

Exploring Digitalization within the Tourism Supply Chain Network: Small Micro Medium Enterprise Perspective in Gauteng, South Africa

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ABSTRACT

Purpose: Digitalisation among SMMEs has been slow due to the constraints such as a lack of infrastructure, networks, technologies, and related skills to fast-track digital transition. These binding constraints make it harder for Small Micro and Medium Enterprises (SMMEs) in developing countries to undertake this digital transition. The purpose of this study is to explore the state of digitalisation within the Tourism Supply Chain Network (TSCN) among SMMEs in Gauteng.

Design/ Methodology/ Approach: An ethnographic qualitative methodology was adopted to have a better understanding of the complexity and idiosyncrasies of digitalisation within the TSCN among the SMMEs in Gauteng where interviews were conducted from twelve participants until saturation.

Findings: The results revealed that apart from the lack of digital skills (data analytics software and video editing technology) and limited understanding of knowledge management especially for the legal systems within the supply network among the selected SMMEs remains a challenge.

Practical Implication: Formulating integrated business ventures and approaching big projects as consortiums not as individual small micro entities is critical for more purpose-driven tourism networks, especially for emerging businesses. SMMEs hardly work with other businesses in the area to develop sustainable networks; hence, there is a need for an effective travel and tourism data Management Company connecting both international and domestic suppliers for effective and efficient service to the businesses and the customers.

Paper type: Research paper

Keywords: *Tourism Supply Chain, Digitalisation, Tourism Supply networks, Small Micro Medium Enterprises (SMMEs)*

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I. INTRODUCTION

Digitalisation and digital technologies are significant drivers of economic growth and development (Solomon & van Klyton, 2020). The introduction of digital technology has caused a paradigm shift in tourism (Happ & Ivancsó-Horváth, 2018). With the sluggish pace in pursuing the digitalisation agenda in the African continent, the World Economic Forum (2015) suggested that collaborative innovation partnerships can exploit the complementary capabilities of businesses. This point is also emphasised by Siyanda Sifolo & Sokhela (2022) that stakeholder coordination and collaboration are the keys to strategic areas for tourism micro-entrepreneurship to increase connectivity through digitalisation. There is a range of techniques to improve business performance when it comes to digital transformation as it affects their company model (Cenamor et al., 2019). Therefore, understanding and knowing various strategies to improve business performance through digital technology is critical for SMMEs.

Perhaps exploring digitalisation as a concept is paramount since the focus of this study is on digitalisation, and not digitisation (conversion of analogue information (a paper document, for instance) into a digital format (a scanned pdf) to store or transmit). Digitalisation is the application of digital technologies to the operations and

processes of the business (Ritter & Pedersen, 2020). There is growth in the use of digital technologies and data management as part of organizational activities. This trend grew with the advent of covid-19. Digitalisation is seen as a key way to improve organizational practices and enable the integration of production data between interacting organisations (Foster, 2017). This study focuses on the evolutionary transformation that occurs when digitised content is used, especially data to affect the way people interact or work (Small Business Institute, 2021). Using new technologies to assess data to solve problems, advance efficiencies or innovate has been embraced particularly in sectors such as finance, media, agriculture, and health where ongoing disruption of business-as-usual is becoming the norm, digital technologies continue to attract considerable interest.

It is also critical to identify factors inhibiting the adoption of digitalisation, which include the laws and regulations that tend to be outdated, the use of technology to its maximum capacity, limited bandwidth, slow internet performance as well as the misalignment of technology with the sustainable development goals. The study conducted by Ndulu et al. (2022) revealed that digitalisation among SMMEs has been slow, particularly in South Africa. However, covid-19 pandemic has fast-tracked the need for SMMEs to pivot and transform their businesses faster than expected. Sustaining an effective tourism supply chain that shows a relationship with other business partners is challenging due to the complexity of the stakeholders involved (Jermsittiparsert et al., 2019). Siyanda Sifolo & Sokhela (2022), are of the view that tourism micro-entrepreneurs should digitise the secondary value chain (procurement, technical development, and infrastructure operations as well as handle their accounts receivable, payables, and reconciliations). Digitalising the tourism supply chain could have an impact on many components in the industry, not just accommodation, transport, and excursions, but also bars and restaurants, handicrafts, food production, waste disposal, and the infrastructure that supports tourism in destinations (Tapper et al., 2004). The notion of tourism supply chain management emphasizes the inter-firm strategic interactions in the context of tourism supply chains (Molefe et al., 2018). Henceforth, measures to be taken by tourism enterprises could help to gain a deeper understanding of the effectiveness of government policies (Wang et al., 2022). More so because, the success of a product on the tourist market is determined by the cooperation between multiple business partners in a tourism supply chain, and contributes to the optimization of the conducted business activities, if successful. The purpose of this study is to explore the digitalisation within the Tourism Supply Chain Network (TSCN) among SMMEs in Gauteng.

A. Problem statement

The domestic tourism market in developing nations, such as South Africa, has been observed to not have the spending power of foreign visitors who arrive with foreign currency, who are inevitably mainstream in the form of USD, EURO, and GBP, with their spending power estimated to be between 1:18 and 1:22 (Bama et al., 2022). There is a need to evaluate the impact of the services provided by the SMMEs to identify the gap(s) that need to be filled and suggest areas where there is a need for improvement (Khoase et al., 2019). The fragmented, cascaded, and often disorganised manner in dealing with policy adoptions and execution in managing developments post-pandemic further restricts a compelling approach to continent-wide tourism and hospitality revival (Bama et al., 2022). For the national development plans and the sustainable development goals to be accomplished between 2022 and 2030, innovations are required to reconstruct the African tourism supply chain networks. Even though investors typically consider SMEs riskier as compared to large-scale enterprises. The primary reason to ignore the SMEs by the investors is that SMEs operate in more magnificent uncertain settings and are less equipped with capital, human resources, and organizational infrastructure (Ali et al., 2019:718). In light of the disaster that the pandemic has caused, "digital transformation is probably Africa's biggest opportunity coming from the crisis. Ali et al. (2019) found that trade digitization improves firm performance. Hence, this study explores the SMMEs' perspectives on digitalisation within the Tourism Supply Chain Network (TSCN).

B. Literature Review

The concept of digitalisation has been studied widely; however, there is limited evidence of the studies conducted among the Small Micro Medium Enterprise (SMMEs) in the South African context, particularly within the tourism industry. Studies of this nature are important because technology is a proven economic enabler in South Africa, especially because South Africa is reliant on international tourism. Hence, South Africa maintains a "globally competitive, inclusive and shared economy with the technological capability and production capacity that is driven by people harnessing the Fourth Industrial Revolution (4IR) to propel the country forward towards its social and economic goals" (Department of Communication and Digital Technologies [DCDT], 2021). Therefore, strengthening government policy capacity is a priority in the country, hence policy implementation and coordination for the economy, infrastructure planning, development, and government service delivery is critical. Perhaps starting with the impact of the SMMEs on the economy is critical.

1. Effect of the SMMEs on the tourism supply chain

There is a need to examine both demand and supply-side aspects to understand the economic phenomenon of tourism. Tourism Supply (TS) is derived by summing the value of tourism products sold by the tourism industry to tourists. It influences an entire tour from start to end intending to satisfy the tourists as a customer, hence, it cannot be examined before purchasing it. TS It takes into account several services that are likely to be offered by the SMMEs such as accommodation services, food, transport, and other retail sales. Therefore, paying attention to SMMEs is critical since they contribute to the Gross Domestic Product (GDP) of the country. According to Mkhungo (2021), SMMEs are responsible for 60%-70% of employment in the country; they make up about two-thirds of the African continent's formally employed workforce. In South Africa, the small business sector employs roughly 47% of the workforce and generates about 20% of the country's annual GDP. Telukdarie et al. (2021) emphasize that over 50% of employment and 90% of businesses are constituted in SMMEs in developing economies thus depicting a major share of the GDP (gross domestic product)

Therefore, selecting partners and managing partnerships effectively in the tourism supply chain is of critical importance. The critical components of TS include attractions, transportation, intermediaries, activities, and destinations as they inspire, conduct, and affect the entire tour. If any of the components are not well coordinated, it impedes the experience of the tourists and the tour does not turn out to the tourists' satisfaction. This may affect the performance of any business. Tourism businesses need to be aware of the determinants of performance in the tourism sector such as financial statements, which show the financial position of the organization; these should be based on Generally Recognized Accounting Practices (GRAP). Having a negative cash balance is acceptable, but should be avoided. There should be month-to-month cash to pay salaries, suppliers, etc., this is important together with day-to-day expenses to avoid cash shortages. A business should be self-sufficient. Over and above the mentioned factors, SMMEs should provide a service or a product that is satisfactory or exceeds the expectation of the customer.

2. Supply chain vs value chain, what's the point?

The existing literature review indicates that tourist satisfaction is a significant aspect of the tourism supply chain. Moreover, the word of mouth is a powerful tool for marketing a destination. According to Hossain et al. (2021), satisfied tourists will talk more positively to others about what they have experienced and it will ultimately generate new tourists for the natural destination. Customer satisfaction is greatly influenced by the quality of interpersonal interaction between the customer and the contact employee (Sitohang & Wiwoho, 2022). It is paramount for tourism businesses to strive to create value and satisfy tourists from the moment a tourist searches for information, during the trips, experience sharing in a destination area, or throughout and after the trips such a process. This process is known as the tourism value chain (Rahmiati et al., 2020). In the same way, Rahmiati et al. (2020) emphasise that the tourism value chain approach shows how several sources of competitive advantage can be derived from the ability to create and effectively manage local networks, able to guarantee the local governance and push the attractiveness of the area so that it's different from competitors. Tourists' satisfaction remains the main focus for any business within the direct and indirect tourism value chain. Although the stakeholder in the tourism supply chain adds value to tourists' satisfaction, Dubey, Singh, Singh, Mishra, and Singh (2020), highlight that the value chain includes the activities that take place within a company to deliver a valuable product or service to their market.

Perhaps differentiating between the value chain and supply chain is of importance. The difference between Supply Chain and Value Chain according to Dubey et. al., (2020) is that "Supply Chain refers to the integration of all activities involved in the process of sourcing, procurement, conversion, and logistics. Whereas, value chain implies the series of business operations in which utility is added to the goods and services offered by the firm to enhance customer value". Based on the above alteration, one may argue that the value chain is the entire sequence of activities or parties that provide or receive value in the form of products or services (e.g. suppliers, outsourced workers, contractors, investors, R&D, customers, consumers, members). Whereas, the supply chain is the entire process of making and selling commercial goods, including every stage from the supply of materials and the manufacture of the goods through to their distribution and sale. Value chain tends to place more emphasis on the organisation and minimally considers other stakeholders within the entire supply chain. Yet, what is coming across from the literature is the fact that stakeholders such as "tourists as customers" remain at the centre for tourism services and products to be consumed.

Daly & Gereffi (2018), define global value chain methodology as an approach to analyse leisure and business tourism in various regions of the world through distinct actors and global characteristics. The global value chain term does not describe travel to visit friends or relatives but rather includes leisure tourism as any trip where the tourist travels internationally for recreation and business tourism for travel internationally and for professional reasons (Daly & Gereffi, 2018:4). Whereas, the scope of the tourism supply chain is within the proximity.

Governments play a leading role in tourism cooperation by formulating tourism cooperation plans to improve relevant infrastructure and enhance the image of tourism in a destination. Tourism enterprises jointly design tourism routes, carry out publicity and promotional activities, provide reception services and other measures, and jointly build the supply network for tourism cooperation. The first article in the field of Tourism supply chain issues was prepared as late as 1993. In 2015, the Web of Science database had only 212 publications posted on the TSC subject revealing that there was no comprehensive research providing information about the determinants of the choice of partners in the supply chain in the tourism sector was conducted (Szpilko, 2017:692). A research gap exists in respect of criteria (requirements) to be met by the contractor to optimize the business activities, as well as reach a potential competitive advantage in the market of tourist services (Szpilko, 2017). The future development of the tourism supply chain, with which a wide range of foresight methods in building a vision of the future of countries, regions, and businesses is of critical importance. The government's regulatory power and tourism enterprises' executive power promote the orderly development of optimal destination combinations and constitute the artificial external driving force. They play a role in promoting, delaying, or revising the formation and evolution of regional tourism cooperation supply networks (Wang et al., 2022).

3. The nature of the tourism supply chain network

The tourism industry is complex and a competitive business in its nature. Digitalisation has emerged as a new phenomenon that affected several aspects of life over the world. Supply networks involve inter-firm relationships and product development (Zhang et al., 2009). The lack of attention to supply networks is not unique to tourism research. Literature suggests that successful partnerships may be initiated at the beginning of the selection process; however, there is a dearth of research on how to manage tourism partnerships effectively (Pongsathornwiwat et al., 2017).

There are three processes suggested by the World Economic Forum [WEF] (2015: 11) to manage collaborative innovation among businesses successfully.

1. The first phase includes preparation for the foundation for collaboration which involves defining objectives, finding the right partners, preparing both organizations culturally and through incentives to support collaborations, and connecting with the right potential partners.
2. The second phase is about partnering which focuses on negotiating and tailoring the projects with partners to ensure that the benefits, risks, and governance aspects are adequately defined.
3. The last phase is pioneering the developed partnerships and adapting to thrive for the mutual and sustained benefit of all parties as they are executed and as the context changes.

There is a need to develop supply chain networks among travel tourism and hospitality businesses. This may create new value through involvement in broader business ecosystems.

Below are some of the principles of sustainable tourism SCN

1. Adopting a balanced scorecard and integrated economic, social, and environmental performance
2. Adopting King Code IV to contribute to sustainable economic development, working with employees, as well as understanding that a business is part of the larger community or system through corporate citizenship.
3. Improving the quality of life for all by observing stakeholder relations, considering social and ethical accounting, auditing, and reporting
4. Engage in ethical practices and organisational integrity, this may impact the culture of a business which is determined by the context a business was created for
5. True power is living what the business was designed for
6. Continuously creating the future whilst protecting stakeholder's interests and channels to disseminate information
7. Creating a buy-local procurement policy

Policies tend to ignore reality. Maisiri and van Dyk (2019) indicated that some organisations experience significant challenges in areas of equipment infrastructure that support Industry 4.0 requirements. Mathibe, Mochenje, and Masonta (2021) are of the view that the provincial government should focus more on the three fundamental pillars of digital infrastructure; human capital and coordination, engagement, and monitoring together with the partnership with businesses and communities. This study fills this void.

II. METHODS

Although there is a call for more quantitative research on tourism cooperation networks (Baggio, 2011; Hong et al., 2015; Wang et al., 2022), ethnography methodology is adopted in this study because this research is undertaken in a natural setting in which a social phenomenon studied (digitalisation) must be within the social setting (SMMEs). According to Phillimore & Goodson (2004:129), ethnography research is concerned with the day-to-day nature of human practice and agency. In this study, digital transformations are critical to consider because they assist with the productivity of daily operational tasks, hence the impact on human practice and agency. This research study adopted applied research which allows the researcher to adopt a different orientation toward the research methodology, hence a transformative transdisciplinary approach. According to Newbold (2018), eight steps can be followed when conducting ethnography research. These steps consider the events that happened during the fieldwork.

1. **Research question identification**
The research question for this study is “What is the nature of digitalisation within the SMMEs in their tourism supply chain network”? The purpose is to understand their relationships, interactions, processes, or anything else that affect how tourism businesses think and/or behave when it comes to digitalisation.
2. **Determine Location(s) for Research**
The location where the SMMEs are based in Gauteng.
3. **Formulating Presentation Method**
This study forms part of a 3 phased project. Phase 1 included conducting systematic research from the literature where 50 articles. This is Phase 2 of the project. An online open-ended instrument was designed and shared with 1 participant for piloting purposes. Thereafter, an MSteam meeting was held with a tourism practitioner to have trustworthy and realistic questions. After that 5 face to face interviews were conducted as well as 7 telephone interviews with SMMEs business owners. This was the most effective way(s) to obtain objective information from the participants. Ethical practices were observed when collecting data.
4. **Acquire Permissions and Access**
According to Newbold (2018), ethnographic research can be a bit intrusive, it is usually necessary to obtain permission for access to the location you plan to research. Permission was obtained from the participants, of which 12 were SMME owners.
5. **Observe and Participate**
Ethnography requires more than just observation (Newbold, 2018), in this study, the researchers determined the most effective ways to collect notes (ranging from journaling to attending the capacity-building sessions where the SMMEs would be together).
6. **Interviews conducted**
To understand the behaviors and actions of SMMEs in adopting digitalisation within the TSCN, interviews were necessary. Interviews took place from January – March 2023, where interviews were between 30 to 60 minutes.
7. **Collect Archival Data**
Secondary data was collected from the 50 articles from the Google search engine. A notepad was kept to capture more information. Moreover, phone conversations with the participants assisted to gather information from rich sources to enhance understanding of the environment of the SMMEs.
8. **Code and Analysis of Data**
Data were analysed and summarised through coding and labelling. The patterns and the outliers were identified. Reflective remarks were compared with theories.

A. Data collection

Qualitative research design varies depending upon the method used; in-depth interviews (face-to-face or on the telephone) were used to collect data from the SMMEs' owners or managers conveniently sampled in Gauteng, South Africa. The interviews were deemed appropriate as this study aims to explore the SMMEs' perspectives in Gauteng on digitalisation within the Tourism Supply Chain Network (TSCN). An open-ended questionnaire was designed to capture SMMEs owners' reflections on the types of technologies they use and whether they collaborate with other SMMEs in their TSCN supply network to enhance business performance. An interview guideline consisted of five sections: about the types of technologies used in an organisation in general, (8 questions), technology adaptation, history and current status of SMME supply networks, collaboration with other SMMEs in the area, and factors enhancing performance in the business area. Primary data collected considered paying attention to asymmetries in terms of power between the host and the guest is

evident in this study, particularly in the tourism supply chain network. Data were collected from 12 participants until saturation.

B. Ethical consideration

An informed consent letter was issued to the participants stipulating the purpose of the study, voluntary participation in the study, and their rights to withdraw from participating in the study at any time. Ethical clearance to conduct this study was obtained from the Tshwane University of Technology Faculty of Management Sciences Research Ethics Committee (No. CRE2022/FR/07/021-MS (2)). Maintaining anonymity by securely, discreetly keeping data and writing up the findings in a way that did not reveal identifying characteristics was essential.

III. RESULTS AND DISCUSSION

The first section presents the demographical data of the SMMEs that participated in the study followed by the types of technologies that they are using in their organisation, collaboration in the tourism supply network, and ways to enhance the performance of the SMMEs. The last part is based on the current hindrances SMMEs perceive to harm their businesses.

A. SMME ownership or management by age

The SMME ownership or management demographics by age of the participants are presented in Figure 1. Out of 12 SMMEs that participated in the study, the majority (7) of the businesses were managed or owned by Generation Y or Millennials between the age of 29 to 46, followed by both gen Z/ iGen/ Centennials (aged between 14 to 28) and Baby boomers (aged 59 to 77). The Policy Paper by the United Nations World Tourism Organisation [UNWTO], (2019) on the Future of Work and Skills Development in Tourism revealed that the Millennial generation will make the management of diversity, in its broadest sense of the word, also a lever of change and differentiation.

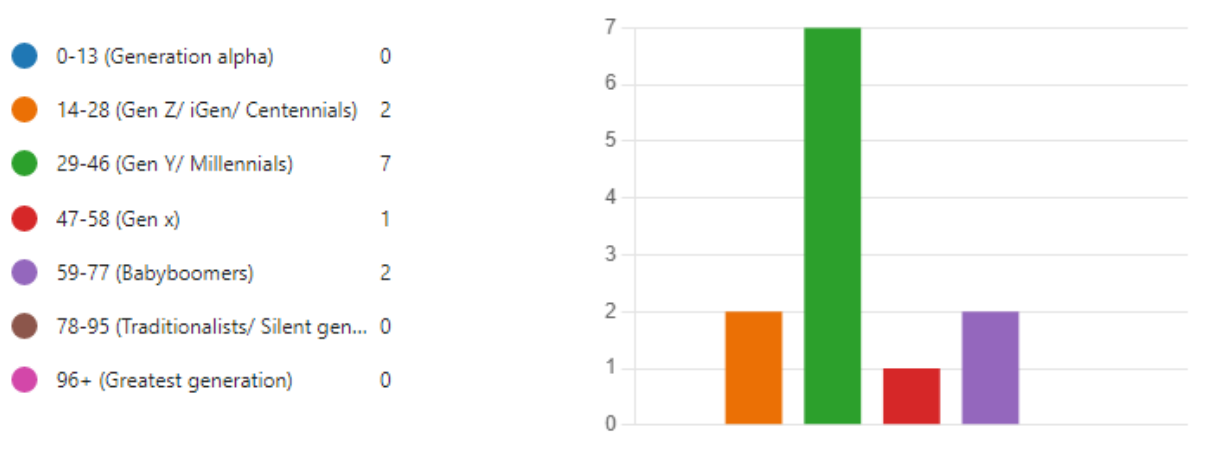


Figure 1: Age group of the participants

Source: emanated from the study

There has been an increase in the number of studies that are focusing on the supply side of township tourism and the small businesses that are involved. The results presented in this study reflect that the status quo remains because the SMMEs that participated in the study are located in the township (6), Urban (4), and suburban areas (2). This is a true reflection of the existing state of affairs in South Africa. According to (Rogerson & Rogerson, 2022), the metropolitan areas and the secondary cities make up the basis for what would be referred to as 'city tourism' in South Africa. The SMMEs based in the urban and suburban areas in this study form part of city tourism destinations. They continue to dominate tourism flows and the tourism space economy

in South Africa (Rogerson & Rogerson, 2022). There were no SMMEs that were from rural areas in this study. Figure 2 reveals that half of the SMMEs that participated in the study were from the township area.

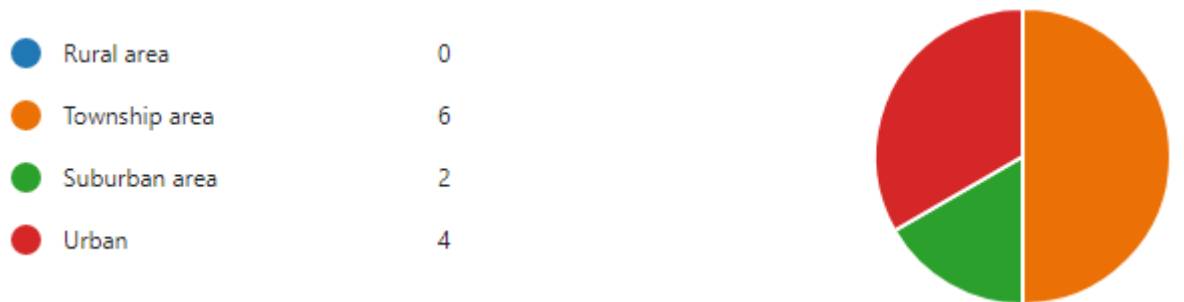


Figure 2: Location of the SMMEs

Source: emanated from the study

The distinction of the type of SMMEs is critical to consider to have a better understanding of the size of the business. Of 12 SMMEs, 7 SMMEs were in the category of small businesses. These results are corroborating the Culture, Arts, Tourism, Hospitality and Sport Sector Education and Training Authority (CATHSSETA) Sector Skills Plan (SSP) for 2020/21 -2024/25 report since small businesses are 39 174. They are the majority when it comes to the number and size of entities registered by CATHSSETA, followed by medium businesses (1 324). This point has also been alluded to in the study of Siyanda Sifolo & Sokhela (2022) most of the micro and small companies (5 million) operate in the informal sector (townships) in South Africa. There were no businesses that fell into the category of medium or large that participated in this study.

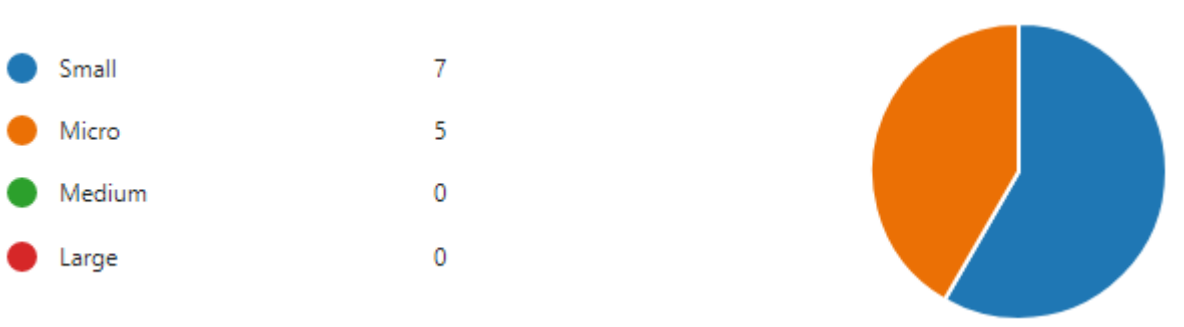


Figure 3: Size of an SMME

Source: emanated from the study

The majority of the SMMEs (7) have been operating for 4-10 years. The results indicate that 4 SMMEs have been in the industry for a period of 4-5 years, followed by the businesses that have been operating for 6-10 years. This indicates the support that SMMEs get from the customers because at the core of a small business' success is the customer. The results also revealed that 2 businesses have been operating for a period of 0-3 years and another 2 from 16-20 years.

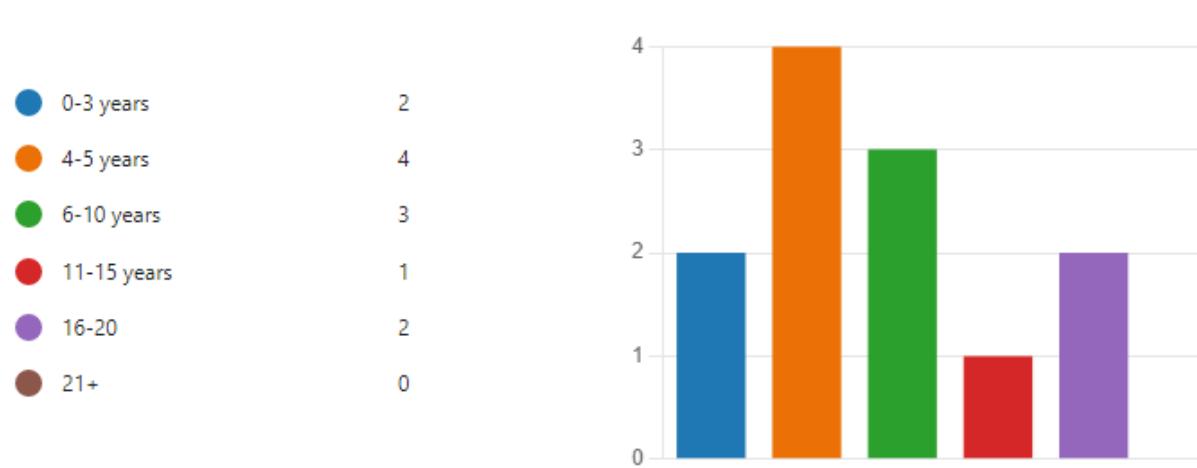


Figure 4: Age of a business

Source: emanated from the study

The economic sector comprises several subsectors which are indicated in Figure 5. The results reveal that most SMMEs (7) were from the tourism and hospitality sector followed by other businesses (2) dealing with business services. The results align with the current state of events in South Africa because the tourism industry contributes 3, 7% to South Africa's GDP, more than agriculture, utilities, and construction. According to CATHSSETA, there are six (6) sub-sectors as Arts, Culture and Heritage, Conservation, Gaming and Lotteries, Hospitality, Sport, Recreation and Fitness, and Tourism and Travel Services. This is an indication that the tourism supply chain consists of several businesses. Zhang et al. (2009) present these tourism organizations as a network of businesses that are involved in a series of diverse activities, ranging from providing an entire spectrum of components of tourism products/services, such as flights, accommodation at the tourism reception desk, and ending with the sale of tourism products in the tourism region. Of the 7 SMMEs, 3 were from tourism and travel services, whilst 4 were from hospitality. Other businesses were from the technological sector (1), community, social and personal services (CSP) (1), and wholesale and retail trade (1).

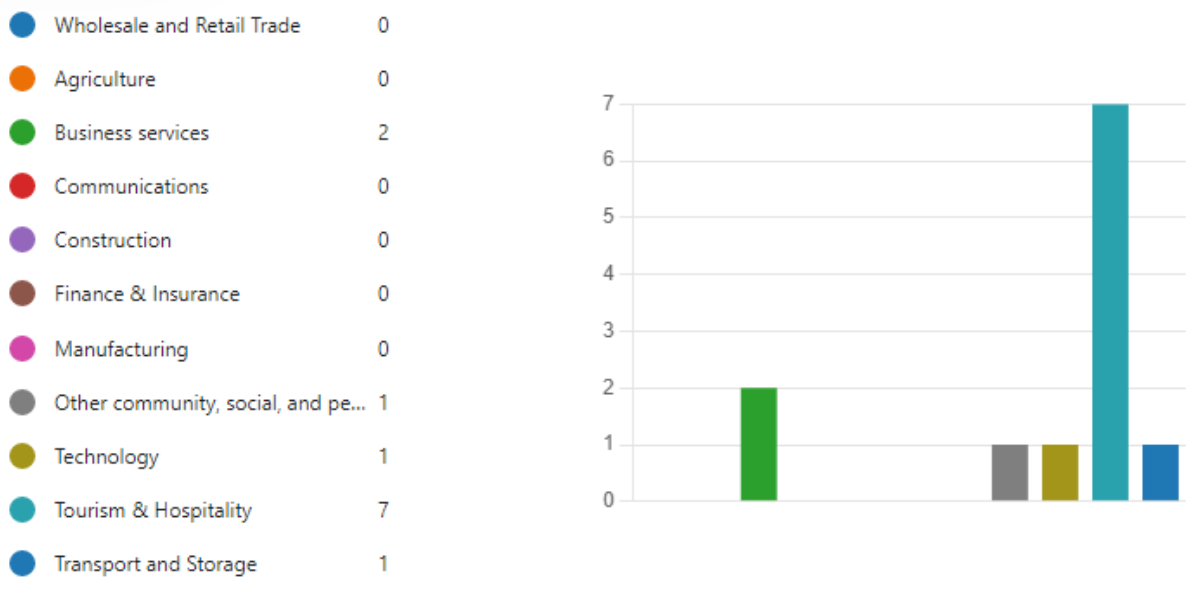


Figure 5: SMMEs participation based on the economic sector

Source: emanated from the study

African Development Community (SADC) region. Participant 12 specified her preference by stating that “*Yes, I would like to have a system that is inclusive*”. Coordination and collaboration are critical for the African continent to realize the digital transformation agenda for Africa (Siyanda Sifolo & Sokhela, 2022).

It is important for tourism destinations to keep up with the latest digital technology trends and to incorporate the ongoing advances reshaping tourism in destination marketing processes (Kotler & Keller, 2016). However, Participant 3 warned that “*the use of chatbots is not good for the SMMEs that I work with because they are not ready for it*”. This point is also alluded to by Telukdarie et al. (2021), that SMMEs are not fully equipped to deliver financial and resource-intensive 4IR (Industry 4.0) developments. The adoption of information and digital technologies (IDT) is a strategic priority for modern businesses and may offer SMME performance improvement benefits, such as effective supplier and customer relationships, enhanced sales, and promotion of original organizational competencies (Telukdarie et al., 2021). Moreover, technology aids in integrating all the entities in the global value chain (GVC) and also enables the co-creation of value for foreign customers, and draws customer participation through smart devices. Therefore, the creation of new business models and services is seen as an opportunity in this regard (Telukdarie et al., 2021). Ndulu et al. (2022) affirm that digitalisation among SMMEs has been slow due to the constraints such as a lack of infrastructure, networks, technologies, and related skills to fast-track digital transition.

The next section presents the results that focus on the state of collaboration in the tourism supply network of the SMMEs that participated in the study.

C. Collaboration in the tourism supply network

Collaboration is a critical ingredient in any network. It is not possible to succeed without sharing information among the stakeholders involved in the organisation. When asked how the SMMEs collaborate with other SMMEs in their area (supply network), Participant 2 specified that they collaborate through “participating in local tourism structures on advisory capacity” whilst Participant 4 mentioned that they collaborate through “affiliating with relevant bodies such as Community Tourism Offices”. This indicates the reliance on the destination marketing organisation as a network, which is also referred to as a traditional way of doing things. One may argue that it is through platforms like these that businesses get to share information and have further engagements on where and how to collaborate. Others rely on social media. Participant 5 mentioned that “we use WhatsApp when we make our orders for Gas and sell our products as well as social media”. Information sharing is important because it brings Supply chain collaboration (SCC) which subsequently improves the firm performance (Ali et al., 2019). Participant 2 corroborated that “monthly meetings and lunch sessions” assist with information sharing. However, Participant 2 raised reservations by stating that “I have a strict database I use for my networks”. Although information can be shared, SCC is one of the crucial components that ensures partners' joint efforts in a supply chain to improve firm performance. Collaboration in operations and innovation can lead to cost reduction in access to knowledge and resources, and the accumulation of unique and competitive resources (Uddin, 2022).

When asked to share examples regarding the types of networks, SMMEs focused on their operations. For example, Participant 6 said “For large catering jobs at the guest house, small companies close by are usually called in as a way of outsourcing the work. When we are fully booked, we offload our remaining guests to trusted guest houses nearby”. Participant 11 mentioned that “I work with agents for the industry as I supply them with customers. I collaborate with other tourism companies, for example, I have connected a boutique shop with tourism operators when they needed it. I would refer the cosmetics suppliers to a guesthouse. They still have that relationship even today. I have good relationships with my tourism suppliers whether formally or informally we have a verbal agreement.” Some of the collaborations show creativity from the SMMEs. Depending on the needs of SMMEs, owners or managers are generally expected to constantly change as the environment they are operating in is continuously changing. An entrepreneurial mindset is critical to sustaining a business. The results revealed that the collaboration identified among the participants was rather operational, for example, Participant 10 stated that “We work well with other small businesses in the area that is selling washing powder, sta soft, and window cleaning products. We do work well with our suppliers in our network because we work closely with an internet cafe in the area for printing, we rent a space in the area and we work well with the funeral parlor since we have a contract for doing the dry cleaning. The 2 soccer clubs in the area rely on us for washing their soccer team clothes. There is an old age home that we do the washing for. The petrol filling station has a good relationship with us. We rely on the community around us.” One may argue that creative collaboration saves cost and time, hence, Uddin (2022) claims that firms that consider creative collaboration encourages the formation of long-term relationships between focal firms and their partners, which motivates both parties to innovation practices such as new product and process development, use of new tools and technology, and innovation team development.

Participant 1 indicated that they received support when they started a business. “When we started our business we were taken under the wing of Southern Sun, we were inducted and even attended a financial management course in Cape Town. They advised us to collaborate with the suppliers in the Tourism Supply chain close to us. We managed to work with other B&Bs in the area to share customers when we are fully booked. We also worked with eggs and chicken suppliers but this was short-lived due to the limited demand from the customers” said Participant 1. Collaboration within the tourism supply chain network is critical for businesses. The results presented in this section are in line with the CATHSSETA national priorities on increasing and initiating partnerships that include worker-initiated interventions and organised labour to leverage established networks with members. The next section presents the results of enhancing the SMMEs' performance based on their response.

D. Enhancing the performance of the SMMEs

When asked what can enhance the performance of your business network in the supply chain (SMME supply network), the majority indicated that investment in the future of work related to digitalisation or Industry 4.0 would be beneficial. Participant 2 stated that *"investment in artificial intelligence systems and backup power facilities are critical for the business"*. Participant 6 mentioned the infrastructure-related items; *"Installation of solar panels and inverters will enhance the performance of our business. You cannot digitalize any technologies without energy/electricity connection, therefore the installation of solar panels will lead to effective and efficient digitalization"*. Participant 8 emphasised the need for digital technologies too, and mentioned the *"advanced equipment when it comes to social media marketing, live streams and virtual experience technology"*. Throughout the literature, technology and digital technologies have brought about multiple improvements that have drastically affected the entire spectrum of operations in various businesses to increase efficiency (Siyanda Sifolo & Sokhela, 2022).

The results also revealed the operational matters that inhibit the supply chain network, for example, Participant 10 stated that *"a reliable legal system is needed for customers who don't want to pay for services. For example, at some point, we tried to get engage the Community Police Forum to intervene but it didn't work. This reflects the critical role of trust and control in networks of SMMEs. Participant 9 stated that "working with other suppliers and being part of route development is crucial because we are close to the Horse Racing club but we are not friends with this establishment. To enhance the performance of our organisation we must utilise social media fully to attract more customers. There seems to be a dire need to work with other businesses in the area, Participant 11 mentioned the need for SMMEs to work with big corporate companies. "I need a contract with big companies. Moreover, having relevant people with relevant skills is needed for efficiency and to provide quality service to the customers. The biggest challenge again is a lack of skills (Participant 11). Moreover, Participant 1 also mentioned that it "allowed me to outline the bigger idea of my project and the business itself more especially where there is an opportunity to give out a contract and also the approval from the stakeholders that we need to use them and financial assistance that is the big challenge we going through and also to be recognised by other private organizations and government"*.

When it comes to enhancing performance, Participant 3 provided a solution for a TSCN to be effective by mentioning that *"there is a need to formulate integrated business ventures and approach big projects as consortiums not as small micro-entities"*. Participant 4 echoed this by stating that *"more purpose-driven tourism networks are needed especially for emerging businesses which are predominantly black. More emphasis was also on skills development and market access. Participant 12 mentioned that "attending the road shows and international exposure, as well as funding, would assist to have a business that is ready to deliver quality service. This finding is not new, according to Telukdarie et al. (2021), the challenges (such as gaining access to the required skills, time, and finances) faced by many SMMEs hinder the adoption of renowned digital platforms that can transform how business is conducted.*

E. Current hindrances on TSCN perceived by SMMEs

When asked about the hindrances towards the TSCN where the participants mentioned instability-related issues such as load shedding and events such as 'July unrest'. Incidents of this nature impact SMMEs' daily operations drastically. Participant 1 associated load-shedding with the national disaster by mentioning that *"the national disaster that distracts the network and internet connectivity as we can't communicate with clients; which leads to late response as a result we lose business"*. This sentiment was shared by participants, 2, 4, 6, 7, 9, and 12. Participant 2 made an example by stating that *"non-air-conditioned offices in hot environments affect productivity rate. Presentations and meetings are affected as the equipment is non-functional Network is affected therefore delayed or compromised communication"*. Participant 6 endorsed the same sentiment by stating the impact it has on the customer by stating that *"electricity being off for more than 4 hours is unexplainable to a guest.*

Participants 3 and 5 complained about the costs that come with load shedding by stating that *“load shedding is largely negative. I have to move meeting venues as I can’t hold meetings in my office where it’s extremely hot. It has recently burnt my sound system”*. Unfortunately, load-shedding has negative impacts on society at large, and SMMEs are also affected. Some have learned to maneuver around it, some have not. Participant 4 stated that *“load shedding is extremely bad because there is potentially more crime and misdemeanors. This requires extra security and resources”*. Participant 6 blamed the unpredictability of load-shedding by mentioning that *“we recently installed a generator but even with generators, travelers/ guests are inconvenienced. It’s noisy, which doesn’t enhance the guest experience. Also, when the electricity comes back on, the surge often causes electrical equipment and appliances to blow, which is inconvenient and can be expensive to guests and the guest house who sometimes have to replace their electrical items. The generator was and is costly but still is not a permanent solution. The only permanent solution is installing solar panels and inverters which is very expensive for a small business*. Participant 9 painted an extreme picture by stating that *“we have had more than 20 burglaries in our establishment. Load shedding has an impact on security. We had to spend more on diesel for the generator. This has led to us lessening working hours of staff members”*. Participant 12 also reverberated the same sentiments that *“load shedding is worse than the July unrest because I can have all the systems in place but I cannot operate if I don’t have a generator or solar system. We have to close our offices and operate during awkward hours. This affects the labour relations policies”*. Only Participant 10 mentioned that load shedding *“doesn’t affect us that much now that we have found a strategy to work around the Eskom Se push app. We lose business if the customer is in the hurry”*. This could be due to the nature of the business as it deals with personal services *“laundromat”*. However, Participant 11 stated that *“I don’t have load shedding where I stay, I am connected”*. This is an indication that the SMME challenges differ sometimes, depending on where they are located.

IV. CONCLUSION

Digitalisation and digital technologies remain significant drivers of economic growth and development, particularly in the tourism sector. This article intended to explore the state of digitalisation within the Tourism Supply Chain Network (TSCN) among the SMMEs in Gauteng. This was done by adopting an ethnographic methodology to better understand the perspectives of SMMEs in the developing context of digitalisation and the state of their TSCN. Through 12 SMMEs the types of technologies that they are using in their organisation were identified (not limited to general office use technology, security management services to tourism facilities, virtualisation for tour bookings, advanced data analytics software, video technology editing technology, effective mobile and online technology, virtual space, artificial and social intelligence, etc.). The results revealed that more investment for SMMEs managed or owned by Generation Y or Millennials could affect the reported limited digital skills and legal systems. This has implications for the businesses operating in an informal environment since collaboration in the tourism supply network is paramount, especially, where SMMEs hardly work with other businesses in the area to develop sustainable networks.

Outdated laws and regulations that do not incorporate the Fourth Industrial Revolution (4.0) add to the challenges impacting the TSCN of SMMEs. This inhibits the potential for SMMEs to attract visitors with more spending power. Strengthening government capacity on policy implementation and coordination for the economy, infrastructure planning, development, and government service delivery could positively impact the demand and supply-side aspects of tourism. Governments play a leading role in tourism cooperation by formulating tourism cooperation plans to improve relevant infrastructure and enhance the image of tourism in a destination. Therefore, sustaining an effective tourism supply chain through a secondary value chain (procurement, technical development, and infrastructure operations as well as handling their accounts receivable, payables, and reconciliations) is paramount for the SMMEs to prosper. Although supply chain and value chain were distinguished, the focus of this study was on SC due to the integration of all activities in the process of sourcing, procurement, conversion, and logistics. SC is critical because tourism enterprises jointly design tourism routes, carry out publicity and promotional activities, provide reception services and other measures, and jointly build the supply network for tourism cooperation. Creative collaboration should be encouraged to form long-term relationships between focal firms and their partners.

The implication is that the future development of the tourism supply chain needs government support because government plays a role in promoting, delaying, or revising the formation and evolution of regional tourism cooperation supply networks (Wang et al., 2022). The red tape caused by people in positions of power (service delivery, infrastructure, policy implementation, etc.) hinders the success of SMMEs to form an effective TSCN and the competitiveness of businesses. Therefore, formulating integrated business ventures and approaching big projects as a consortium for SMMEs could impact the TSCN's success. Hence defining

objectives, finding the right partners, preparing both organizations culturally and through incentives to support collaborations, and connecting with the right potential partners are paramount. Partnering, negotiating, and tailoring the projects with partners to ensure that the benefits, risks, and governance aspects are adequately defined. Adapting and executing all the plans could be valuable for broader business ecosystems. The principles of sustainable tourism SCN were presented to avoid any hindrances on TSCN.

In conclusion, there is a need for an effective travel and tourism data Management Company connecting both international and domestic suppliers for effective and efficient service to businesses and customers. Depending on where the SMMs are located, load shedding affects businesses. O’Conner (2023), calls for governments, regional tourism organisations, and other policy-level stakeholders to facilitate more rapid diffusion of the developing smart tourism concept, helping to support the tourism agenda 2030 and multiple United Nations Sustainable Development Goals.

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