue to digital emerged as the key indicators of the level of knowledge about digital transformation.

3.1.1 Digital illiteracy

The participants demonstrated limited knowledge about digital devices and digital transformation. The participants indicated that they understand digital devices to be based on computers. Furthermore, there was an indication that digital transformation means businesses must now be run with the use of computers.

> *Ohh! Hay man!, its that thing of computers. It's that thing of making computers do everything for you while you do other things (Kashu, 35)*

> *Digital transformation is when a customer pays on a machine like Speed Point and no longer uses cash to pay. It makes things so easy when you do not have cash but need something quick (MaDlomo, 49)*
> *Digital means scanning your documents like ID documents, printing CV, typing your CV, and email (khabo, 52).*

The descriptions by the participants indicate some knowledge, but it is inadequate knowledge about digital transformation in the grand scheme of things, especially concerning small businesses and, by extension, informal businesses.

Some of the participants have been in informal business for a long time. They have never used any digital devices to run, market, or operate their businesses. They therefore do not seem to have an interest in learning digital devices because there is a view that their businesses are working perfectly fine without any digitization. To this effect, one of the participants said:

> *Ey, my outy, these things of digital what what will make us lose money man! I have been selling second-hand clothes for 15 years now using cash payments. My business is doing just fine without that digital what what (Thabo, 41).*

Business culture can be understood as the collection of normative behaviors and practices that can be seen inside an organization. This includes its aims, codes of conduct, rules, processes, ethics, and values (Kraus, et al., 2021). The findings perhaps indicate that they are both ignorant and resistant to integrating digital technologies into the business culture of some of the informal businesses.

3.2 Digital Transformation Challenges Experienced By Informal Traders

Participants were asked questions to investigate the digital transformation challenges faced by informal traders in Mthatha, Eastern Cape. Challenges to digital transformation can be understood as natural, cultural, s,ocial and economic factors that infringe on the access, use and acceptance of digital transformation (Heavin & Power, 2018). The key challenges highlighted include time, lack of ICT skills, poor usability, rural network and connectivity challenges and technology mistrust and fraud.

3.2.1 Lack of Information and Communication Technology (ICT) skills

The inability to use digital technologies because of a lack of ICT skills emerged as one of the challenges that the participants had in relation to digital transformation. A lack of ICT skills can be understood as a lack of the skills and competencies necessary to independently use digital devices (Kane, Phillips, Copulsky, & Andrus, 2019). To that end, the participants shared the subsequent narratives:

> *Andikwazi ukusebenzisa ezizinto mna mntanam (My child, I can't use these things!) (Lebo 54).*
> *These technologies are written in English. I am not good in English (Vee, 26).*

> *I would like to have a sped point machine here at my stall but I do not know how to use one. There is just a lot of things that appear on the machine so I get very confused (Khabo,* 32)

Lack of ICTs skills and knowledge is more evident in small- and medium-sized enterprises (SMMEs) (Harteis, 2018). This was evident in the findings of this study as some of the businesses under investigation fall under the small, medium and micro enterprises category. For small businesses-informal businesses included- the knowledge, skills and abilities to handle IT systems are an indispensable asset and success factor (Suhartanto & Leo, 2018).

The issue of language came up from the interviews. It appears that the exclusive use of English language as the only medium of communication. To that effect, participant said

> *I do not know English. This English confuses us because it says things that we do not understand while customers are in front of us waiting to be served quicker (Bra Don, 43).*

A general definition of communication is that it is a transfer of messages from sender to receiver. If the message is not understood by the receiver then the communication is impaired. That is the case when users of digital tools do not understand the communication that comes out of the digital tools. Korachi & Bounabat (2020) posit that language is one of the most significant communication barriers. It is further postulated that the use of one language over others is exclusionary in that it excludes those who do not speak or understand the language used (Ikise, 2020)

3.2.2 Poor network connectivity and reception

Network reception and connectivity are some of the challenges that were faced by the informal traders who had made strides in their use of digital technology. 8 of the 20 participants were using 'ikhokha' machines for their business payments and transactions. An 'Ikhokha' machine works in more or less the same way as a speed point machine. It needs network reception and connectivity. Without network reception and connectivity, the machine will not function. On poor network reception, the participants gave the following narratives:

> *I do have an ikhokha machine. It helps me when clients say they do not have money in cash. Customers can pay and enjoy the food I sell quickly without having to go to town (Gee, 26)*

> *Akhukho network apha "(There is no network here), so we need customers to pay in cash (Ntombi, 49)*
> *Mna, my biggest problem is network. It is difficult to even make calls here. So, these machines cannot work here and it's very busy. We can't be chasing network and standing on bricks just to catch it, suka! (Sipho, 28)*

3.2.3 Technology mistrust and fear of fraud

The participants indicated that they do not trust technological devices as they fear that they may lose their money to the banks. There is also a demonstration of fear of fraudulent activity on their money if they do not see it physically. Participants also demonstrated low take up of digital technologies as being caused by the fees that banks charge. Bank charges emerged as one of the deterrents to the uptake of some of the digital technologies.

> *These machines of yours are evil. They take people's money and no one will know who took it and where it was taken. A friend of mine swiped a card on a machine and the next thing money was coming out of her account every 2 minutes. Those things are not good, mntanam! (Nomsa, 61).*

> *I am scared of people I do not know taking my money. This business is my only source of income. I cannot afford to lose any money at this point or any other point in my life. I would rather get it by hand, count it and save it so I always know how much money I make instead of looking at it on the phone (Khaya, 36).*

Credit card fraud is a healthy and growing means of stealing billions of money from credit card companies, merchants, and consumers (Budhram, 2012; Chigada, 2020) In the view of the participants, for fraudsters to have access to your money, it needs to be in a bank account. If it is not in a bank account, then no one can defraud you. Credit card fraud is a serious problem wherein the least literate can become easy victims. That is not to say only those with low literacy levels can be victims (Chigada, 2020)

Although using a credit card is a simple way to pay, however, there are risks involved. Credit card fraud is rampant as a result of the significant expansion in credit card use. Due to technological advancements, it is now challenging for store owners, teller employees, law enforcement officers, and bank investigators to distinguish between a fake card and a real card (Budhram, 2012).

4 DISCUSSION

The participants demonstrated insufficient knowledge of digital transformation. This lack of knowledge on digital transformation meant that the participants could not identify any use and acceptance for digital tools in their business as they had never used them before. Telukdarie, Philbin, Mwanza, & Munsamy (2022) view digital transformation as the process of using digital technologies, including computers and the internet, to generate new — or modify existing — business processes, culture, and customer capabilities to meet changing business and market requirements (Telukdarie, Philbin, Mwanza, & Munsamy, 2022). The findings suggest a divergence from the benefits of digital transformation that are included in the above definition. There is also a demonstration of a narrow understanding of digital transformation. It appears that digital transformation is poorly understood concerning its relevance and benefit for informal traders. In other words, one can argue that digital transformation is viewed by a large sect of the sample as an alien concept to their daily practices.

Furthermore, there is a bit of an idea of what digitization means; however, none of the knowledge possessed has to do with its benefits for informal businesses. Digital transformation is mainly understood as the transition from manual to computer-based methods of working and living. There is no demonstration of a link between the benefits of digital transformation and informal businesses. In the main, digital transformation is understood as the transition from analogue to digital. This is because the phrase 'analogue to digital' is a buzz term that they hear often on television and radio adverts. A large magnitude of the data indicates that participants are not necessarily against the use of digital technologies. They just do not possess the necessary knowledge and skills to integrate them into their business operations. Technology acceptance and use stems from some level of knowledge and understanding about the technologies to be adopted. Kane (2019). Akomea-Bonsu & Sampong (2002) comment that one of these challenges is the demand for ICTs skills and expertise in adopting and implementing these emerging digital technologies. In South Africa, there is a general divide in terms of internet connectivity. Those in rural areas struggle to access connectivity than those in the urban areas. Load shedding is also a role player in this as it has been demonstrated that network reception is connected to a good electricity supply. South Africa currently undergoes what is called load shedding, due to the country's energy crisis. The South African energy crisis is a persistent period of broad national-level rolling blackouts as electricity supply lags behind electricity demand, posing a danger to the stability of the national power grid. It is most noticeably shown in repeated rounds of load shedding (Bushe, 2019).

Some of the participants attribute this to their business culture. This is because their business has been running reasonably well without the involvement or use of any form of digital technology. The participants demonstrated a digital divide as one of the factors that affect their acceptance and use of digital devices. It appeared that informal traders in urban areas are more receptive to digital technologies than those in rural areas. Hence, it can be concluded that access to digital devices, the internet, and the ICT skills necessary for digital transformation are more apparent in urban areas than in rural areas.

CONCLUSIONS

The participants demonstrated insufficient knowledge on digital transformation. This lack of knowledge on digital transformation meant that the participants could not identify any use and acceptance for digital tools in their business as they had never used them before. Furthermore, there is a bit of an idea of what digitization means, however, none of the knowledge possessed has to do with its benefits on informal businesses. Digital transformation is mainly understood as the transition from manual to computer-based methods of working and living. There is no demonstration of a link of the benefits of digital transformation to informal businesses. In the main, digital transformation is understood as the transition from analogue to digital. This is because the phrase 'analogue to digital' is a buzz term that they hear often on television and radio adverts.

A number of the participants attribute this to their business culture. This is because their businesses have been running reasonably well without the involvement or use of any form of digital technology. The participant's demonstrated a digital divide as one of the factors that affect their acceptance and use of digital divide. It appeared that informal traders in urban areas are more receptive to digital technologies than those in rural. In tab thus be concluded that access to digital devices, the internet and the ICT skills necessary for digital transformation are more apparent in urban areas than in rural areas.

When it came to the challenges experienced by informal traders concerning digital transformation, it emerged that a lack of ICT skills was one of the fundamental challenges. A lack of ICT skills emerged as the reason behind the slow adoption of digital tools and technologies. This was because there is no value held by the participants to something they cannot use. This lack of iCT skills does not indicate rejection of digital technologies. It only means that though the desire to adopt digital technologies is there, the lack of skills acts as a deterrent to their adoption.

Poor internet connection and reception presented as a further challenge to digital transformation for informal traders. Because rural populations have poor access to internet connection and network reception, they appear to be resistant to adopting digital devices as they are not functional when the network is bad. There is then very little impetus to adopt a piece of technology that the informal traders cannot use because of reasons outside of their control.

Technology mistrust and the fear of fraud also came up as challenges 0to the acceptance of digital technologies. The participants demonstrated that they are uncomfortable with using computer based technologies because they fear that their money will disappear from their bank account without them having knowledge of where it went. The findings perhaps suggest that the customers feel a sense of safety seeing, counting and keeping their money physically.

The participants indicate that digital technologies have a central benefit of allowing them to use their time in a savvy fashion. This means that with the use of digital technologies, the informal traders can use their time more wisely and with greater effect. They are further enabled to have the flexibility to do things with their time other than things related to the business. This is called striking benefits in both family and business life, among other things.

Adaptability was another identified benefit of digital transformation. This was because a piece of technology can be adapted to many different uses beyond just the one it was initially purchased for. For instance, a cell phone bought for a food stall can also be used for a car wash, if and when the informal trader decides to expand her/his business.

A further conclusion concerning the benefits of digital transformation relates to its utility in digital communication. The participants indicated that digital technologies are a useful tool in communicating the messages of the business to promote and advertise products and services offered. Though there

appears to be a digital divide and general ignorance of digital technologies, the children of the participants manage the social media accounts of the business.

LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

Though the study adds to the body of knowledge, the study has limitations, that could be addressed in future research. Future research could thus focus on the following:

- This study explored the experiences and challenges of digital transformation in the informal business sector in a South African rural town. Future studies could examine how informal traders use local resources and institutions to help grow and sustain their businesses. That way, there would be knowledge on how informal traders can be assisted institutionally to grow and sustain their businesses.
- The study was conducted using a small sample of 20 participants. A study with a larger sample could assist in providing a wider understanding of the experiences and challenges faced. This would allow greater generalizability of the findings.

RECOMMENDATIONS

The study put forward the following recommendations based on the conclusions above. The recommendations focus on what can be done by ICT professionals, practitioners, and researchers on digital transformation in the informal business sector. The recommendations are also directed at practitioners of informal trading, more specifically, small business owners and their scholarships in the greater scheme of things. The recommendations are briefly highlighted below:

- Training on digital technologies should be offered to informal traders to offer ICT skills. The Department of Small Business Development can spearhead this with the support of the Small Business Development Agency (SEDA). Small businesses are not homogenous. The training should be clustered following a set of criteria that includes whether the business is a service or product business.
- To close the digital divide, there must be greater investment in internet connectivity and access to rural areas.
- ICT developers must develop technologies with the needs of the end-user in mind. Digital technologies must be developed with the end-user in mind. This means that the technologies produced should be accommodative to the language and culture of the user.
- To address the fear of fraud and technology mistrust, digital technologies must be developed with enhanced security features. The informal traders also need to exercise greater caution with their security passcodes and pins. The informal traders should consistently update their knowledge on cyber-safety.
- The informal traders must maximise the communication technology available to them. They should use the internet to its full potential in attracting, keeping, and communicating with new, old and potential customers

RESEARCH ETHICS STATEMENTS

This study did not require research ethics approval. The participants provided informed consent in verbal form.

REFERENCES

Acharyya, R., & Bhattacharya, N. (2019). *Research Methodolohy for Social Science.* London: Routledge. doi:https://doi.org/10.4324/9780367810344

Adeleye, N., & Eboagu, C. (2019). Evaluation of ICT development and economic growth in Africa. *NETNOMICS: Economic Research and Electronic Networking, 20*, 31–53.

Batuo, E. M. (2015). The effects of mobile phones on socio-economic life of the rural dwellers in the niger delta region of Nigeria. *Information Technology for Development, 19*(3), 249–263.

Bloomberg, J. (2018). Digitization, Digitalization, And Digital Transformation: Confuse Them At Your Peril. *Digital transformation in the enterprise, 1*(1), 1-6.

Budhram, T. (2012). Lost, stolen or Skimmed: Overcoming credit card fraud in South Africa. *South African Crime Quarterly, 40*, 31-37.

Bushe, B. (2019). The causes and impact of business failure among small to micro and medium enterprises in South Africa. *Africa's Public Service Delivery and Performance Review, 7*(1), 1-26. doi:https://doi.org/10.4102/apsdpr.v7i1.210

Chen, M., & Carré, F. (2020). *The Informal Economy Revisited: Examining the Past, Envisioning the Future.* Chicago: Wiego.

Chigada, J. M. (2020). A qualitative analysis of the feasibility of deploying biometric authentication systems to augment security protocols of bank card transactions. *South African Journal of Information Management, 22*(1), 1-9. doi:https:/doi.org/10.4102/sajim.v22i1.1194

Dadoosh, A. A. (2022). The Informal Economy and its Role In Reducing the Unemployment Rate In Iraq for the Period (2000-2020). *World Economics and Finance Bulletin, 7*(1), 107-121.

Dzomonda, O., & Fatoki, O. (2019). The role of Institutions of Higher Learning Towards Youth Entrepreneurship Development in South Africa. *Academy of Entrepreneurship Journal, 25*(1), 1-11.

Ezeani, C. C. (2022). *Africa in the Face of the AI Wave and the Fourth Industrial Revolution: Leapfrog Opportunities, Developmental Backlogs, and Impediments* (1st ed.). Lagos: IGI Global.

Fundin, A. P., & Bergman, B. L. (2003). Exploring the customer feedback process. *Measuring Business Excellence, 7*(2), 55-65.

Galdino, K. M., Kiggundu, M. N., Jones, C. D., & Ro, S. (2018). The Informal Economy in pan-Africa: Review of the Literature, Themes, Questions, and Directions for Management Research. *Africa Journal of Management, 4*(3), 225-258.

Gertzen, W. M., VanDerLingen, E., & Steyn, H. (2022). Goals and benefits of digital transformation projects: Insights into project selection criteria. *South African Journal of Economic and Management Sciences, 25*(1).

Harteis, C. (2018). *The Impact of Digitalization in the Workplace: An Educational Review.* Springer.

Heavin, C., & Power, D. J. (2018). Challenges for digital transformation – towards a conceptual decision support guide for managers. *Journal of Decision Systems, 27*(1), 38-45. doi:https://doi.org/10.1080/12460125.2018.1468697

Ikise, B. N. (2020). The Internal Communication Barriers: A Communication Audit Report of a Nonprofit Organisation. *Global Journal of Management and Business Research, 20*(6), 27-35.

ILO. (2022). *World Employment and Social Outlook: Trends* . Geneva: International Labour Organization.

Johnson, V., & West, A. (2022). *Youth and Positive Uncertainty: Nehotiating Life Pathways in Post-Colonial and Fragile Environments.* Practical Action Publishing .

Kane, G. C., Phillips, A. N., Copulsky, J. R., & Andrus, G. R. (2019). *The Technology Fallacy: How People Are the Real Key to Digital Transformation.* MIT Press. doi:DOI: 10.1080/08956308.2019.1661079

Khambule, I. (2022). COVID-19 and the informal economy in a small-town in South Africa: governance implications in the post-COVID era. *Cogent Social Sciences, 8*(1). doi:DOI: 10.1080/23311886.2022.2078528

Korachi, Z., & Bounabat, B. (2020). General Approach for Formulating a Digital Transformation. *Journal of Computer Science, 16*(4), 493-507. doi:DOI: 10.3844/jcssp.2020.493.507

Kraus, S., Jones, P., Kailer, N., Weinmann, A., Chaparro-Banegas, N., & Roig-Tierno, N. (2021). Digital Transformation: An Overview of the Current State of the Art of Research. *SAGE Open* , 1-15. doi:https://doi.org/10.1177/2158244021104757

Liere-Netheler, K., Packmohr, S., & Vogelsang, K. (2018). Drivers of Digital Transformation in Manufacturing. *Proceedings of the 51st Hawaii International Conference on System Sciences, 1*(1), 3926-3935.

Lisienkova, T., Chelekova, E., Mitrofanova, I., Shindina, T., & Titova, J. (2022). An approach for increase of digital/IT innovation adoption for sustainable development of transportation system. *Transportation Research Procedia, 63*, 564-574.

Nomoyi, L. P. (2016). *The role of local economic development strategies for the informal sector in Buffalo City.* Gqeberha : Nelson Mandela University, Masters Thesis .

Odeku, K. O., & Rudolf, S. S. (2019). An Analysis of the Transformative Interventions Promoting Youth Entrepreneurship in South Africa. *Academy of Entrepreneurship Journal, 25*(4).

OECD. (2018). *Going digital in a multilateral world.* Geneva: OECD.

Panagiotopoulos, P., Klievink, B., & Cordella, A. (2019). Public value creation in digital government. *Government I formation Quarterly, 36*(4).

Sammar IqbalAshraf, M. R., Anwer, S., & Saeed, M. F. (2022). Relationship of the informal economy with unemployment and GDP per capita: A case of OECD and non-OECD economies. *ournal of Economics, Management & Business Administration, 1*(1), 82-90.

Statistics South Africa. (2023). *Quarterly Labour Force Survey (QLFS) – Q1:2023.* Pretoria : Statistics South Africa .

Statistics South Africa. (2022). *Quarterly Labour Force Q 1.* Pretoria: Government Printworks.

Suhartanto, D., & Leo, G. (2018). Small business entrepreneur resistance of ICT adoption: a lesson from Indonesia. *Int. J. Business and Globalisation, 21*(1), 5-18.

Telukdarie, A., Philbin, S., Mwanza, B. G., & Munsamy, M. (2022). Digital Platforms for SMME Enablement. *Procedia Computer Science* (pp. 811-819). London South Bank University: Elsevier .

Tshabalala, M., & Beharry-Ramraj, A. (2021). Examining The 4th Industrial Revolution And South Africa Youth Entrepreneurship Linkage To Covid 19: Opportunities And Challenges. *Gender and Behaviour, 19*(1).

Verina, N., & Titko, J. (2019). Digital transformation: conceptual framework. *International Scientific Conference, 1*(1), 720-726.

Vial, G. (2019). Understanding digital transformation: A review and a research agenda. *The Journal of Strategic Information Systems, 28*(2), 118-144.

Vogelsang, K., Packmohr, S., & Hoppe, U. (2019). Barriers to Digital Transformation in Manufacturing: Development of a Research Agenda. *Proceedings of the 52nd Hawaii International Conference on System Sciences, 10*(17), 4937-4946.

Wegerif, M. C. (2020). "Informal" food traders and food security: experiences from the Covid-19 response in South Africa. *Food security, 12*, 797-800. doi:https://doi.org/10.1007/s12571-020-01078-z

Willemse, L. (2020). Opportunities and constraints facing informal street traders: Evidence from four South African cities. *Journal of Business Research, 2*(4), 7-15.

Zhang, J., Long, J., & vonSchaewen, A. M. (2021). How Does Digital Transformation Improve Organizational Resilience?—Findings from PLS-SEM and fsQCA. *Sustainability, 13*(20). doi: https://doi.org/10.3390/su132011487

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