COMMUNITY ENGAGEMENT AND THE DIGITAL ECONOMY: IMPACT ON TOWNSHIP ECONOMIC DEVELOPMENT IN THE EMFULENI LOCAL MUNICIPALITY.

Research report presented

to the

Graduate School of Business Leadership

University of South Africa

by

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Submitted in partial fulfilment of the requirements for the degree

MASTERS DEGREE IN BUSINESS ADMINISTRATION

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December 2021

Table of contents

CHAPTER 1: RESEARCH PROPOSAL

CHAPTER 2

LITERATURE REVIEW

CHAPTER 3

RESEARCH METHODOLOGY

CHAPTER 4

DATA ANALYSIS

CHAPTER 5

CONCLUSIONS, RECOMMENDATIONS AND LIMITATIONS

DECLARATION

I declare that *"Community engagement and the digital economy: Impact on township economic development in the Emfuleni Local Municipality"* is my own work, and that all sources have been indicated and acknowledged by means of complete references.

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…… Date: December 2021

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ACKNOWLEDGEMENTS

First and foremost, all praise and thanks to God for all that I am and all that I ever will be. Thank You for being the guiding light at all times, I am nothing without You.

To my family; my wise and kind grandparents, my strong and dedicated mother, my wonderful sisters, my beautiful and loving wife, and my lively nephews. I absolutely adore you all and I hope this work will make you proud.

Professionally, I would like to extend my humble gratitude to Mr. Willem van Heerden and Mr. Daniel van Deventer for the significant guidance, contribution, and encouragement that you provided to this young man. It may or may not have been apparent, but the time that I spent learning from you gentlemen was truly enriching. Thank you for advising me to go on this MBA journey!

To my friends and my colleagues, your patience and support is truly appreciated. Hopefully, we can get back to full-time work soon.

And last but not least, thank you to all at UNISA SBL and of course, the people who took their valuable time to participate in this research study. I hope it will lead to a positive change in some way.

ABSTRACT

This study aims to understand the research problem of whether socio-economic conditions in Emfuleni Local Municipality's townships, where unemployment rates are as high as at 60%, double the national average, can be addressed through community engagement and the digital economy. The research uncovers that existing policy and approaches seem to be failing to stem this problem. Thus, it is becoming imperative for current policies to be critically reviewed, and any shortcomings be systematically addressed, in order to galvanise the strained South African economy. It is becoming critical that an understanding of factors that can be leveraged to turnaround this pattern is established. Hence, a quantitative research approach using questionnaires and stratified random sampling was adopted, as it best enabled for the views of the sample population to be recorded through empirical and clearly defined parameters, whilst also allowing for generalisation of results obtained. In doing so, this study has to some degree, established that community engagement and the digital economy can be used to address the economic challenges in Emfuleni townships.

Results from earlier research have also shown that a combination of effective community engagement and growing the digital economy, can lead to economic development. Sunter (1992) stated that technology and its effects are inevitable, and historical trends highlight those technological advancements are usually followed by economic upswings. And that countries with higher societal engagement and technological indices, showed higher levels of economic development. Similarly, findings from this study and the data analysis conducted, point to a conclusion that the effective use of community engagement and the digital economy can have a positive impact on the economic development of townships in the Emfuleni area. Thus, leading to the reduction of poverty, inequality, and unemployment in those townships.

Despite the limitations identified, it is recommended that results of this study should be considered as preliminary inputs for an improved future study, as it could be crucial for helping affected communities, their local municipality, and the business sector to better align and improve the effectiveness of their local economies for mutual benefits.

LIST OF TABLES

LIST OF FIGURES

LIST OF ANNEXURES

Keywords: Township, Poverty, Inequality, Unemployment, Digital Economy, Community Engagement, Economic Development.

CHAPTER 1
INTRODUCTION

1.1 Introduction

The triple challenges of poverty, inequality and unemployment are largely concentrated in the less affluent sub-urban areas of South Africa. According to Chibba & Luiz (2011), these challenges are due to South Africa's history of racial estates, where apartheid policy led to the majority African population being relegated to townships and rural areas. This continues to have serious economic repercussions for those living and operating within these township economies today. Hence, to foster a better understanding of township economies, the researcher will present an overview of literature that is currently available on this research topic, and further expand the investigation in subsequent chapters.

To be concise, this research study will focus on two key factors that are impacting the development of township economies in the Emfuleni region of Gauteng Province in South Africa. It is important to note that similar research on township economies, has previously been conducted and is continuing for various township contexts across the globe. However, factors that affect each township economy do tend to differ, depending on the specific geographical area being examined Scheba (2019). For instance, training and resource allocation are key factors that feature prominently in research on South African townships, whilst policy and legislation seem to take precedence in other parts of the world, such as Asia.

Also, important to note is that there is no extensive literature available on the two factors chosen for this study, community engagement and the digital economy, and how they impact township economies in the Emfuleni region. Hence, this research study aims to build on existing research conducted in other parts of the globe, the African continent and locally within South Africa. From the above, the researcher is cautiously optimistic that common factors, key drivers, challenges, and solutions can be identified. And that this and other related research, maybe be integrated into future studies to yield a more holistic overview of similarities and differences between different townships, and further understand how success factors from other areas can

be adapted to improve the economic performance of underachieving townships. This is thus, a basis for a more long-term study that aims to contribute to finding solutions to economic challenges faced by many of South Africa's townships.

With all the introductory representations considered, the researcher understands and concedes that this specific research alone has its limitations and shall not provide all the answers to the subjects under investigation but will rather contribute to a larger body of work that comprehensively examines township economies and promotes knowledge sharing.

1.2 Problem Statement

It is in this context, that this research study seeks to explore two factors that may be forming part of the challenges to the development of township economies. Because as more people migrate into urban areas, Africans are moving into townships and becoming trapped in a perpetual cycle of poverty and unemployment. This serves to grow inequality and poverty, as most employment growth remains in the cities, not townships Mlambo (2018). This means townships must begin to create economic opportunities for their growing population groups, otherwise a situation that is already widely regarded as dire, could worsen in the coming years.

According to World Bank (2020), South Africa has over 76 large townships with half of the country's urban population residing there. This accounts for 38% of working-age citizens with an unemployment rate of 60%. As a result of these statistics, Training for Township Renewal Initiative (2007), considered townships to be an urban challenge, a view supported by South Africa's National Treasury NDP Unit, and the Development Bank of Southern Africa (DBSA). Whilst the term township has no formal definition, it is narrowly understood to mean a relatively underdeveloped, urban residential area that was formalized during the apartheid era and reserved for Black people who lived near or worked in areas that were designated 'White only'. This formal segregation was since ended under the new democratic era; however, townships and informal settlements continue to persist and, in some areas, show rapid growth due to urban migration. Data from the Parliamentary Monitoring Group shows that 63% of South Africans were already residing in urban areas in 2021, and that this is set to rise to 71% by 2030, and 80% by 2050. Further to this, Arndt, Davies and

Thurlow (2018) state that urban migration is driven by a search for economic growth and poverty alleviation.

Therefore, research studies such as the one being undertaken in this document, and government initiatives such as the Gauteng Township Economy Revitalisation Strategy, could become crucial tools in helping to avert a looming economic disaster confronting South African townships, and specifically the Southern Gauteng where unemployment is extremely high at 53,6%. The Gauteng Township Economy Revitalisation Strategy is already being deployed, with an aim to address poverty, unemployment, and inequality through “the significant participation and meaningful inclusion of township communities into the mainstream economy of Gauteng through their own township enterprises that are supported by the government and big business.” However, despite these types of programmes, there remains a gap in the Emfuleni Local Municipality. As the community is devastated by youth unemployment and high levels of poverty.

Bhorat et al. (2017:3) support the view that if the above economic situation is not addressed, the triple challenge of poverty, inequality and unemployment will continue to grow and be accompanied by crime, as increasing numbers of people migrate into township urban areas in search of economic opportunities. This is evidenced by Figures 1 and 2 below, showing that urban migration has been steadily increased in South Africa, whilst unemployment has grown from 24 % in 2012 to over 32 % in 2020. This in an economy where the covid-19 outbreak has further exacerbated the unemployment problem, leading to 2,2 million job losses in the second quarter of 2020 alone.

Figure 1. South Africa: Urbanisation from 2009 to 2019

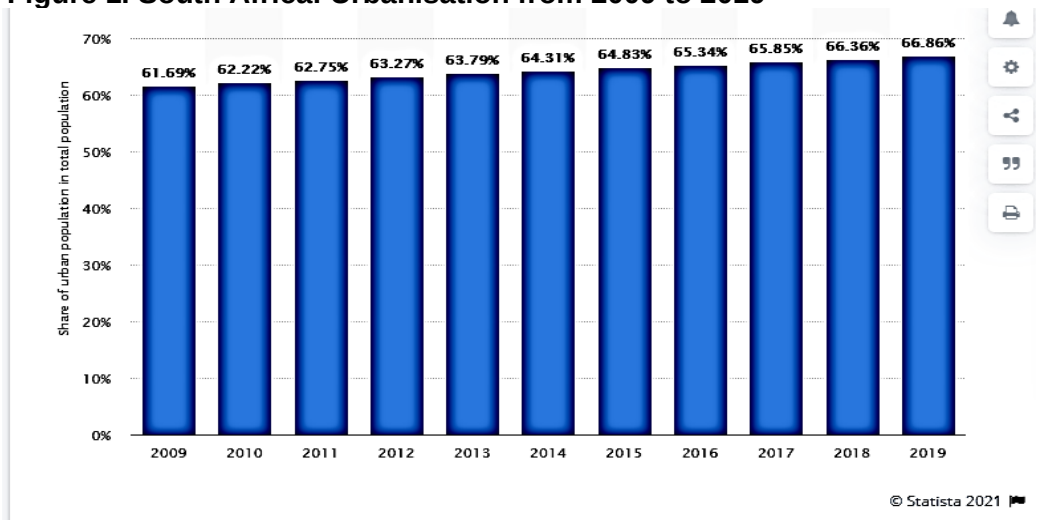


Figure 2. Rising unemployment levels in South Africa.

Actual	Previous	Highest	Lowest	Dates	Unit	Frequency
32.50	30.80	32.50	21.50	2000 - 2020	percent	Quarterly

The above figures portray an undesirable economic situation, especially for townships, where unemployment levels are at 60%, which is around twice the national rate of 32%. Hence, it is becoming critical to quickly gain an understanding of factors that can be leveraged to turnaround this pattern. This study will seek to find some answers and make recommendations on how to address the economic challenges in townships specifically.

1.3 Research question

This research will utilise a descriptive research question to help gain an understanding of whether two independent variables (community engagement and the digital economy), can impact a dependent variable in the form of township economic development in the Emfuleni region, and to further investigate if community members understand that these factors could help address the challenges confronting those economies. Hence, the research question is as follows: Does community engagement and the digital economy have an impact on township economic development in the Emfuleni Local Municipality

1.4 Research objectives

The below research objectives shall serve to narrow the focus of this study and assist in providing succinct and very pointed answers to the research question.

- To gain an understanding of whether community participation and engagement could be leveraged to support and promote growth for township-based businesses in Emfuleni.

- To determine how the digital economy can be adopted to overcome marketing and promotional challenges faced by township-based businesses in Emfuleni.
- To determine if development of the township economy could assist in alleviating the poverty and unemployment challenges.
- To understand if there is indeed limited collaboration and coordination between locally owned township businesses and their stakeholders.

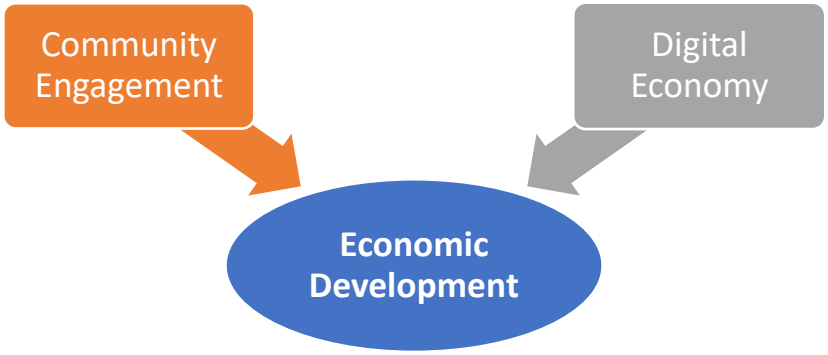
1.5 Brief literature overview

Globally and locally, literature on township economic development and the various factors affecting it, is not widely available or well-established yet. As such, it is an evolving and interesting area of study, where some aspects remain largely under-investigated. A case in point, are the concepts to be explored in this research study, which have not been explored in relation with each other previously. The two independent factors, community engagement and the digital economy will be investigated in detail, for the purposes of ascertaining whether these can have an impact on one dependent factor, economic development in Emfuleni townships.

A broad spectrum of existing literature on township economic development and related independent concepts has been adopted and integrated to form the basis for a revised body of research work, which is intended to yield updated insights into the area of township economic development in the Emfuleni region of southern Gauteng.

The factors that impact on economic development are depicted in this Figure 1. The researcher will briefly describe them.

Figure 3. A conceptual framework of factors impacting economic development.



1.5.1 Community engagement

Bishop, Goller and Guthrie (2015:3), describe a framework for community development as “the process of involving people in the decision-making processes on issues that affect them. This includes activities that facilitate an informed dialogue amongst participants and encourages them to share ideas and opinions for decision-making purposes,” and is grounded on four pillars: people, practice, policy and performance.

1.5.2 The Digital economy

In their article Heath and Micallef (2021) explain the digital economy as “economic activity that results from billions of daily online connections between people, businesses, devices, data, and processes. This as a direct result of Internet proliferation, mobile technology, and the internet of things”.

1.5.3 Economic development

Krueger (2020) briefly defined economic development as the process whereby simple, low-income economies are transformed into modern industrial economies.

Although economic development is sometimes used as a synonym for economic growth, generally it is employed to describe a change in a region’s economy involving qualitative as well as quantitative improvements. Whilst CALED (2020) described economic development as “the creation of wealth from which community benefits are realized. It is more than a jobs program; it is an investment in growing the economy and enhancing the prosperity and quality of life for all residents.” Finally, the qualitative and quantitative elements of economic development shall be established through the relevant research and data collection methodologies in this research project.

1.6 Research methodology

For the purposes of this study, a quantitative research approach shall be adopted, as it will best enable for the views of the sample population in Emfuleni townships, to be captured and recorded through empirical and clearly defined numbers. Bhandari (2020) defines quantitative as the process of collecting, organising, and analysing numerical data, for the purpose of identifying patterns and averages, making predictions, testing causal relationships, and generalising results to wider populations.

This research is aimed at testing perceptions of causal relationships between the two independent factors and their effect on the dependent factor, economic development. All collected information shall be organised into numerical datasets by use of Linkert scales. Quantitative analysis and interpretation of responses from the sample population shall then be applied to the broader population and be used to make estimates on how propagating these factors will impact economic development. Bhandari (2020) also stipulates that quantitative research is suitable for social sciences, economics, marketing, psychology, and other closely related fields, which is precisely the objective of this study.

Specific quantitative research methods will focus on descriptive research, in order to provide an overview of the variables under investigation. This will be augmented by correlational research, whereby the relationships between the two independent variables will be more closely scrutinised. Descriptive research can be described as a method that aims to describe a population, situation, or phenomenon accurately and systematically. It provides an explanation on what is being studied, its geographical boundaries and the methods to be used in conducting the research study. McCombes (2019), supports this view by stating that descriptive research answers what, where, when and how questions, but does not extend to why or causal questions. However, the why questions shall be addressed through correlational research, which measures a relationship between two variables, without the researcher controlling either. It aims to establish whether there is a positive, negative of zero correlation. Table 1 below, provides examples of correlations in this study.

Table 1. Correlational research variables of this study – a hypothesis.

Positive correlation	Both variables change in the same direction.	As community engagement increases, so does economic development.
Negative correlation	The two variables change in opposing directions.	As digital economy usage increases, purchasing costs decrease.
Zero correlation	There is no relationship between the two variables.	As digital economy usage increases, unemployment is not necessarily affected.

The above examples further support the case for selecting quantitative research approaches as the preferred methodologies for achieving the desired outcomes for this study.

1.6.1 Population and sample frame

The population for this study can be defined as the total group of people living in the geographical area (Emfuleni region) where the study will be carried out McLeod (2019). Whilst the sample frame refers to a narrower predefined subgroup from which participants for the study will be selected. It is the aim of sample selection, that this group will be representative of the broader overall population.

The Department of Cooperative Governance and Traditional Affairs (2020) states that the Emfuleni District in Southern Gauteng has three major townships: Sebokeng, Sharpeville and Evaton, with a combined population of 1,039,908 people (1,8 % of South Africa's population). Fifty percent (50 %) of residents are women, and the median age in the region is 28 years. Whilst 62 % of the population are of working age, between 18 to 64 years of age.

The sample frame for this study will be comprised of persons of both genders, between the age of 18 and 50 years in order to overcome language barriers at higher age groups but will also lean towards business owners in Emfuleni. There shall be no discriminating between economically active and inactive individuals, as anyone from across the population shall be eligible to participate in the quantitative survey, even those who have inactive businesses or are still planning to start a business. This broader frame will ensure a more representative and accurate sample of views from townships across the Emfuleni region.

Ideally, proportionally more people shall be surveyed from townships with larger population groups, such as Sebokeng and Evaton. Though this shall not be strictly measured, it should allow for greater generalisability from the resulting research findings. To avoid sampling bias and cater for the large population, stratified sampling techniques will be used as part of this research, whereby business owners and customers shall comprise a majority of participants. Stratified sampling can be defined as identifying different types of people that make up the total population, and then deciding on what proportions need to be surveyed for the study to be representative McLeod (2019). In this case, close to 100% of participants shall be sharply focused on business owners and their customers, with the balance randomly being from the general population. The researcher remains cognisant that stratified sampling may require greater time, effort, and resources, and has planned accordingly for this eventuality.

Geographical area	**Total population (18 – 50 years)**	**Sample size**	**Sampling method**
Evaton & Sebokeng	169 280	100	Stratified
Sharpeville	17 720	20	Stratified
		120	

1.6.2 Data collection method

As this is a quantitative study, questionnaires and surveys will be the preferred data collection method. Ainsworth (2021) underscores those questionnaires, surveys, documents, and records are quantitative in nature. They are relatively uncomplicated and measurable tools that can best answer questions on just how much a variable has influence on another, which is precisely the basis of this study.

The quantitative surveys shall ask closed-ended questions with a list of limited answers for participants to select from. The advantage is that the questions and answers are standardised across the entire survey and should enable easier generalisation from the outcomes. Both primary and secondary data collection shall be adopted, thus ensuring the best possible research is undertaken. Secondary data will stem from sources such, as existing research, and government statistics, as portrayed in earlier tables. These give a clear context and a solid foundation on which the primary research can be constructed around.

As outlined earlier, the questionnaires for primary data collection shall be comprised of closed-ended questions in conjunction with a five-point Linkert scale. This will enable ease-of-answering. The questionnaires shall be segmented into two sections: Section A for demographic information (age, gender, and location), whilst Section B will be the survey.

1.6.3 Data analysis methods, techniques, and instruments

For a quantitative study, it is sensible that quantitative data analysis methods shall be utilised in order to yield data that can easily be converted into numbers without losing its meaning (Jansen and Warren, 2020). As a result, quantitative data analysis can be used to measure relationships between variables presented in correlation research and to test the hypothesis in a scientifically rigorous manner (Jansen and Warren, 2020).

Descriptive statistics will be adopted to understand the details of the surveyed sample. Statistical techniques such as mean, median, standard deviation and skewness to attain both a macro and a micro-level view of the collected data. This allows identification of patterns and any errors and help in selecting the further inferential statistical techniques to be used.

Inferential statics will be used to make generalisations from the sampled population, about how identified relationships are applicable to the total population. Thus, enabling the research to be linked into an integrated and cohesive study for hypothesis testing. Common inferential techniques that can be used for this quantitative study include T-tests which compare averages between two sets of data, correlations that investigate relationships between variables by way of scatter diagrams, or regressions that are similar to correlations, but have the added advantage of understanding cause and effect relationships between variables. Ultimately, the decision on which statistical tests and analyses will be influenced by the type of data collected and the research questions and hypothesis being tested.

1.6.4 Validity and reliability

Validity in a quantitative study, is described as the extent to which a concept is accurately measured Heale (2015). In the context of this study, the two independent variables and the dependent variable, economic development must be accurately measured, otherwise the study could be rendered meaningless. Whilst reliability, refers to the consistency of a measure. In that it should produce fairly similar results each time it is administered.

1.7 Ethical considerations

Ethical considerations are vital procedures to be followed for protecting the rights of any human subjects participating in a research study Ketefian (2015). The purpose of such procedures is to assure that research is conducted in a scientifically sound manner, whilst remaining respectful towards participants in such studies, and recognises their human dignity and does not jeopardise their wellbeing in any way. As a result of these requirements, developing guidance on how to conduct research ethically has become crucial in recent years Ketefian (2015). There are several ethical considerations to be covered prior to commencing any data collection for a research study. Usually, this clearance is issued by an institutional review body, and in the case of this research, it would be in the form of an ethical clearance certificate from the UNISA SBL Ethics Committee. Thus, the researcher will be required to follow the stipulated application procedures to be issued with such ethical clearance. The researcher further needs to prove to the Ethics Committee that the research will be beneficial to the scientific community, will be correctly distributed, with the right quality and integrity, and that the methodology being used is appropriate ENAGO Academy (2020).

1.7.1 Informed consent

According to (Fouka and Mantzorou, 2021), informed consent means that a person knowingly, voluntarily, and intelligently, in a clear and manifest way, gives his consent. Therefore, participants in any research study need to be made fully aware of the nature and type of research that is being undertaken and must be at liberty to decide if they

will participate. People should not be made to feel coerced, persuaded or deceived in any manner for them to take part in a study. It should be made explicitly clear that people have been provided with sufficient information about the study, so that they can make an informed decision on their own. With regards to this study, people shall be advised beforehand of the nature of research being conducted. The choice to partake remains solely with the individuals, and should they choose to complete the survey, then informed consent would be implied.

1.7.2 Protection from harm

Everything in the researcher's power should be done, to protect participants from the risk of any harm befalling them because of the study. hence, no matter how beneficial the study could be for the community, if it can present any harm to individuals in the process, it should be scrapped and be redesigned.

1.7.3 Right to privacy

(Fouka and Mantzorou, 2021) explain that an invasion of privacy occurs when private information such as beliefs, attitudes, opinions, and personal records, are shared with others, without the participant's knowledge or consent. Therefore, all participants have the right to have their particulars and responses protected and kept anonymous. Furthermore, these should not be utilised for any other purposes, than to further the objectives of this study (Fouka and Mantzorou, 2021) support this view by stating that anonymity is protected when the subject's identity cannot be linked with personal responses. If the researcher is unable guarantee anonymity, he must address confidentiality, which is the management of private information by the researcher to protect the subject's identity. As such, researchers should adhere to the Protection of Personal Information Act (POPI) through proper assessment of the manner in which people's data is collected, stored, processed, and ultimately disposed of.

1.8 Conclusion

This research proposal is an important first step, as it provides a detailed synopsis of the problem, key objectives, and ideas behind the study, supported by contemporary scientific literature, relevant research modelling and related evidence. It is also an opportunity to present a compelling case on the significance of the study being undertaken, and its potential contribution to the scientific community. As a comprehensive outline of the study being undertaken, it enables the researcher to think clearly about each stage of the research process, identify any potential pitfalls and address them beforehand.

Thus, a good research proposal is a vital planning and organising tool for any research study, and when done properly, it should lead into a better-quality study during the implementation, analysis, and interpretation stages.

Furthermore, a good proposal should explore and interrogate all the different sub-segments of the intended research. In the case of this study, two independent variables are being investigated for their impact on a single dependent variable, through quantitative research methodologies.

The data shall be collected through quantitative questionnaires with closed-ended questions and Linkert scales. Then the data analysis and interpretation shall be carried out by using descriptive and correlative statistical analysis, which are well suited for the selected quantitative research methodologies. Lastly, it is crucial that the research be conducted with integrity and the highest ethical considerations that protect participants from incurring any harm because of the study.

To elaborate further on the different areas covered in this research proposal, a detailed literature review of seminal works and contemporary articles shall be conducted in the next section. This will provide a comprehensive background and a critical evaluation of existing literature in relation to the research problem.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This research study was primarily centred on addressing the research problem of historical and prevailing socio-economic conditions in South Africa. However, the events of the previous two years may have served to further highlight the dire economic disparity that exists across South African society. Covid-19 has reminded many of how fragile the economy can be and that poorer sections of our society are not adequately protected or equipped to deal with such systemic shocks LGSETA (2020). This scenario is compounding an already challenging economic situation in South African townships, underpinned by an alarming unemployment rate that was as high as 60% prior to the millions of job losses during the pandemic. It should also be understood that existing policy, though thoroughly researched and remaining intact, there seems to be a discrepancy between the policies and their actual impact, evidenced by the rising inequality in South Africa, as per table 1 below, where the majority of the population lives on very little Webster (2019).

Table 2. Economic inequality in South Africa.

Earning Bracket	% of National Income	Comment
Top 1 % of Earners	20 %	Wealth concentrated in the top 10% due to historical ownership patterns.
Top 10 % of Earners	65 %	
Remaining 90 %	35 %	

Hence, it is becoming imperative that current policies, strategies, and actions be re-examined, and where shortcomings are identified, that these be systematically addressed. Otherwise, the unfolding situation will place an additional burden on an already strained South African economy Shibamvu and Msomi (2020).

In the above context, it can be argued that the economic situation has not changed and probably requires an adjusted approach. Hence, the aim of this research to gain an understanding of how the township economic situation can be adjusted to yield benefits for those communities in the medium to long-term. The researcher

acknowledges that there is a wide variety of literature already available on the subject of township economic development, but limited scientific literature is available for the Emfuleni region specifically.

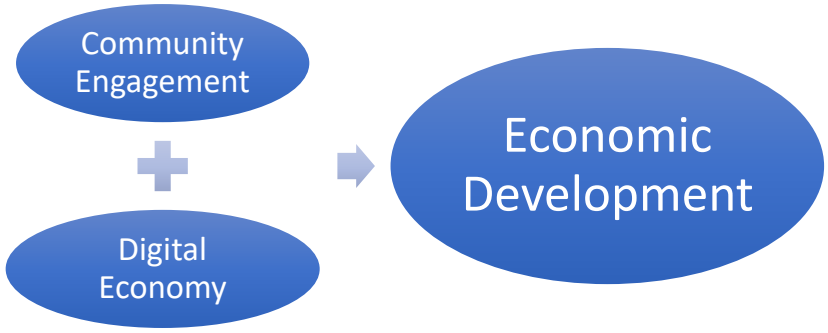
It should also be understood that research into township economic development can be rather broad, if not carefully curated and proactively confined within a pre-set scope that can still be expanded upon by future studies. Hence, this study will only focus on two very acute areas of interest. Firstly, how community engagement, and secondly the digital economy, can impact township economic development.

To elaborate further on above, a detailed literature review of seminal and contemporary work shall be undertaken in the sections that follow. Providing a comprehensive background and a critical evaluation of existing literature in relation to the earlier South African context and the defined research problem.

2.2 Overview of Literature Review

For academics to engage in a critical manner with emerging philosophies and practices of community engagement, they should undertake their activities with conceptual, theoretical, and lived experiences of the socio-political and ethical aspects of community engagement Bender (2008). Hence, a systematic study and review of several academic articles and journals, which holistically or partially focus on three research topics: township economic development, community engagement and the digital economy has been done. Keen interest was taken in the research methods adopted by those earlier researchers, the contexts in which their research was conducted, and the conclusions they drew under their contexts. The researcher also drew on and reflected on experiences that influenced the decision to conduct this particular study. These were then consolidated into summarised viewpoints that either support or contradict the research question posed by this study, on what impact community engagement and the digital economy can have on the economic development of townships in the Emfuleni region. The basic model to be followed is in diagram 1 below.

Figure 4: Variables under investigation in this study.



2.3 Literature Review: Historical Context

2.3.1 Community Engagement: Global Perspectives

Several definitions of community engagement in the broader global and western contexts are provided as follows:

- Goller and Guthrie (2015:3) defined community engagement as the process of involving people in the decisions on issues that affect them. This includes facilitating an informed dialogue amongst participants and encouraging them to share ideas and opinions for decision-making purposes, and is based on four pillars: people, practice, policy, and performance.
- French and Simson (2020:8) define it as engaging in informing, consulting, involving, collaborating, and empowering the community.

Table 3. Framework for Community Engagement.

Four Pillars Supporting the Practice of Community Engagement			
Performance	**Practice**	**People**	**Policy**
Continuous improvement through learning & evaluation.	Embed community engagement into the corporate culture of the area.	Increase stakeholder capability to design & deliver community engagement.	Confirm commitment to engage our community.

In the above framework, community engagement is intended to achieve the below outcomes:

- Investment in the development of people in communities and organisations.
- Improvements in information and communication, in providing feedback.
- Better co-ordination and use of resources.

- Long-term, resourced, commitment to improving community engagement.
- Creation of opportunities to influence the outcome of decisions and tackle issues.
- Developing more creative ways to engage with people.

According to UK Research and Innovation (2021), the idea that communities in informal settlements should be directly involved in the improvement of their neighbourhoods is often discussed in the international development community. However, the knowledge and means needed to ensure a successful upgrade and management are poorly understood, and top-down policies used by central and local government in SA have not been successful to date.

Thus, the global research community began to ask, if township communities would be able to improve their neighbourhoods through participatory methods, enhancing their skills, self-reliance and using locally available materials. If so, then there could be a realisation of local, regional and national environmental, social and economic benefits. That global research, led by the University of Westminster, sought to explore the underlying barriers and drivers that could enable communities to upgrade their own areas in Durban, South Africa. The methodology utilised was participatory action-research, and the project team aimed to produce findings on:

- bottom-up environmental management by the local community.
- processes, partnership, and business models required to ensure sustainability.
- resources required, skills developed and enhanced through the 'self-build' approach.
- business models created for driving private sector involvement and economic growth.
- potential approaches for communities, businesses, and policymakers to collaborate
- lessons learned and transferred.
- communicate and distribute findings to stakeholders through a project website, social media, and events.

The research findings from the above global studies were intended to feed into the South African government policy and building on best practice from the UK, and likewise from South Africa to the UK. The target audience included local communities

aiming to improve their quality of life and wellbeing, as well as local authorities seeking to enhance their planning.

The intended benefits of from disseminating the above findings are:

- building capacity for achieving self-reliance in resource-constraint contexts.
- local inhabitants will become active co-investigators involved in development work and testing.
- directly involved in community-level communication and dissemination activities.
- have access to a workable toolkit.
- skills upgrade to promote human capital and employability.
- improving technical, communication and management skills amongst the community.
- knowledge transfer and creating relevance to different contexts.

2.3.2 Community Engagement: South African Perspectives

Shifting from the global to a South African perspective, community engagement evolved from the Community Higher Education Service Partnerships in the 1990s Perold (1998). More recently, Raisuyah (2017:171) identified it as having four major themes: context, process, mutually beneficial relationships, and knowledge production. Though the research on community engagement was initially based on engagement in relation to universities, parallels could still be drawn with the broader socio-economic situation in South Africa, as universities are described as microcosm of society, plagued by a combination of academic, socio-political and economic challenges Du Plessis (2021:54). This view is further supported by a variety of other expert opinions. For example, Duma (2020), states the unemployment rate and inequality has continued to increase, even among graduates. In this way, our universities remain a microcosm of our unequal society.

Research by Raisuyah (2017:171) almost mirrors the above research that the South African higher education landscape is similar to the broader economy, and is beset by academic, socio-political and economic challenges that have resulted in much turbulence. That study was based on a qualitative enquiry with community

engagement practitioners and academics nationally. Khanyile (2020: 116) goes on to state that community engagement should be included in organisational activities in order to be financially viable. Thus, in order for business in townships and other related stakeholders to remain viable, it would be advisable that they adopt community engagement practices.

And though Local Economic Development (LED) meetings are an attempt to undertake community engagement, in most cases very few people in communities actually participate. So, the question that arises is why do the LED meetings not have as much traction as desired? According to Mukwarami, Mukwarami and Tengeh (2020:489), bureaucracy, lack of interest, no recognition, poor technology, low production capacity, limited market access, and lack of management skills are key contributors. Khanyile (2020:116) adds that he approaches used in community engagement activities are often foreign to the communities and neither appreciate nor understand their problems. This is contrary to the framework for community engagement presented earlier, where consistent themes are engaging, informing, consulting, collaborating and empowering.

Uzuegbunam (2020) is also aligned to the community engagement framework themes and stated in his research that the public must be involved in the law and policymaking process, and people must be kept up to date on the consideration of their submissions, and whether it was included in the bill, plus the rationale behind the decision. Accordingly, this led to benefits of:

- enhanced social involvement, linkages and trust citizens have in government.
- municipalities can make better and informed decisions on law and governance issues and be more representative of the people.

Uzuegbunam (2020) concluded by stating that South Africa's democracy is dependent not only on citizens voting but also actively participating in policy-making and governance processes affecting their lives. Hence, authorities should encourage public participation in processes by establishing dedicated units to build these linkages and understandings with the public. Earlier work on community engagement in South Africa Rowe and Frewer (2005), identified mechanisms of public engagement as namely: public communication, consultation, and dialogue. Public communication is

deemed to the lowest level necessary for community engagement, whilst public dialogue is the highest level, and they can be defined as follows:

- Public communication entails the local authority giving information one-way to other stakeholders.
- Public consultation involves other stakeholders providing information back to their local authority, as requested or at their own volition.
- Public dialogue involves reciprocal exchange of information between the stakeholders and local authority representatives.

Criteria identified for acceptance of public participation or community engagement, as a result of the research Rowe and Frewer (2020) are:

- The participants should be representative of the target population.
- The process should be independent of any political or funder's influences.
- There should be early involvement of the public.
- The inputs by participants should influence policy.
- The process should be transparent, and progress communicated to all stakeholders.

Competencies for success then include:

- Participants should have access to resources including materials, information, experts and sufficient time to make decisions.
- The reasons for participation should be clearly communicated.
- There should be a predetermined and structured processes communicated to all stakeholders.
- The selected method should be cost effective.

Lastly, in line with the objectives of this study, Williams (2006) states that the South African post-apartheid constitution provides for community participation in the development, implementation, and evaluation of integrated development planning at local level. It drew on the findings of a wide range of research projects conducted in Cape Town since 1994. Williams (2006) argued that the contemporary understanding of community engagement in South Africa is informed by the memory of the struggle against the apartheid State. Meaning communities have a deep history of mobilization against exclusionary and discriminatory government practices at the local level. It was

argued that it is precisely this range of historical strategies that should be revisited and adapted, to advance the interests of marginalized communities at a local level. However, it was found that community-led development programmes through Integrated Development Planning in post-apartheid South Africa, and Cape Town in particular, have so far been largely rhetoric and lacking substance.

A closer inspection in this literature review, outlined in table 2 below, clearly portrays that there exists a diametrical opposition between the theoretical framework for community engagement and actual experiences of communities in South Africa. And based on the findings of earlier studies, it becomes clear that unless community engagement is effectively repurposed and deployed, the prevailing socio-economic challenges in South Africa will continue to plague township communities.

Table 4: Disparity between community engagement framework and actual practice.

Community Engagement Framework Themes French and Simon (2020:5)	**Themes in Actual Practice Mukwarami et. al (2020:489)**
Creative ways to engage people	Bureaucracy
Improve community engagement	Lack of interest
Improvements in information and communication	No recognition
Collaborate	Poor technology
Better coordination and use of resources	Low production capacity
Creation of opportunities	Limited market access
Invest in the development of people	Lack of management skills

This current study seeks to lean-on and adopt some key concepts from broader community engagement research already done previously. It shall proceed to explain how local community engagement has the potential to address some of the socio-economic challenges, by pushing beyond the discipline-based boundaries, to focusing on greater concern with societal issues. Furthermore, earlier researchers have theorised that community engagement and its diverse and rich partnerships with communities can be used to develop and sustain research, learning and innovation, in a way that makes them become entrenched within society for its own wellbeing.

The earlier works also identified the advent of community engagement in South Africa, as a potential opportunity to transform authoritarian approaches at that time into more democratic, transparent, and socially just systems focused towards public good. And

whilst forms of community engagement have become entrenched in South Africa, scientific discourse and empirical research on the subject is still in relatively emergent stages. This presents an opportunity to supplement and enhance existing knowledge on this research area.

As outlined above, community engagement has notable benefits if managed and implanted effectively. However, it has the potential to be a waste of time and resources when handled incorrectly. Ultimately, this study has the potential to contribute to the greater body of community engagement research, though it is specifically limited to community engagement, accompanied by adoption of the digital economy, for township economic development.

2.3.3 The Digital Economy

Heath and Micallef (2021) describe the digital economy as “economic activity that results from billions of daily online connections between people, businesses, devices, data, and processes. This as a direct result of Internet proliferation, mobile technology, and the internet of things”. Competition Commission South Africa (2020) labels the digital economy as a broader ecosystem that “cuts across all markets in which goods and services utilise an internet base for production, distribution, trade and consumption by different agents. It has become an entire economic system running parallel to the industrial economy and threatens to, one day, overtake it as the primary base for economic activity”.

Research from Fosu (2020), provided lessons from experiences derived from developing digital economy (DE) assessment tools and piloting them in various global contexts. That paper synthesised a recent review by the author, the Digital Partnership Fund, and the World Bank. It adopted a mixed-methods approach where analyses of outcomes were triangulated. The methodology included comprehensive reviews of World Bank reports, literature reviews, and semi-structured interviews with internal assessment teams. They covered varying geographical regions and countries at different stages of development, with aims of optimising the diversity and relevance of engagements and potential lessons, from a limited budget. Below are key issues identified in the research review:

- Engaging business as an equal partner in shaping national Digital Economy strategy remains a key challenge for developing countries and aid agencies.
- Actual adoption and effective use of digital technologies in industry, public agencies, and small businesses cannot be accurately measured.
- Advancing economy-wide digital economic transformation requires a cross-governmental approach and multi-disciplinary development practices.
- Risks of digital economy firms exacerbating income inequality and not adequately distributing gains into the broader community.

Though the above challenges cannot be overlooked, and the digital economy should not be viewed as a panacea to poverty, inequality and unemployment. Developments in the digital economy have generated vast wealth in record time, but that wealth has been concentrated in few individuals and companies (i.e. Microsoft, Apple, Amazon, Facebook, Uber, etc). Chevalier (2020) shows for example, that Amazon's 2020 market share in the USA was 38% and its global turnover $386 billion. This gcommerce generated wealth was distributed amongst the relatively few company shareholders.

Geldman (2021), presented that online retail revenue in Africa is estimated at $20 billion per annum, which is only 3.5% of total retail sales. This means that online sales for the entire African market are lower than Australia. However, Africa's population of 1,35 billion people, is on par with China. But Africa's population is growing faster than China's, meaning demographics will remain skewed towards a younger marketplace for decades to come. As such Geldman (2021), Africa has all the components for a rapid expansion of both its overall economy and in ecommerce. In several years, the African ecommerce market is set to overtake China and the USA and could be the largest digital economy in the world.

Table 5: The largest online marketplaces in Africa.

#	Type	Name	Region/Country	Product Category	African Visits monthly (millions)	Market Share
1		Jumia	Africa	General	23,3	46%
2		Takealot.com	South Africa	General	10,5	21%
3		Souq	Middle East	General	10	20%
4		Konga	Nigeria	General	2,3	5%
5		bidorbuy	South Africa	General	1,9	4%
6		noon	Middle East	General	1,8	4%
7		Zando	South Africa	Fashion	0,567	1%
8		Amazon	Global	General	0,446	1%
9		Kilimall	Africa	General	0,267	1%

In Africa, 92% of the online retail economy is concentrated between Jumia, Takealot.com and Souq. These organisations mainly service large urban centres, and do not necessarily focus on township markets, probably due to perceived lack of economic incentives. However, the bulk of South Africa's population resides in townships. Pernegger and Godehart (2007) state that by 2004, 24.35% or 11.6 million of South Africa's population lived in the 76 largest townships in the country. Could this large potential market space, similar to the physical retail space, be democratised such that a Takealot.com could exist in it? Needless to say, this would require the development of a physical and digital infrastructure, associated supply chain networks, management structures, various tiers of employees, service providers, financing, etc. If replicated across 24% of the South African population, this could be a real driver of economic development in townships. So there needs to be lessons learnt from how the market leaders have manged to develop and entrench their digital offerings, and how these can be adapted for the township economic model.

According to recent research Competition Commission South Africa (2020:4), the advent and growth of the digital economy represents an opportunity for South Africa to reverse the widespread, triple scourge of unemployment, inequality, and poverty. That paper makes recommendations that in order for South Africa to leverage the benefits of digitalisation, there is a need to create a conducive commercial and regulatory environment designed to extract those benefits and distribute them in a way that guarantees inclusive economic growth in the form of increased and meaningful

employment, equality and shared prosperity. However, the danger seems to be that the proliferation of the digital economy can entrench the dominance by leading global businesses and could further marginalise vulnerable countries and communities. Hence, deliberate regulation is required to mitigate outcomes that could harm the development of small businesses, consumers and the much needed economic growth in South Africa's developing economy. Additionally, the onset of Covid-19 has seen increasing numbers of products and services moving to online platforms.

The Competition Competition's paper presented ways in which South Africa's competition laws can be applied to achieve equitable outcomes in the digital economy, as well as the features in the regulatory environment to yield maximum results. It was mainly identified that an enabling regulatory environment, including sound competition policy, along with:

- watchful and informed consumers,
- an innovative business culture,
- and willing commercial partners,

can drive change in South Africa and ensure that the digital economy delivers inclusive economic growth. This is because in reality, the digital economy is broader than a single market, as it spans all markets in which goods and services utilise an internet base for production, distribution, trade and consumption by different agents Competition Commission (2020:4). Table 4 below, indicates the degree to which South Africa participates in the digital economy relative to its BRICS developing economy counterparts. The country has a high degree of internet penetration and mobile phone connections. Theoretically, this high degree of connectivity represents a key enabler for communities to be able to leverage the digital economy for their own betterment.

Table 6: Key indicators of digital connectivity of South Africa and BRICS counterparts.

	Brazil	Russia	India	China	South Africa
Population	211.8 million	145.9 million	1.3 billion	1.4 billion	58.9 million
Mobile phone connections	205.8 million	237.6 million	1.06 billion	1.6 billion	103.5 million
Internet penetration	71%	81%	50%	59%	62%
Active social media users	66%	48%	29%	72%	37%
Growth in internet penetration in one year	+6%	-0.4%	+23%	+3.1%	+3.1%
Growth in active social media users in one year	+8.2%	0%	+48%	+1.5%	+19%

Other recent research shows that financial technology platforms in South Africa are dominated by the big banks. However, Capitec, Tyme Bank and Discovery Bank are growing their market share by introducing innovative lifestyle solutions. There are also numerous start-ups in the broader online payments space that are concurrently disrupting and enhancing South Africa's online financial service offerings. This is evidence that there is scope for adoption of new and innovative offerings in the digital economy space. The question then is, why are we not seeing more of these offerings customised for the township economy? The following were issues highlighted as contributors by earlier papers:

- First-mover advantages, consolidating networks, and cartel conduct, followed by exclusionary practices and anti-competitive behaviour, that once entrenched can be difficult to reverse.
- Thus, there is a need for well-informed consumers and ease-of-entry into digital markets through open access networks, where consumers can define their own desired benefits.
- Regulators need to monitor the digital space and adapt their thinking with evolving circumstances.
- In developing countries, evidence suggests that prioritising specific industries for large scale and accelerated digital penetration can drive faster and more impactful growth in the digital economy than if digital developments were left to develop organically.

The understanding of how digital technologies can be used by local SMMEs to enhance their businesses in underdeveloped areas of South Africa, was researched in Buffalo City (Fosu, 2018). This was based on the premise that the digital economy has changed the way in which businesses and organizations communicate and interact with their customers and society, whilst presenting opportunities for wealth creation and growth for businesses that are prepared to take advantages of them. Whilst, for those SMMEs that are ill-equipped, the digital economy and globalization can easily lead to marginalization and foreclosure. The Buffalo City study also showed that use on ICT gadgets introduced efficiencies to SMMEs. And minimised the need for office spaces and expensive equipment. The researcher used purposive sampling to approach fifty four SMME entrepreneurs operating in townships in the Buffalo City Metropolitan area. Later Microsoft Excel was used in the descriptive statistics. The results of this study indicated that the participating township entrepreneurs needed training, education, and support in the use of digital technologies and platforms.

Furthermore, recommendations for development agencies and researchers involved with advising SMMEs in South Africa, advised a need to consider the lack of technology use by SMMEs as a barrier to growing of their businesses, and that necessary steps should be taken to address this situation. Age and gender were proven as key controlling variables in many technology acceptance models Venkatesh et al. (2003). With South Africa's relatively young population, should theoretically allow for greater technology adoption in the years ahead.

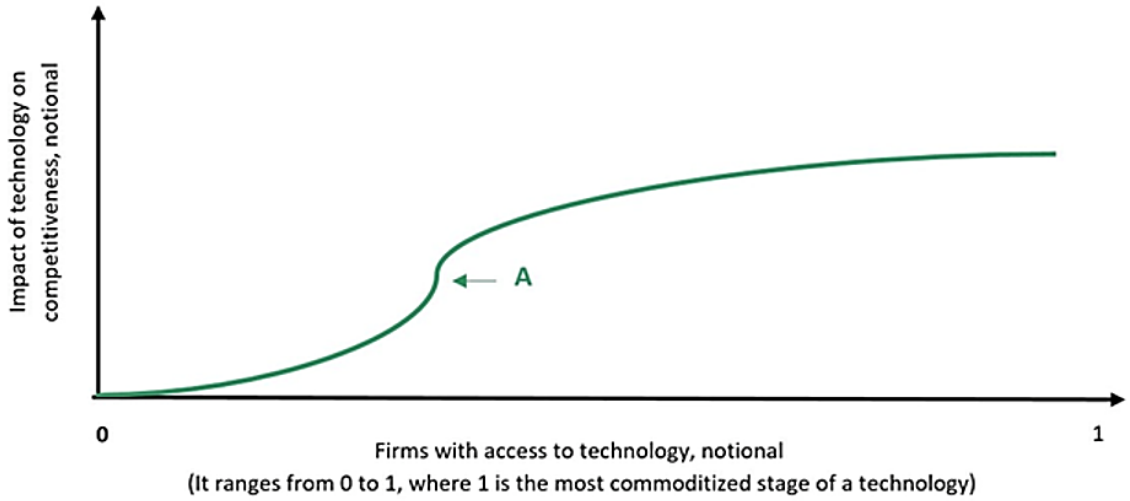
In addition to the above discussion, Dwolatzky and Harris (2020) investigated the feasibility of successful digital transformation in South Africa, where five factors for successful digitalisation of the economy were listed as (figure 1): connectivity, skills; logistics, digital payment methods, plus policy and regulations. Another earlier study (Cogburn and Adeya, 2001), also identified similar themes of technology availability, human capacity, policy and strategies, as being important for transformation into the digital economy in South Africa. Even in those early days, the study found that insufficient information and communications infrastructure remains a key barrier to digital economic growth in developing areas.

Figure 5: Factors for successful digital economy deployment.

Based on earlier presented statistics and findings, only two of the above factors seems to be lacking in township economies: skills and conducive policy. However, building a robust domestic market for local products and minimising imports was also deemed to be key. As a strong domestic market for locally manufactured goods would encourage investment and potentially drive exports of locally manufactured products. This could lead to strong economic growth, where townships are transformed from consumptive activities, but progress into productive centres that generate income into those communities.

Lastly, a study by Arbache (2018) explored the relationship between the digital economy and economic development. It found that the digital economy contributed $2,8 trillion to the global GDP in 2014, whilst other direct benefits of propagating the digital economy include access to new ideas, innovation, automation of mundane tasks, and accessing new channels into markets, all at a lower cost Arbache (2018). However, the study also mentioned that policies should remove barriers to access, and not be a barrier themselves. However, as demonstrated in figure 4, the introduction of several digital technologies by a business is becoming an entry requirement and no longer a source of competitive advantage. One of the questions this current study will seek to address, is whether township economies in the Emfuleni region are falling behind the curve on this aspect.

Figure 6: The relationship between digital commoditization and competitiveness.



2.3.4 Economic Development

According to Krueger (2020), economic development is the process whereby simple, low-income economies are transformed into modern industrial economies. Gunter and Massey (2020) describe economic development as the growth and progression of every nation towards prosperity. Eminent researchers Fraser et al. (1996); Crookes and Lyne (2001); Chisadza and Bittencourt (2019), all state that economic development happens with output produced by resources in terms of labour, capital, technology, land, and intellectual skills.

In South Africa, Dhamija (2020) sought to understand the main themes contributing towards economic development in the country. It was the first to explore a research question of whether there has been economic development in South Africa in the 25 years of democracy. It assumed that in the current highly competitive era, the most critical sources for economic development are innovation, learning ability and knowledge enhancements Gunter and Massey (2020). These themes of innovation, learning enhancements and national development are very similar to themes identified as key factors to community engagement and the digital economy. Generally, rising economic development is inversely related to several aspects like poverty, unemployment and economic policies. Dreze and Sen (1999) were of the view that economic development means the freedom to live to the fullest, and people are enabled to develop to their optimum potential and capacity. A visionary approach to

economic development predicts effective investment opportunities for stakeholders, along with sustainable societal enhancements can prove economically beneficial Mago and Chitokwindo (2014). Additionally, efficient intellectual capital with proper use of technology can bring prosperity Sulaiman and Aluko (2015). Once more, these themes seem to connect back to success factors highlighted in research on community engagement and the digital economy. The above researchers used systematic reviews involving a series of steps to screen, assemble, organize, and present data on economic development in the South African economy.

As outlined in the preceding reviews, economic development can be affected by numerous variables under different contexts. However, core themes are innovation and knowledge enhancement. For the purposes of this study, previous research seems to support the view that a correlation exists between economic development and the two variables under investigation (community engagement and the digital economy).

Another South African study, Pretorius and Piquito (2012), suggests that technology in its many forms is largely responsible for driving and enhancing the processes involved in economic development. Based on their studies, there is a definite correlation between technology levels and economic development. This supports the assumption in this current research that technology, in the form of the digital economy, does have an impact on economic development. The same would apply to township economic development.

2.4 Conclusion

The reviews have also shown, to a large extent, that the combination of effective community engagement and growing the digital economy, can lead to economic development, and that this can be applied to township economic development for broader benefits that can eliminated the triple economic challenges in Emfuleni townships.

Lastly, though perceived to be mainly beneficial (figure 3 below), economic development can also have disadvantages (figure 4), if not properly managed. Furthermore, a temporary unsustainable economic boom may be followed by an

economic downturn or recession. Hence, it can be very damaging if the rate of economic growth is above s sustainable rate.

Figure 7: The benefits of economic development Pettinger (2018).

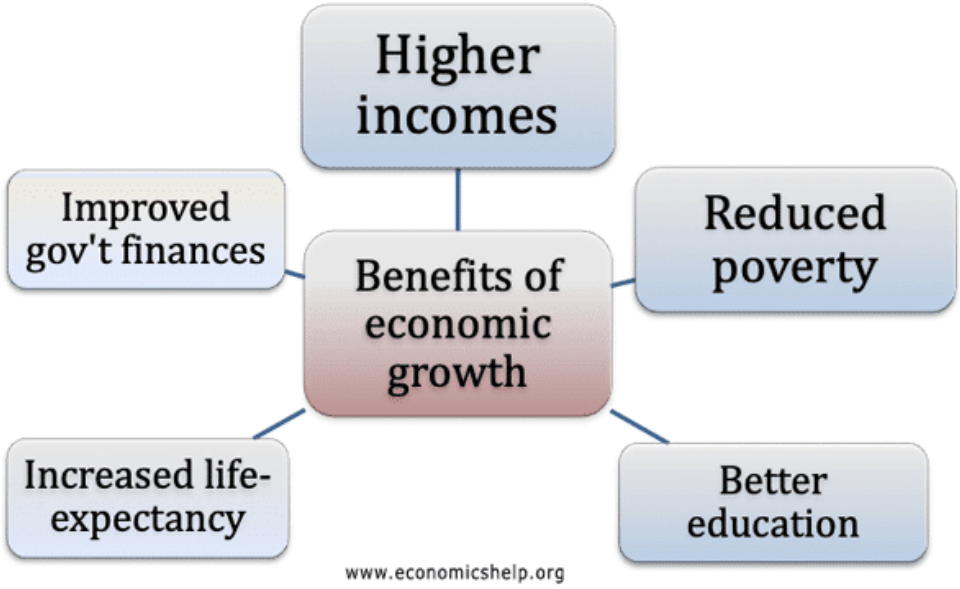


Figure 8: Disadvantages of economic development Pettinger (2018).

Thus, the question remains, is South Africa and its township communities ready to leverage technology for township economic development in a sustainable way. Pretorius and Piquito (2012) found that this readiness is dependent on the South

African government's ability to, itself have sustainable and coherent programmes of technology driven economic development, ergo a digital economy. Also as demonstrated in the earlier reviews, community engagement is crucial to developing and introducing conducive policies, which when accompanied by a digital economy that enables efficiencies and makes information accessible to consumers, will allow businesses to learn, innovate and grow. This whilst building intelligence on how to best serve their current markets or identify new opportunities.

In closing, seminal works Sunter (1992) showed that technology and its effects are inevitable, and historical trends highlight those technological advancements are usually followed by economic upswings. They also evidence that countries with higher societal engagement and technological indices, showed higher levels of economic development. Hence, this review has sought to provide a balanced overview of existing research on the subjects under investigation. It has also given valuable insights on which questions and themes need to be incorporated into the research methodology that follows in the next chapter of this current study.

CHAPTER 3

RESEARCH METHODOLOGY

3. INTRODUCTION

As presented in the preceding chapters, this research study aims to understand how the triple challenges of poverty, inequality, and unemployment in suburban areas of South Africa, and more specifically the Emfuleni region, could be addressed through the use of community engagement approaches and the digital economy. Thus, hopefully providing a better understanding of how township economies in the Emfuleni Local Municipality, could be mobilised for the economic development and benefit of communities in that region. However, there are numerous factors that affect each township economy, and they tend to differ depending on the specific geographical area being examined Scheba (2019).

Hence, the research problem to be addressed by this research study, is limited to finding causes and solutions to two factors that may be presenting challenges to the development of township economies. Because as more people migrate into urban areas, they are moving into townships and becoming trapped in a cycle of poverty and unemployment. This grows inequality, as most employment growth remains in the cities, not townships Mlambo (2018). Hence, this will require townships to realign and start to create economic opportunities for their growing population groups, otherwise the current challenging situation could worsen.

This study will make use of a descriptive research question to help gain an understanding of two selected variables and how they can impact township economic development in the Emfuleni region. Whilst also seeking to establish how understanding these factors, could help address the local economic challenges confronting the geographical area under investigation.

The below research objectives will serve to narrow the focus of this study and assist in providing concise answers to the research question:

- To gain an understanding of whether community participation and engagement could be leveraged to support and promote growth for township-based businesses in Emfuleni.
- To determine how the digital economy can be adopted to overcome marketing and promotional challenges faced by township-based businesses in Emfuleni.
- To determine if development of the township economy could assist in alleviating the poverty and unemployment challenges.
- To understand if there is indeed limited collaboration and coordination between locally owned township businesses and their stakeholders.

3.1 Quantitative Research methodology

Bhandari (2020) defines quantitative research as the process of collecting, organising, and analysing numerical data, for the purpose of identifying patterns and averages, making predictions, testing causal relationships, as well as generalising results to wider populations. For the purposes of this study, a quantitative research approach has been adopted, as it best allows for the views of the sample population in Emfuleni Local Municipality townships, to be captured and recorded through empirical and clearly defined numerical parameters.

This research is aimed at testing perceptions of causal relationships between two independent factors and their effect on a dependent factor, economic development. These are basically hypotheses, which in quantitative research are a generally accepted causal relationship that the researcher expects to ultimately demonstrate. Quantitative research approach will also allow for all collected information to be organised into numerical datasets by use of Linkert scales. This should further allow for quantitative analysis and interpretation of responses from the sample population, which can then be generalised to the broader population and be used to make estimates on how propagating these factors will impact the dependent variable, economic development.

Bhandari (2020) also specifies that quantitative research is suitable for social sciences, economics, marketing, psychology, and other closely related fields. This aligns with the objectives of this study when considering the variables under

investigation relate directly to society, economics, markets, and the psychology of people in those areas.

Specific quantitative research methods are focused on descriptive research, which is useful in providing an overview of the variables under investigation. This will be supported by correlational research, whereby the relationships between the two independent variables will be more closely scrutinised. Siedlecki (2020) descriptive research can be described as a method that aims to describe a population, situation, or phenomenon accurately and systematically. It provides an explanation on what is being studied, its geographical boundaries and the methods to be used in conducting the research study.

McCombes (2019), supports this view by stating that descriptive research answers what, where, when and how questions, but does not extend to why or causal questions. However, the why questions shall be addressed through correlational research, which measures a relationship between two variables, without the researcher controlling either, with an aim to establish whether there is a positive, negative of zero correlation.

All the above observations further support the case for selecting quantitative research approaches as the preferred methodologies for achieving the desired outcomes for this study.

3.2 Population and sample frame

According to McLeod (2019) the population for a study can be defined as the total group of people living in the geographical area where the study will be carried out (Emfuleni Local Municipality). Whilst the sample frame refers to a narrower predefined subgroups from which participants for the study will be selected. It is the aim of sample selection, that this subgroup will be representative of the broader overall population.

The Department of Cooperative Governance and Traditional Affairs (2020) states that the Emfuleni District in Southern Gauteng has three major townships: Sebokeng, Sharpeville and Evaton, with a combined population of 1,039,908 people (1,8 % of South Africa's population). Fifty percent (50 %) of residents are women, and the median age in the region is 28 years. Whilst 62 % of the population are of working age, between 18 to 64 years of age.

The sample frame for this study will be comprised of persons of both genders, between the 18 to 50 years age range, in order to overcome language barriers and vulnerability concerns for higher age groups but will lean towards business owners and their customer in Emfuleni. There shall be no discriminating between economically active and inactive individuals, as anyone from across the population is eligible to participate in the survey, as they are all active or potential consumers from township businesses. This broader sample frame will ensure a more representative and accurate sample of views from townships across the Emfuleni region. The sample shall be tested using stratified sampling, by dividing the population into homogeneous subpopulations based on age, gender identity, and location. Each stratum shall then be sampled using another probability sampling method (simple random sampling), allowing researchers to estimate statistical measures for each sub-population.

Ideally, proportionally more people will be surveyed from townships with larger population groups, such as Sebokeng and Evaton. Though this shall not be strictly measured, it should allow for greater generalisability from the resulting research findings. To avoid sampling bias and cater for the large population, stratified sampling techniques will be used as part of this research, whereby business owners and customers shall comprise a majority of participants. Stratified sampling can be defined as identifying different types of people that make up the total population, and then deciding on what proportions need to be surveyed for the study to be representative McLeod (2019). In this case, close to 100% of participants shall be sharply focused on business owners and their customers, with the balance randomly being from the general population. The researcher remains cognisant that stratified sampling may require greater time, effort, and resources, and has planned accordingly for this eventuality. Especially considering that no large geographical areas will be covered, and the sample frame is relatively accessible within defined clusters.

Table 7: Sample frame for the research.

Geographical area	Total population (18 – 50 years)	Sample size	Sampling method
Evaton & Sebokeng	169 280	100	Stratified
Sharpeville	17 720	20	Stratified
		120	

3.3 Data collection methods

As this is a quantitative study, where questionnaires and surveys will be the preferred data collection method. Ainsworth (2021) underscores those questionnaires, surveys, documents, and records are quantitative in nature. They are relatively uncomplicated and measurable tools that can best answer questions on just how much a variable has influence on another, which is precisely the foundation of this study.

The quantitative survey will ask closed-ended questions with a list of limited answers for participants to select from. The advantage is that the questions and answers are standardised across the entire survey and should enable easier generalisation from the outcomes. Both primary and secondary data collection shall be adopted, thus ensuring the best possible research is undertaken. Secondary data will stem from sources such, as existing research, and government statistics, as portrayed in earlier tables. These give a clear context and a solid foundation on which the primary research can be constructed around.

As outlined earlier, the questionnaires for primary data collection shall be comprised of closed-ended questions in conjunction with a five-point Likert scale. It is important that this enables ease-of-answering. The questionnaires shall be segmented into two sections: Section A for demographic information (age, gender, and location), whilst Section B will be the survey.

3.4 Data analysis methods, techniques, and instruments

For a quantitative study, it is sensible that quantitative data analysis methods shall be utilised in order to yield data that can easily be converted into numbers without losing its meaning (Jansen and Warren, 2020). As a result, quantitative data analysis can be used to measure relationships between variables presented in correlation research and to test the hypothesis in a scientifically rigorous manner (Jansen and Warren, 2020).

Descriptive statistics will be adopted to understand the details of the surveyed sample. Statistical techniques such as mean, median, standard deviation and skewness to attain both a macro and a micro-level view of the collected data. This allows

identification of patterns and any errors and help in selecting the further inferential statistical techniques to be used.

Inferential statics will be used to make generalisations from the sampled population, about how identified relationships are applicable to the total population. Thus, enabling the research to be linked into an integrated and cohesive study for hypothesis testing. Common inferential techniques that can be used for this quantitative study include T-tests, which compare averages between two sets of data, correlations that investigate relationships between variables by way of scatter diagrams, or regressions that are similar to correlations, but have the added advantage of understanding cause and effect relationships between variables. Ultimately, the decision on which statistical tests and analyses will be influenced by the type of data collected and the research questions and hypothesis being tested.

3.4.1 Validity and reliability

Validity in a quantitative study, is described as the extent to which a concept is accurately measured Heale (2015). In the context of this study, the two independent variables (community engagement and the digital economy) and the dependent variable, economic development, must be accurately measured, otherwise the outcomes of the study could be compromised. Reliability refers to the consistency of a measure to be used in a study. In that it should produce fairly similar results each time it is administered. Cronbach alpha tests and Exploratory factor analysis will be used to conduct tests for questionnaire validity and reliability.

3.4.2 Ethical considerations

There are several ethical considerations to be covered prior to commencing any data collection for a research study. Usually, this clearance is issued by an institutional review body, and in the case of this research, it would be in the form of an ethical clearance certificate from the UNISA SBL Ethics Committee. Thus, the researcher will be required to follow the stipulated application procedures to be issued with such ethical clearance. The researcher further needs to prove to the Ethics Committee that the research will be beneficial to the scientific community, will be correctly distributed,

with the right quality and integrity, and that the methodology being used is appropriate ENAGO Academy (2020).

Ethical considerations are crucial procedures that must be followed for protecting the rights of any human subjects participating in a research study Ketefian (2015). The purpose of such procedures is to assure that research is conducted in a scientifically sound manner, whilst remaining respectful towards participants in such studies, and recognises their human dignity and does not jeopardise their wellbeing in any way. As a result of these requirements, developing guidance on how to conduct research ethically has become crucial in recent years Ketefian (2015).

3.4.3 Informed consent

According to Fouka and Mantzorou (2021), informed consent means that a person knowingly, voluntarily and intelligently, in a clear and manifest way, gives his consent. Therefore, participants in this research study need to be made fully aware of the nature and type of research that is being undertaken and must be at liberty to decide if they will participate. People should not be made to feel coerced, persuaded or deceived in any manner for them to take part in a study. It should be made explicitly clear that people have been provided with sufficient information about the study, so that they can make an informed decision on their own. With regards to this study, people shall be advised beforehand of the nature of research being conducted. The choice to partake remains solely with the individuals, and should they choose to complete the survey, then informed consent would be implied.

3.4.4 Protection from harm

Everything in the researcher's power should be done, to protect participants from the risk of any harm befalling them because of the study. hence, no matter how beneficial the study could be for the community, if it can present any harm to individuals in the process, it should be scrapped and be redesigned.

3.4.4 Right to privacy

(Fouka and Mantzorou, 2021) explain that an invasion of privacy occurs when private information such as beliefs, attitudes, opinions, and personal records, are shared with others, without the participant's knowledge or consent. Therefore, all participants have the right to have their particulars and responses protected and kept anonymous. Furthermore, these should not be utilised for any other purposes, than to further the objectives of this study (Fouka and Mantzorou, 2021) support this view by stating that anonymity is protected when the subject's identity cannot be linked with personal responses. If the researcher is unable guarantee anonymity, he must address confidentiality, which is the management of private information by the researcher to protect the subject's identity. As such, researchers should adhere to the Protection of Personal Information Act (POPI) through proper assessment of the manner in which people's data is collected, stored, processed, and ultimately disposed of.

3.5 Conclusion

This research methodology chapter is an important first step, as it provides a detailed summary of the problem to be addressed, the research objectives, the underlying ideas behind the study, and the most suitable research modelling. As a comprehensive outline of the practical methodology to be adopted when compiling data, it enables the researcher to think clearly about this crucial stage of the research process and identify any potential pitfalls and address them beforehand.

Thus, a good research methodology is a vital planning and organising tool for preparing for the actual data collection of this study. When done correctly, it should lead to better quality implementation, analysis, and interpretation of the collected data.

The data shall be collected through quantitative questionnaires with closed-ended questions and Linkert scales. Then the data analysis and interpretation shall be carried out by using descriptive and correlative statistical analysis, which are well suited for the selected quantitative research methodologies. Lastly, it is crucial that the research be conducted with integrity and the highest ethical considerations that protect participants from incurring any harm because of the study.

CHAPTER 4
DATA ANALYSIS

4.1. INTRODUCTION

In this section of this study, the researcher provides an analysis of the data which was collected. Descriptive statistics will be used, with a focus on the demographic profile of respondents from Group 1 in Evaton & Sebokeng, and Group 2 in Sharpeville. The purpose of this data analysis is to interpret and draw conclusions from the mass of collected data. A focus will also be placed on results pertaining to the various hypothesis stipulated in this research study. The data analysis will also enable the researcher to generalize the perceptions of the sampled population groups in relation to the variables that were investigated. It will also allow the researcher to determine the reliability of the work, and verify whether the measuring instrument is reliable, valid and is a good model fit. Lastly, this analysis allowed the researcher to substantiate whether specific variables have an influence on each other, and whether those relationships were positive, negative, or neutral.

To facilitate the data analysis purposes, statistical programs such as R Markdown, SPSS 26, and AMOS 26, were be utilised. SPSS was used to convert the data from excel format into an SPSS format, so that the data became suitable for AMOS, which was used for confirmatory factor analysis and structural equation modelling. SPSS was used to run results of demographic data in section A of the questionnaire, which entailed the participants' location, age, and gender. The results obtained indicated which percentage of respondents were male or female, what percentage fell under which age category, and what percentage resided in which Emfuleni township. R Markdown used to determine the reliability and validity of the study by referring to the Cronbach Alpha results, the item total statistics and the item statistic. AMOS 26 was used to conduct the confirmatory factor analysis, to test whether the two independent variables, community engagement and the digital economy did have an influence on the dependent variable, economic development. AMOS 26 was also used to conduct a structural equation model where the researcher tested the relationship between the research variables. The model fit, factor loading, and hypothesis testing were also run respectively.

4.2 Data Analysis Procedures

Descriptive statistics are the most frequently used procedures in SPSS Garth (2008). In fact, they can be used for initial analysis and checking the validity of data and provide a greater variety of charts, Field (2005: 200). Descriptive statistics are important because they are used as the first instance to get an overview of the collected data, and secondly for use in the statistical tests themselves. Thirdly, descriptive statistics are also used to highlight the groups of respondents associated with sets of results and provide clarity through graphical outputs.

Descriptive statistics are used to summarize and describe the data obtained from a sample of respondents, Hair, Bush and Ortinau (2006: 495). In other words, descriptive statistics are procedures used to make sense of observations by summarizing them numerically. This definition descriptive statistics is the most appropriate for this chapter of research.

4.2.1 Descriptive statistics

Frequencies **Table 8. Demographic and Geographical information.**

Statistics

		Gender	Location
N	Valid	120	120
	Missing	0	0

Frequency Table

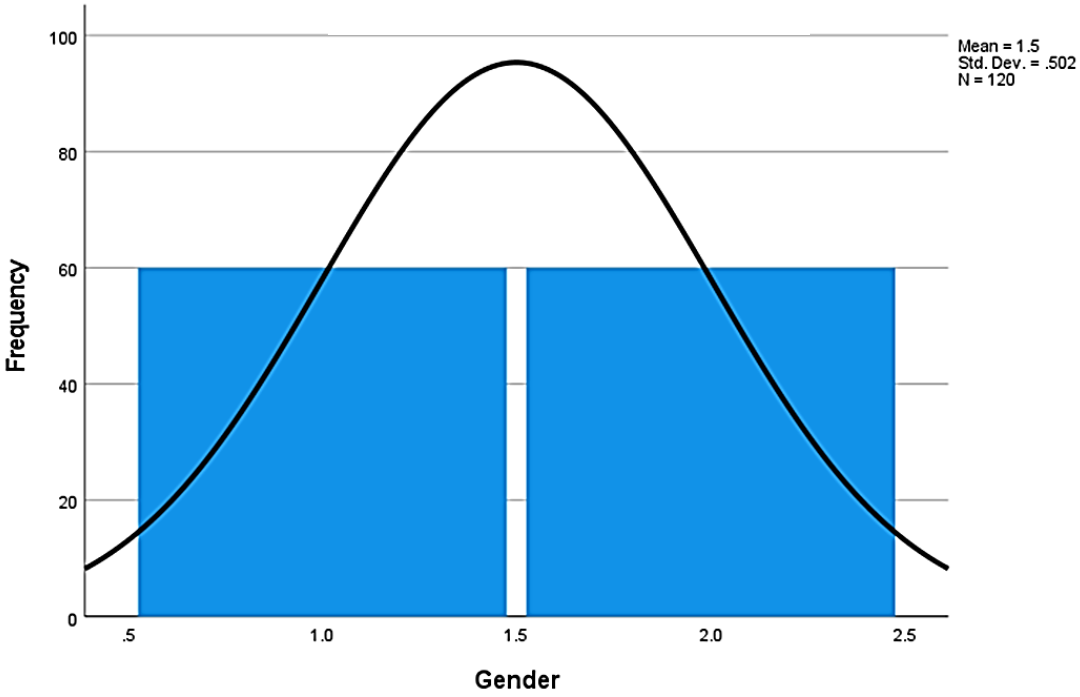
Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	60	50.0	50.0	50.0
	Female	60	50.0	50.0	100.0
	Total	120	100.0	100.0	

Location

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Sharpeville	20	16.7	16.7	16.7
	Evaton & Sebokeng	100	83.3	83.3	100.0
	Total	120	100.0	100.0	

Figure 9. Gender Histogram



As can be observed from Table 8 and Figure 9 above, the total number of participants to whom the questionnaire was administered was 120 people, with an even frequency of 60 males and 60 females. In percentage terms, this translated directly into the targeted 50% male and 50% female participation rate which the researcher initially set out to attain, so as to give a balanced input from both genders. This sample requirement was strictly monitored and achieved, as demonstrated in figure 9 above.

Keeping in mind that the data collection has divided into two groups based on geographical location, the below geographical results were also obtained.

Table 9. Random stratified sampling groups.

Group 1: Evaton & Sebokeng	**Sample Sizes:**	**Male**	**Female**
	100	50	50
Group 2: Sharpeville	**Sample Sizes:**	**Male**	**Female**
	20	10	10
Total:	**120**	**60**	**60**

Figure 10. Geographical Information Histogram

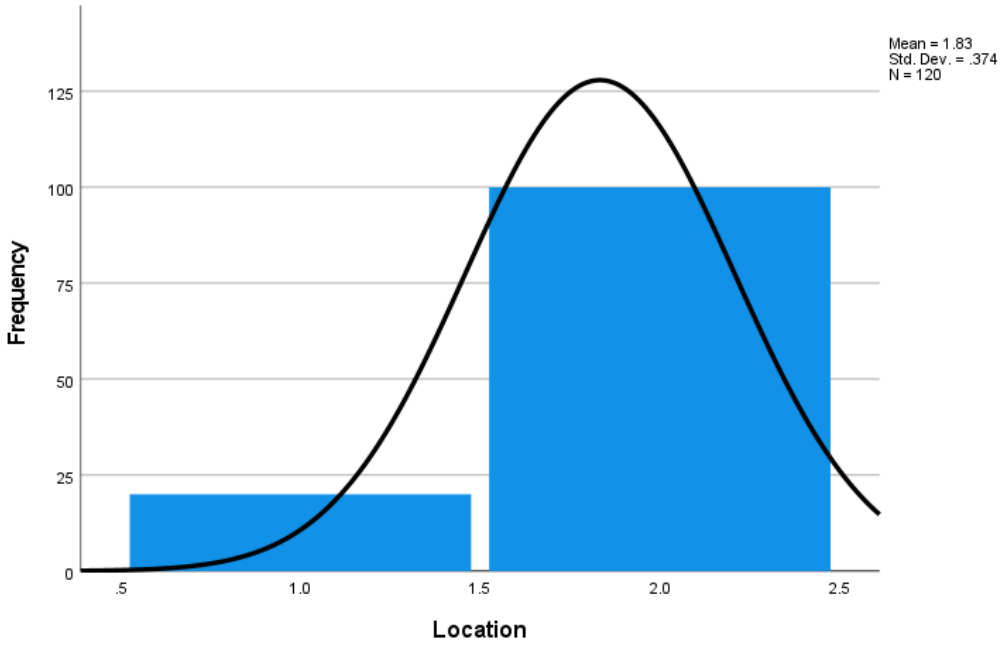
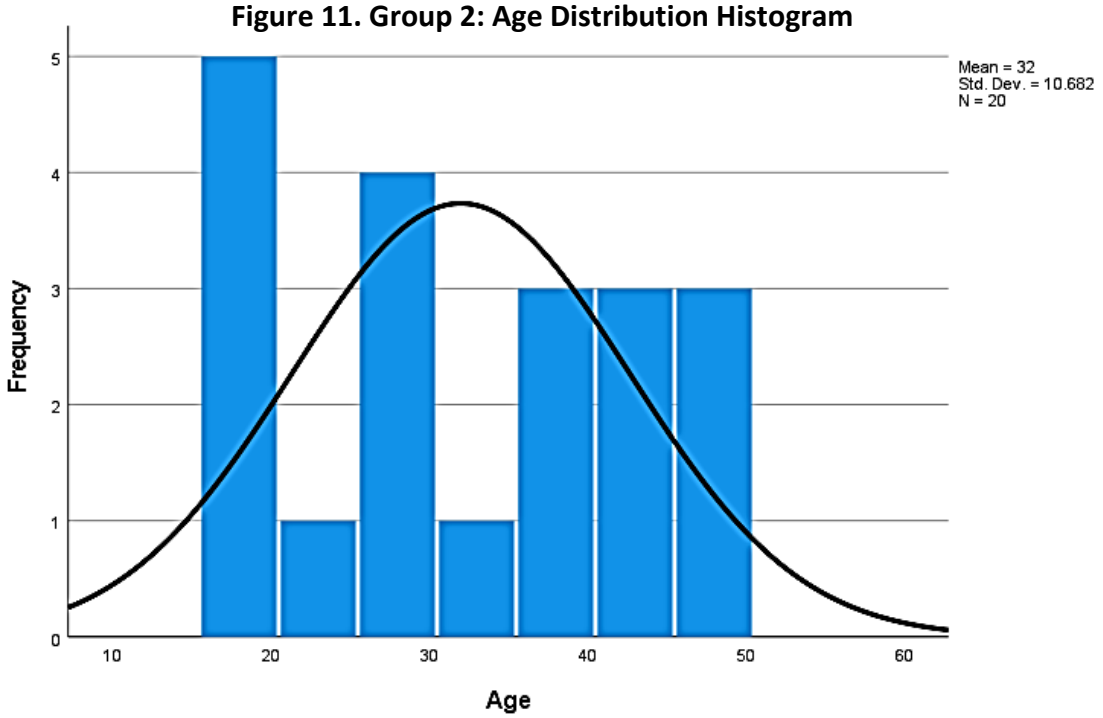


Table 9 and Figure 10 above, show the total number of participants split into their two groups. A proportionally higher number of participants were from Evaton & Sebokeng, where 100 people, 50 males and 50 females responded to the questionnaire and accounted for 83,3% of total participants in the field study. A relatively smaller 20 people were from Sharpeville, with 10 males and 10 female participants accounting for 16,7% of total questionnaire respondents.

The study focused only on 120 randomly selected people between the ages of 18 to 50, who were subdivided according to their geographical location within the Emfuleni Local Municipality. Group 1 was comprised of respondents from Evaton & Sebokeng, whilst Group 2 respondents were only from Sharpeville. It was interesting to note that the median age of participants from Group 1 from Evaton & Sebokeng, was 31.1 years and was just under a year lower than Group 2 median age of 32, as per Table 10 and Figure 11 below.

Figure 11. Group 2: Age Distribution Histogram



The data for Group 2 participants from Sharpeville, is presented in Figure 11 above, whilst that of Group 1 is outlined in Table 10 below. There were 20 people who participated in Group 2, with a 50 / 50 male and female split, and an average age of 32 years in this sample population. The standard deviation meant the age of respondents was spread to 21,4 years on the lower end, and approximately 42,6 years on the upper end. Whilst the standard deviation for Group 1, meant that the age spread was +/- 8,9 years on either side of the mean age of 32 years.

Table 10. Group 1: Age Distribution

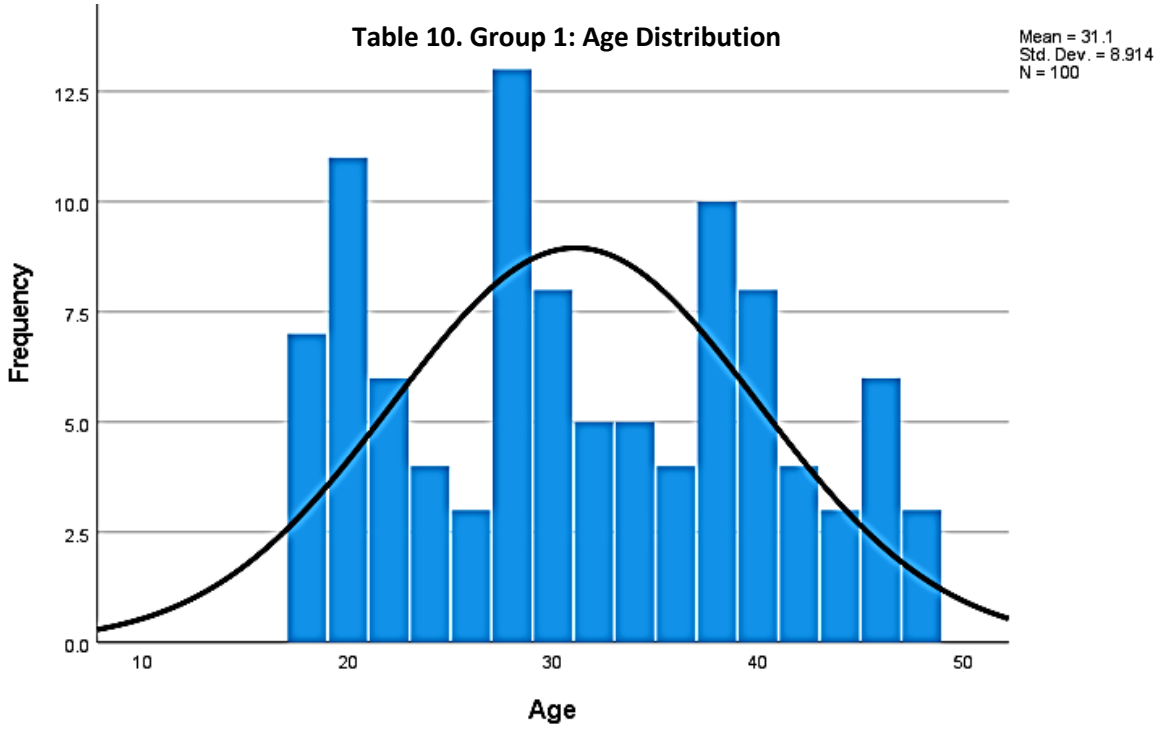
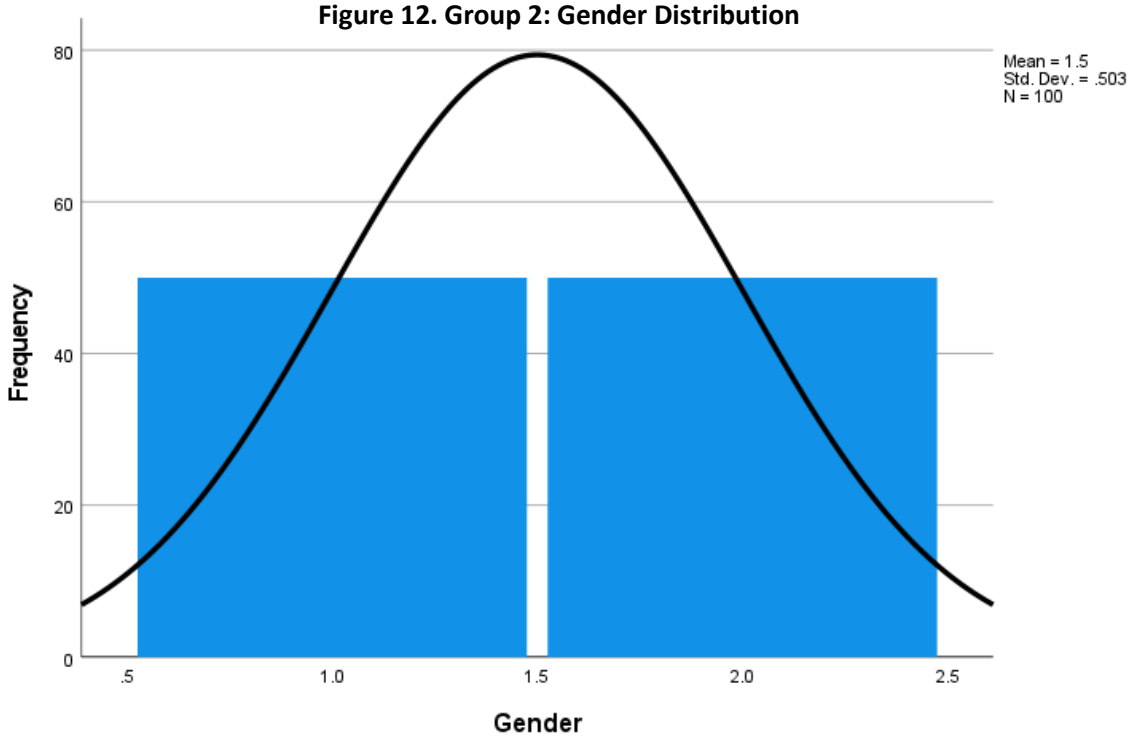


Figure 12. Group 2: Gender Distribution



4.2.1.1 Research Variable Results

The primary objectives of this research study were:

- To gain an understanding of whether community participation and engagement could be leveraged to support and promote growth for township-based businesses in Emfuleni.
- To determine how the digital economy can be adopted to overcome marketing and promotional challenges faced by township-based businesses in Emfuleni.
- To determine if development of the township economy could assist in alleviating the poverty and unemployment challenges.
- To understand if there is indeed limited collaboration and coordination between locally owned township businesses and their stakeholders.

Hence, the below tables and associated descriptive information summarizes responses from the 120 research participants regarding the variables that were being tested. However, it is important to note that reliability values for some of the variables that were being measured was reading below 0.6 on the Cronbach Alpha tests. Compounding this challenge, were time constraints, as there was insufficient time available following the data collection and analysis, for the researcher to reconstruct

the questionnaire and retest it for a higher Cronbach reading. As such, it should be noted that the reliability of this study is at a value of 0.50. To remedy this limitation, the researcher has recommended that a future study utilising a revised questionnaire, be undertaken, in order to verify the validity of results obtained in this particular study. However, an analysis of the collected data in this study is still provided below in order to complete the research loop and present the findings thereof.

Table 4.5 Community Engagement - Group 1

Q1, 4, 6, 8, 10, 13, 14		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	STRONGLY AGREE	164	23%	23%	23%
	AGREE	274	39%	39%	62%
	MODERATELY AGREE	93	13%	13%	75%
	DISAGREE	136	19%	19%	95%
	STRONGLY DISAGREE	33	5%	5%	100%
	Total	700	100%	100%	

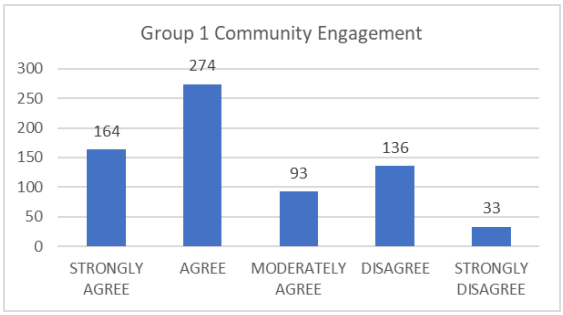
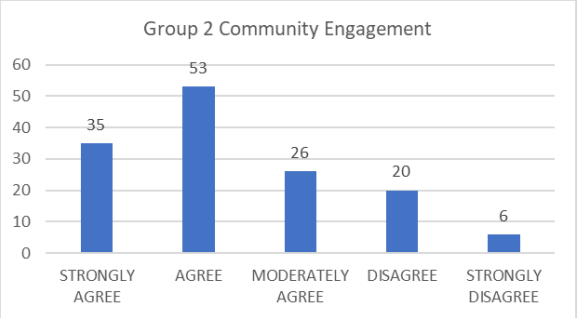


Table 4.5 above shows the extent to which Group 1 participants from Evaton & Sebokeng, agreed or disagreed with Q1, 4, 6, 8, 10, 13, and 14 in the questionnaire. Those particular set of questions were designed to test for the research question of whether community engagement could be leveraged in order to promote growth of township economies. It focused on engagement and collaboration between local businesses, the municipality and community members. According to responses received, 23% of participants strongly agree that community engagement can lead to economic development, 39% agreed, 19% moderately agreed, whilst 24% either disagreed or strongly disagreed. Through these results, it can be established that three-quarters of Group 1 participants (75%), agreed that community engagement could be a viable tool to assist with the local economic development and growth of township businesses in Evaton and Sebokeng.

Table 4.6 Community Engagement - Group 2

Q1, 4, 6, 8, 10, 13, 14		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	STRONGLY AGREE	35	25%	25%	25%
	AGREE	53	38%	38%	63%
	MODERATELY AGREE	26	19%	19%	81%
	DISAGREE	20	14%	14%	96%
	STRONGLY DISAGREE	6	4%	4%	100%
	Total	140	100%	100%	



Results of data collected from Group 2 regarding the community engagement question in Sharpeville, was almost similar to that of Group 1, with 25% of respondents strongly agreeing that community engagement is required for economic development to happen. Whilst 38% agreed, 19% moderately agreed, 14% disagreed and only 4% strongly disagreed. As such, over three-quarters of Sharpeville participants (81%), were of the view that community engagement can be useful in aiding their local economic development. This is very much aligned to the responses from Group 1.

Table 4.7 The Digital Economy - Group 1

Q2, 5, 9, 11, 15, 17		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	STRONGLY AGREE	170	28%	28%	28%
	AGREE	250	42%	42%	70%
	MODERATELY AGREE	73	12%	12%	82%
	DISAGREE	91	15%	15%	97%
	STRONGLY DISAGREE	16	3%	3%	100%
	Total	600	100%	100%	

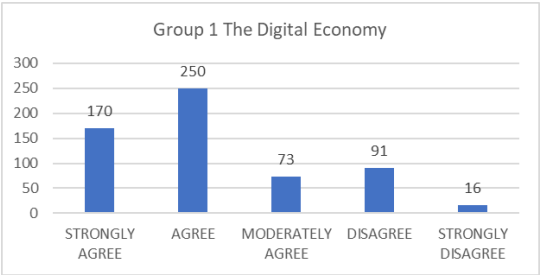
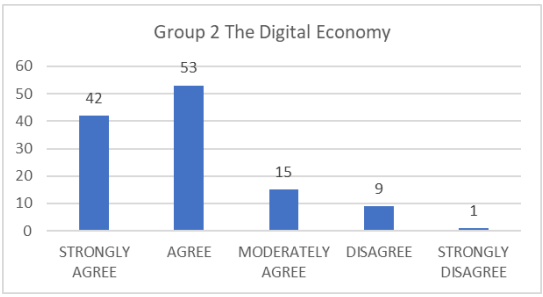


Table 4.7 relays the results of data collected for Q2, 5, 9, 11, 15 and 17 which focused on the digital economy. It shows that 82% of Group 1 participants agreed that digital economy use has the potential to overcome communication challenges and promote the economic development of businesses and communities in the Emfuleni Local Municipality. Whilst 18% disagreed, of which only 3% strongly disagreed.

Table 4.8 The Digital Economy - Group 2

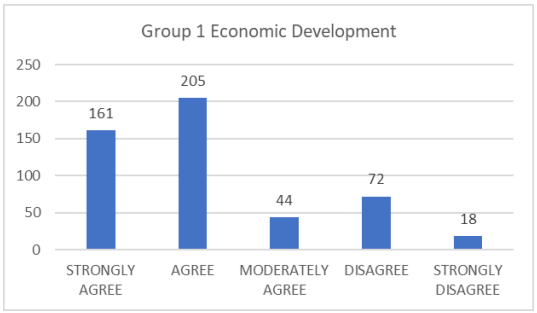
Q2, 5, 9, 11, 15, 17		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	STRONGLY AGREE	42	35%	35%	35%
	AGREE	53	44%	44%	79%
	MODERATELY AGREE	15	13%	13%	92%
	DISAGREE	9	8%	8%	99%
	STRONGLY DISAGREE	1	1%	1%	100%
	Total	120	100%	100%	



Results of data collected from Group 2 for the digital economy set of questions, are displayed in Table 4.8 and show that a very high number of participants, 92% were of the view that the digital economy could bridge challenges and lead to local economic development. Whilst only 8% disagree with the digital economy question and its related hypothesis. Overall though, Group 2 consensus for the digital economy's impact on economic development was significantly higher than Group 1, at +10%.

Table 4.9 Economic Development - Group 1

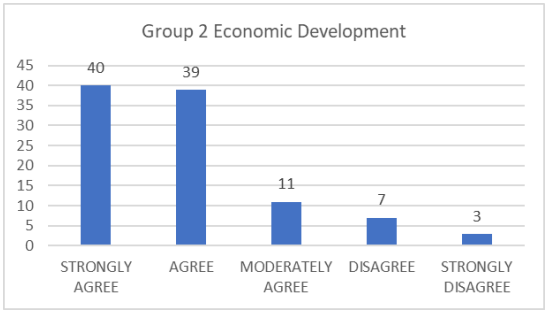
Q3, 7,12,16, 18		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	STRONGLY AGREE	161	32%	32%	32%
	AGREE	205	41%	41%	73%
	MODERATELY AGREE	44	9%	9%	82%
	DISAGREE	72	14%	14%	96%
	STRONGLY DISAGREE	18	4%	4%	100%
	Total	500	100%	100%	



Results on parts of the questionnaire relating to economic development, as per Table 4.9, illustrated that Group 1 were of the view that local economic development could lead to reduced poverty, unemployment, and inequality in their townships. This is supported by the results, as 82% of respondents agreed with the hypothesis of this study. Whilst 18% thought economic development would not necessarily lead to a reduction in poverty, inequality, and unemployment.

Table 4.10 Economic Development - Group 2

Q3, 7,12,16, 18		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	STRONGLY AGREE	40	40%	40%	40%
	AGREE	39	39%	39%	79%
	MODERATELY AGREE	11	11%	11%	90%
	DISAGREE	7	7%	7%	97%
	STRONGLY DISAGREE	3	3%	3%	100%
	Total	100	100%	100%	



Group 2 respondents, though a smaller sample size, also displayed similar outcomes to those of Group 1, with 90% of participants indicating that economic development in their local townships could lead to greater odds of employment creation, which could then lead to a reduction in poverty, inequality, and unemployment. Once more, it can be observed that Group 2 from Sharpeville seems to be displaying higher levels of support for the above questions and related hypothesis.

4.2.2 Reliability Analysis

Table 11. Cronbach's αlpha value

	α
Entire set	0.495

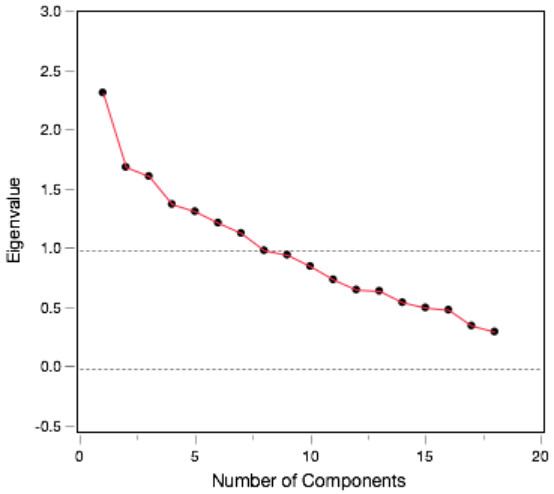
```
## Reliability analysis
## Call: alpha(x = dat1[, 8:13], check.keys = TRUE)
##
##   raw_alpha std.alpha G6(smc) average_r  S/N  ase mean   sd median_r
##         0.5      0.49    0.47      0.14 0.94 0.07  3.8 0.59     0.15
##
##  lower alpha upper     95% confidence boundaries
## 0.36 0.5 0.63
##
##  Reliability if an item is dropped:
##     raw_alpha std.alpha G6(smc) average_r  S/N alpha se  var.r med.r
## Q2       0.49      0.49    0.46      0.16 0.95    0.072 0.0110  0.17
## Q5       0.41      0.40    0.39      0.12 0.67    0.083 0.0136  0.07
## Q9       0.40      0.38    0.35      0.11 0.62    0.084 0.0074  0.11
## Q11      0.49      0.49    0.46      0.16 0.96    0.072 0.0098  0.16
## Q15      0.40      0.40    0.36      0.12 0.66    0.086 0.0045  0.14
## Q17      0.48      0.47    0.45      0.15 0.89    0.073 0.0113  0.17
##
##  Item statistics
##       n raw.r std.r r.cor r.drop mean   sd
## Q2  120  0.40  0.45  0.22   0.15  4.0 0.90
## Q5  120  0.61  0.59  0.44   0.32  3.5 1.24
## Q9  120  0.60  0.61  0.51   0.35  3.7 1.06
## Q11 120  0.41  0.45  0.23   0.15  4.1 0.95
## Q15 120  0.63  0.59  0.50   0.34  3.6 1.23
## Q17 120  0.51  0.48  0.28   0.20  3.6 1.18
##
```

Table 11 portrays the reliability statistics for the entire data set and Cronbach's alpha of the items being measured which has a value of 0.495. For the purposes of completing this study, this Cronbach alpha value is deemed sufficient. It is supported by the views of a recent study by Setyowati, Chung, Yusuf, and Haksama (2020), where it was stated that a Cronbach alpha value of 0.50 and higher should be acceptable reliability. However, the researcher still considers a secondary study with a revised testing method necessary. This in order to further test the validity of results obtained for community engagement, the digital economy and economic development.

Exploratory factor analysis (EFA) using principal axis factoring with varimax rotation was used to evaluate construct validity. Exploratory factor analysis was applied to responses of the eighteen-item scale in the questionnaire. The Eigen values > 1 and the results are as per table 12 below. There is a gradual decline as per Scree plot, with the cumulative percentage explained by the factors being studied at higher than 60%. The factor loadings were then used to determine items aligning to each specific factor between, community engagement, the digital economy and economic development. Values near 1 in table 4.12 below, indicate that those items tested aligned strongly with related factors, whilst loadings of approximately 0.40 are also considered meaningful.

Table 12. Exploratory Factor Analysis.

Number	Eigenvalue	Percent	20 40 60 80	Cum Percent
1	2.3343	12.968		12.968
2	1.7070	9.483		22.452
3	1.6302	9.057		31.508
4	1.3939	7.744		39.252
5	1.3333	7.407		46.659
6	1.2372	6.874		53.533
7	1.1500	6.389		59.922
8	1.0039	5.577		65.499
9	0.9664	5.369		70.868
10	0.8711	4.840		75.708
11	0.7585	4.214		79.922
12	0.6728	3.738		83.659
13	0.6625	3.681		87.340
14	0.5660	3.144		90.484
15	0.5218	2.899		93.383
16	0.5030	2.795		96.177
17	0.3692	2.051		98.228
18	0.3189	1.772		100.000



The table above illustrates the relativeness of each variable and items being measured from one variable to another. In this case, it can be seen that variable relationships between community engagement, the digital economy and the dependent outcome

variable, economic development. This is all done in order to test the hypotheses and the relationships between the variables being measured.

4.4. Conclusion

Based on the administered questionnaire, two very similar outcomes are observable. Firstly, respondents from both Group 1 and 2 largely agreed with the hypotheses of this study, that community engagement and the digital economy could indeed be used to achieve economic development for townships in the Emfuleni Local Municipality, which could lead to poverty reduction and the creation of employment opportunities. It was also observed that there is strong agreement from the sample population that there is insufficient community engagement between the community, businesses, and the local municipality.

With regards to Group 2 from Sharpeville, though proportionally a smaller quantity than Group 1, had a higher agreement ratio on all the factors being tested, with the digital economy being the highest agreed variable that was perceived as having the highest possibility to result in economic development in Sharpeville. In terms of gender, the data showed that both males and females from Group 1 and 2 responded largely in a similar manner and thus, there was no need to further segment the analysis in this study, as it would have been repetitive.

Lastly, it must be emphasised that items with low values should be considered to be removed if the scale from the questionnaire in this study will be used in future studies. However, for the purpose of validation of constructs of this study, it will just be reported.

CHAPTER 5

CONCLUSIONS, RECOMMENDATIONS AND LIMITATIONS

5.1 Introduction

At the onset of this research study, poverty, inequality, and unemployment were identified perennial challenges confronting South African township communities. Due to the large scale of this problem, and in order to manage time and budgetary constraints, the researcher took a decision to undertake this study with a narrowed focus on a small cross-section of South African society. Hence, the focus on a specific geographical location, Emfuleni Local Municipality townships of Evaton, Sebokeng and Sharpeville, where the variables under investigation had previously not been scientifically studied. From that point of departure, the objective of this study was to establish whether community engagement and the digital economy could be used to have an impact on the economic development of townships located in the Emfuleni Local Municipality region. Hence, all the data gathered and analysed in the previous chapter was aimed at providing insights into this point of departure, and its related questions and hypotheses.

Therefore, continuing from the analysis and information already presented earlier, this is the final section of this research study. Where the researcher shall outline limitations encountered during the research process, conclusions drawn and the recommendations which arose from all the literature reviews, information gathering, and observations from all the work compiled in this research study. These conclusions should help to establish an overall summary of this study and provide insights on the meaning of the results found and their implications for the field of academia and social sciences at large. It should be pointed out that several challenges and limitations were encountered during the course of the study, and these will also be reflected upon. To surmise, this final chapter of the study should enable future researchers to recognise the path followed in conducting this study and how its outputs were arrived at. It should also enable other researchers to add their own ideas and viewpoints, in order to improve on this study and enhance the body of work further.

5.2 Discussion of Conclusions

The aim of this research study was exploratory, and the related research design used, was correlational research design with the questionnaire as the measuring instrument. In this regard, 120 questionnaires were issued to participants, and there was a 100% response rate.

Although this study is not comprised of entirely new ideas, through the extensive research undertaken, literature reviews and interactions with respondents, it had an impact on the various community stakeholders. By providing them with new questions to ponder and stimulating discussions about how community engagement and the digital economy could be used to help boost local economic development in townships located in the Emfuleni Local Municipality, and hopefully create employment.

As outlined earlier, based on responses from the administered questionnaire, two outcomes are observable. Firstly, respondents from both Group 1 and 2 largely agreed with the hypotheses of this study, that community engagement and the digital economy could indeed be used to achieve economic development for townships in the Emfuleni Local Municipality, which could lead to the creation of employment opportunities. It was also observed that there is strong agreement from the sample population that there is insufficient community engagement between the community, businesses, and the local municipality.

With regards to Group 2 from Sharpeville, though proportionally a smaller quantity than Group 1 from Evaton & Sebokeng, had a higher agreement ratio on all the factors being tested, with the digital economy being the highest agreed variable that could lead to economic development in Sharpeville. In terms of gender, the data showed that both males and females from Group 1 and 2 responded largely in a similar manner and thus, there was no need to further segment the analysis, as it would be repetitive.

In the context of this study, previously concluded studies, and literature from other parts of the globe, it has illustrated that the two independent variables; community engagement and the digital economy, did have a positive relationship with the dependent variable; economic development. Hence, the objective of this study was to investigate whether this could also be considered to be the case in Emfuleni Local Municipality townships. Based on the empirical research conducted, data gathered and related outputs from this specific study, the researcher has concluded that

community engagement and the digital economy can indeed have a positive impact on economic development in Emfuleni Local Municipality townships.

Secondary to the above, it can be concluded that whilst there is a large volume of literature available on community engagement, the digital economy and economic development, globally. The amount of literature on these concepts is extremely limited for the broader South African context, and more so for the Emfuleni Local Municipality region. Hence, this research has been a good gateway in beginning to engage with these concepts in Emfuleni townships, because ultimately this is how community engagement is initiated, by getting inputs from affected parties.

Thirdly, in relation to the objectives of the study, the literature review done and the results of the data analysis, have confirmed that digital economy platforms, such as mobile phones and the internet, can be leveraged to support community engagement and also overcome marketing challenges faced by township businesses in Emfuleni. Further to that, participants seem to have understood that local economic development of their townships can create much needed employment opportunities for them. Thus, helping to alleviate the identified triple challenge of poverty, inequality, and unemployment. Participant responses to questions aimed specifically at establishing the current extent of community engagement have also shown that there are insufficient levels of engagement and collaboration between the community, businesses, and the Emfuleni Local Municipality. As previously pointed out, higher levels of collaboration and engagement with the local community, have been deemed critical to the successful economic development several areas in other parts of the world.

In terms of the selected research methodology, a quantitative approach was used, and this adopted the use of a questionnaire to a stratified sample population. The researcher later identified that even though this was intended to produce numerical data that could easily be processed and analysed. However, perhaps a mixed approach comprised of interviews and a questionnaire should have been used in order to improve the validity and reliability of obtained outcomes. However, for its intended purposes, this research study has proven the hypothesis to be true in the Emfuleni Local Municipality, that:

- As community engagement and digital economy adoption increases, so should economic development.
- As community engagement increases, unemployment should decrease.

5.3 Recommendations and Limitations

This research study was limited by the prevailing covid-19 conditions in South Africa, as the researcher could not adequately access business owners, the Emfuleni Local Municipality, the UNISA Statistical Support Unit, and could not conduct interviews without increasing associated health risks. Secondly, it would have been ideal to be able to increase the size of the sample frame to include all the other townships in Emfuleni. Thirdly, future researchers should aim to engage the services of a professional statistician in order to assist in the creation of a more robust questionnaire, which should attain a higher validity and reliability score, which should enhance the generalisability of the study.

In terms of the selected research methodology, a quantitative approach was used, and this adopted the use of a scaled questionnaire to a stratified sample population. The researcher later identified that even though this was intended to produce numerical data that could easily be processed and analysed. Perhaps a mixed approach comprised of interviews and a questionnaire should have been used in order to improve the validity and reliability of obtained outcomes. The lower than average Cronbach alpha and Exploratory factor analysis values are indicative of this shortcoming, where the questionnaire could have maybe leant towards being qualitative in terms of questioning. It should be noted though, that this issue can be addressed through a subsequent expanded research study on this topic, using the recommended mixed approach.

In an earlier study, Raisuyah (2017:171) identified community engagement as having four major themes: context, process, mutually beneficial relationships, and knowledge production. This research study has managed to achieve this engagement in the localised context of the Emfuleni Local Municipality, through scientific research methodology processes. It is hoped that the research outcomes obtained can lead to socio-economic benefits and knowledge gains for all parties from participating communities and beyond. However, due to the Cronbach alpha and Exploratory factor

challenges identified in the data analysis section, a recommendation can be made to understand this research as preliminary, and to build on its conclusions, findings, and recommendations, in order to develop a more robust study in the future. This is important, especially in a context where Williams (2006) stated that South Africa's post-apartheid constitution provides for community participation in the development, implementation, and evaluation of integrated development planning at local level.

This research is also going to be key to helping the local community in the Emfuleni region to begin to examine digital economy platforms that could be suitable for their community, and how they can take advantage of them for their own benefit. As Geldman (2021) stated, online retail revenue in Africa is estimated at $20 billion per annum, which is only 3,5% of total retail sales. This means that 96,5% of retail sales in Africa are conducted via physical retail spaces which require large capital investments in infrastructure and have costly operating expenses associated with them. However, if township business can begin to utilise digital platforms to market and sell their wares, this could be a less capital intensive way of gaining access to Africa's extensive market of 1,35 billion people, which will be skewed towards a younger marketplace for decades to come and is therefore sustainable. Further to this, Geldman (2021) also stated that Africa has all the components for a rapid expansion of both its overall economy and in e-commerce. In several years, the African e-commerce market is predicted to overtake those of China and the USA, and could be the largest single digital economy in the world. And with the African Continental Free Area having recently been implemented, proper engagement with continental communities through digital platforms could be used to target this vast potential customer base more efficiently and effectively. From the above evidence, the importance of propagating this type of research and its impacts on the development of township economies, cannot be underestimated.

This study has contributed and seeks to continue to contribute positively to township economies in the Emfuleni Local Municipality. Business and community organisations have been made aware that they can adopt digital platforms and community engagement to drive broader growth that has the potential to be mutually beneficial and sustainable. As the more wealth that is generated and shared, it should result in a more robust and healthy local economy, not just in Emfuleni. But can be replicated to use township businesses as a vehicle to eradicate poverty, inequality, and

unemployment in South Africa. By adopting the above recommendations, with disruptions such as Covid-19 in mind, township businesses could become fit for future markets that are going to be beset by such uncertainties. This view is supported by recent research from the Competition Commission South Africa (2020:4), which stated that the advent and growth of the digital economy represents an opportunity for South Africa to reverse the widespread, triple scourge of unemployment, inequality, and poverty.

5.4 Conclusions

Due to some of the limitations identified in this study, several ways to expand on this study in future, could be as follows:

- A further analysis of the reasoning which informed participant groups could yield higher quality insights in relation to the factors being studied and allow for improvements to be made to the body of work.
- A review of the responses received can aid in refining the data analysis process according to gender dynamics, by linking responses to each gender and obtaining a more nuanced output to analyse.
- Further dissecting the information gathered according to defined age ranges, educational and income levels could add more depth and value to the results of similar studies in the future.
- Segmenting the sample frame further, into business owners, direct customers and the general public could also prove highly useful in helping researchers to determine more succinctly, how various subgroups view the research hypothesis.
- With more time and resources available, it would also be interesting to determine why Group 2 had generally higher agreement rates with the hypothesis of this study.
- The above revisions could help businesses and local municipalities to better tailor their initiatives to the differing subgroups, in order to optimise the impact of those initiatives and avoid a once-size-fits-all approach.

Other than the above, this study has achieved the research objectives, proven the hypothesis and collected interesting data from participants. It has laid a platform that can be improved upon by future studies interested in community engagement, the digital economy and economic development within township contexts.

5.5 List of References

Ainsworth, Q. 2021. Data Collection Methods. Available from: <https://www.jotform.com/data-collection-methods/> [Accessed on: 10 May 2021].

Arndt, C., Davies, R., & Thurlow, J. 2018. Urbanization, structural transformation, and rural-urban linkages in South Africa. Available from: <https://sa-tied.wider.unu.edu/sites/default/files/pdf/SATIED_WP41_Arndt_Davies_Thurlow_March_2019.pdf> [Accessed on: 11 May 2021].

Bhandari, P. 2021. An introduction to quantitative research. Available from <https://www.scribbr.com/methodology/quantitative-research/> [Accessed on: 10 May 2021].

Bhattacherjee, A. 2012. Social Science Research: Principles, Methods, and Practices. Textbooks Collection 3. Available from: <http://scholarcommons.usf.edu/oa_textbooks/3?utm_source=scholarcommons.usf.edu%2Foa_textbooks%2F3&utm_medium=PDF&utm_campaign=PDFCoverPages> [Accessed on: 25 September 2021].

Bishop, K., Goller, R., & Guthrie. K. 2015. Community Engagement Framework. Available from: <https://guelph.ca/wp-content/uploads/CEF_Framework_2015.pdf> [Accessed on: 12 May 2021].

Bhorat, H., Lilenstein, A., Monnakgotla, J., Thornton, A. and van der Zee, K. (2017). "The Socio-Economic Determinants of Crime in South Africa: an Empirical Assessment". Development Policy Research Unit Working Paper 201704. DPRU, University of Cape Town. Available from: <https://media.africaportal.org/documents/Socio_Economic_Determinants.pdf> [Accessed on: 29 July 2021].

CALED. 2020. What is Economic Development. Available from: <https://caled.org/economic-development-basics/> [Accessed on: 11 May 2021].

Chevalier, S. 2020. Amazon's share of online retail sales in selected regions as of September 2020. Available from: https://www.statista.com/statistics/1183515/amazon-market-share-region-worldwide/ [Accessed on: 23 September 2021].

Chibba, M. and Luiz, J. 2011. Poverty, Inequality and Unemployment in South Africa: Context, Issues and the Way Forward. Economic Papers A journal of applied economics and policy Economic Papers (3):pp. 307-315. doi:10.1111/j.1759-3441.2011.00129.x [Accessed on: 10 May 2021].

Cogburn, D. and Adeya, C. 2001. Prospects for the Digital Economy in South Africa. Technology, Policy, People, and Strategies. World Institute for Development Economics Research. [Accessed on 20 June 2021].

COGTA. 2020. Profile and Analysis: District Development Model. Available from: <https://www.cogta.gov.za/ddm/wp-content/uploads/2020/07/District_Profile_SEDIBENG-1.pdf> [Accessed on: 12 May 2021]

Dhamija, P. 2020. Economic Development and South Africa: 25 Years Analysis (1994 to 2019). South African Journal of Economics. (0):1-10 DOI: 10.1111/saje.12248 [Accessed on 18 August 2021].

Dwolatzky, B. and Harris, M. 2020. Fast tracking the critical task of building South Africa's digital economy. Available from: https://www.wits.ac.za/news/latest-news/opinion/2020/2020-08/fast-tracking-the-critical-task-of-building-south-africas-digital-economy.html [Accessed on 12 June 2021].

Duma, N. 2020. Unequal universities are a microcosm of SA's society. Available from: <https://ewn.co.za/2020/09/07/nkosikhona-duma-unequal-universities-are-a-microcosm-of-sa-s-society> [Accessed on 18 September 2021].

Du Plessis, P. 2021. DECOLONISATION OF EDUCATION IN SOUTH AFRICA: CHALLENGES TO DECOLONISE THE UNIVERSITY CURRICULUM. South African Journal of Higher Education 35(1): 54-69 https://dx.doi.org/10.20853/35-1-4426 [Accessed on: 21 August 2021].

ENAGO Academy. 2020. What are the Ethical Considerations in Research Design? Available from: <https://www.enago.com/academy/what-are-the-ethical-considerations-in-research-design/> [Accessed on: 10 May 2021].

Fosu, A. 2018. The use of ICT by SMMEs in a Digital Economy: A case study in Buffalo City Metropolitan in South Africa. International Journal of Community Development & Management Studies. (2): 159-168, Retrieved from: http://ijcdms.org/Volume02/v2p159-168Fosu4836.pdf [Accessed on 23 September 2021].

Fouka, G. and Mantzorou, M. 2011. What are the Major Ethical Issues in Conducting Research? Is there a Conflict between the Research Ethics and the Nature of Nursing? Health Journal 5(1).

French, R. and Simson, D. 2020. The Community Engagement Framework. Available from: <https://www.communityplanningtoolkit.org/sites/default/files/BrightonandHoveCommunityEngagementFramework.pdf> [Accessed on: 17 September 2021].

Garth, A. 2008. Analysing data using SPSS. A practical guide to those unfortunate enough to have to actually do it. Available from: https://students.shu.ac.uk/lits/it/documents/pdf/analysing_data_using_spss.pdf [Accessed on: 10 December 2021].

Geldman, A. 2021. Online Marketplaces in Africa: Fast Growth, Enormous Potential. Available from: https://www.webretailer.com/b/online-marketplaces-africa/ [Accessed on: 23 September 2021].

Haradhan, H. Two Criteria for Good Measurements in Research: Validity and Reliability. doi: https://mpra.ub.uni-muenchen.de/83458/1/MPRA_paper_83458.pdf Annals of Spiru Haret University, 17(3): 58-82 [Accessed on 25 October 2021].

Heale, R. and Twycross, A. 2015. Validity and reliability in quantitative studies. doi: 10.1136/eb-2015-102129 Evid Based Nurs 2015 18: 66-67. [Accessed on: 12 may 2021].

Heath, D. and Micallef, L. 2021. What is digital economy? Unicorns, transformation and the internet of things. Available from: <https://www2.deloitte.com/mt/en/pages/technology/articles/mt-what-is-digital-economy.html> [Accessed on 10 May 2021].

Jansen, D. and Watson, K. 2020. Quantitative Data Analysis 101: The lingo, methods and techniques, explained simply. Available from: <https://gradcoach.com/quantitative-data-analysis-methods/> [Accessed on: 10 May 2021].

Ketefian, S. 2015. Ethical considerations in research. Focus on vulnerable groups. doi: 10.17533/udea.iee.v33n1a19. Invest Educ Enferm. 2015;33(1):164-72. [Accessed on: 10 May 2021].

Khanyile, M. 2020. WHOSE INTEREST DOES IT SERVE? A CONFUCIAN COMMUNITY ENGAGEMENT. South African Journal of Higher Education 34(6): 106-119 https://dx.doi.org/10.20853/34-6-2806 [Accessed on 18 august 2021].

Krueger, A. 2020. Economic development. Available from: <https://www.britannica.com/topic/economic-development/Development-thought-after-World-War-II> [Accessed on: 10 May 2021].

Lessig, L. 2008. "Two Economies: Commercial and Sharing." Remix: Making Art and Commerce Thrive in the Hybrid Economy. London: Bloomsbury Academic, 2008. 117–176. Bloomsbury Collections. [Accessed on: 12 May 2021].

McCombes, S. 2019. Descriptive research. Available from: <https://www.scribbr.com/methodology/descriptive-research/> [Accessed on 11 May 2021].

McLeod, S. 2019. Sampling methods. Available on: <https://www.simplypsychology.org/sampling.html> [Accessed on: 10 May 2021].

Menguele, F. 2007. Training for Township Renewal Initiative. Available from: <http://www.treasury.gov.za/divisions/bo/ndp/TTRI/TTRI%20June%202009/TTRI%201-4%20Jun%2009%20Key%20points.pdf> [Accessed on: 10 May 2021].

Mlambo, V. 2018. An overview of rural-urban migration in South Africa: its causes and implications. Archives of Business Research 6(4) DOI:10.14738/abr.64.4407. [Accessed on 11 May 2021].

Mukwarami, S., Mukwarami, J., & Tengeh, R. 2020. Local economic development and small business failure: the case of a local municipality in South Africa. International Journal of Business and Globalisation (25(5): 489-502 DOI: 10.1504/IJBG.2020.10031306 [Accessed on 21 August 2021].

Nagy, H. 2020. Assessing the digital economy: aims, frameworks, pilots, results, and lessons. Journal of Innovation and Entrepreneurship (2020) 9:16 https://doi.org/10.1186/s13731-020-00129-1 [Accessed on 20 September 2021].

Pernegger, L. and Godehart, S. 2007. Townships in the South African Geographic Landscape – Physical and Social Legacies and Challenges. Available from: http://www.treasury.gov.za/divisions/bo/ndp/TTRI/TTRI%20Oct%202007/Day%201%20-%2029%20Oct%202007/1a%20Keynote%20Address%20Li%20Pernegger%20Paper.pdf [Accessed on 20 August 2021].

Pettinger, T. 2018. Pros and cons of an increase in economic growth. Available from: https://www.economicshelp.org/blog/4493/economics/how-to-increase-economic-growth/ [Accessed on: 10 August 2021].

Pretorius, L. and Piquito, N. 2012. TECHNOLOGY AS A DRIVER FOR ECONOMIC DEVELOPMENT IN SOUTH AFRICA. DOI: 10.7166/11-2-365 [Accessed on: 23 August 2021].

Raisuyah, B. 2017. Towards a conceptual understanding of community engagement in higher education in South Africa. Perspectives in Education. 2017 35(1): 171-185 http://dx.doi.org/10.18820/2519593X/pie.v35i1.13 [Accessed on 18 September 2021].

Rowe, G. and Frewer, L. J. (2005) A typology of public engagement mechanisms, Science, Technology, and Human Values. 30 (2), 251-290 DOI: 10.1177/0162243904271724 [Accessed on: 19 September 2021].

Scheba, A. and Turok, I. 2019. Strengthening Township Economies in South Africa: The Case for Better Regulation and Policy Innovation. Available from: <https://www.hsrc.ac.za/en/research-data/ktree-doc/21690> [Accessed on 11 July 2021].

Setyowati, A., Chung, M., Yusuf, A. and Haksama, S. 2020. Psychometric of the Curiosity and Exploration Inventory-II in Indonesia. Journal of Public Health Research 2020; 9 (3):1745 doi: 10.4081/jphr.2020.1745 [Accessed on 14 December 2021].

Siedlecki, S. 2020. Understanding Descriptive Research Designs and Methods. doi: 10.1097/NUR.0000000000000493 Clinical Nurse Specialist: ½. 2020;34(1):8-12. [Accessed on 25 October 2021].

Statistics South Africa. 2019. Inequality Trends in South Africa: A Multidimensional Diagnostic of Inequality. Available from: <https://statssa.gov.za/publications/Report-03-10-19/Report-03-10-192017.pdf> [Accessed on 18 July 2021].

TESDA. 2010. Entrepreneurship education/training. Available from: <https://unevoc.unesco.org/home/TVETipedia+Glossary/filt=all/id=206#:~:text=A%20training%20scheme%20to%20develop,Development%20Authority%20(TESDA)%20%2C%20Philippines>[Accessed on 12 May 2021].

UK Research and Innovation. 2021. Community-led Upgrading for Self-Reliance in South Africa: Integrated Construction and Environmental Management Systems in Informal Settlements. Available from: <https://gtr.ukri.org/projects?ref=ES%2FN014006%2F1#/tabOverview> [Accessed on 22 August 2021].

UNESCO / ILO. 2006. Entrepreneurship education/training. Available from: <https://unevoc.unesco.org/home/TVETipedia+Glossary/filt=all/id=206#:~:text=A%20training%20scheme%20to%20develop,Development%20Authority%20(TESDA)%20%2C%20Philippines> [Accessed on 12 May 2021].

Uzuegbunam, C. 2020. Why Public Participation is important. Available from: https://www.voices360.com/community-development/why-public-participation-is-important [Accessed on: 21 August 2021].

Webster, D. 2019. Why South Africa is the world's most unequal society. Available from: <https://mg.co.za/article/2019-11-19-why-sa-is-the-worlds-most-unequal-society/> [Accessed on 18 July 2021].

Williams, J. 2006. Community Participation: Lessons from South Africa. Policy Studies. 27(3) 470-1006 DOI: 10.1080/01442870600885982

World Bank. 2020. The economics of South African townships. Available from: <https://www.worldbank.org/en/country/southafrica/publication/the-economics-of-south-african-townships-special-focus-on-diepsloot> [Accessed on: 10 May 2021].

CONSENT TO PARTICIPATE IN THIS STUDY

I, _____ (participant name), confirm that the person asking my consent to take part in this research has told me about the nature, procedure, potential benefits and anticipated inconvenience of participation.

I have read (or had explained to me) and understood the study as explained in the information sheet.

I have had sufficient opportunity to ask questions and am prepared to participate in the study.

I understand that my participation is voluntary and that I am free to withdraw at any time without penalty (if applicable).

I am aware that the findings of this study will be processed into a research report, journal publications and/or conference proceedings, but that my participation will be kept confidential unless otherwise specified.

I agree to the recording of the <insert specific data collection method>.

I have received a signed copy of the informed consent agreement.

Participant Name & Surname…… (please print)

Participant Signature……..Date……

Researcher's Name & Surname……(please print)

Researcher's signature……..Date……

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SCHOOL OF BUSINESS LEADERSHIP

RESEARCH ETHICS REVIEW COMMITTEE (GSBL CRERC)

13 December 2021

Ref #: 2021_SBL_MBA_049_FA
Name of applicant: Mr GMO Somo
Student #: 66800498

Dear Mr Somo

Decision: Ethics Approval

Student: Mr GMO Somo (godfrey@intellitechsystems.co.za , 082 941 5668)

Supervisor: Dr B Muchara, (muchab@unisa.ac.za , 011 652 0395)

Project Title: Community engagement and the digital economy: Impact on township economic development in the Emfuleni Local Municipality.

Qualification: Master in Business Administration (MBA)

Expiry Date: December 2022

Thank you for applying for research ethics clearance, SBL Research Ethics Review Committee reviewed your application in compliance with the Unisa Policy on Research Ethics.

Outcome of the SBL Research Committee: Approval is granted for the duration of the Project

The application was reviewed in compliance with the Unisa Policy on Research Ethics by the SBL Research Ethics Review Committee on the 13/12/2021.

The proposed research may now commence with the proviso that:

1) The researcher will ensure that the research project adheres to the relevant guidelines set out in the Unisa Covid-19 position statement on research ethics attached
2) The researcher/s will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.
3) Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study, as well as changes in the methodology, should be communicated in writing to the SBL Research Ethics Review Committee.
4) An amended application could be requested if there are substantial changes from the existing proposal, especially if those changes affect any of the study-related risks for the research participants.
5) The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study.

Graduate School of Business Leadership, University of South Africa, PO Box 392, Unisa, 0003, South Africa
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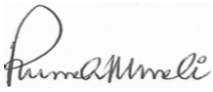
Kind regards,

NBWM Mlitwa

Prof N Mlitwa

Chairperson: SBL Research Ethics Committee

011 - 652 0381/ wiltonb@unisa.ac.za



Prof P Msweli

Executive Dean: Graduate School of Business Leadership

011- 652 0256/mswelp@unisa.ac.za

The Programme Administrator: MBL 3
Graduate School of Business Leadership
P O Box 392
UNISA
0003

CONSENT TO SUBMIT RESEARCH REPORT 2021

Consent is hereby given to:

Student name ___Godfrey Malose Onny Somo_____

Student number ___66800498_____ to submit his/her research report in its final form.

Study LeaderDr. B. Muchara..... Date: _09 December 2021_

Supervisor signature 

The student acknowledges that sufficient feedback was provided by the study leader and that s/he took the responsibility to attend to the feedback in a way that satisfies the requirements for a research dissertation on the MBL level.

Student signature  Date: __09 December 2021__

Students must obtain consent from their Study Leaders before submission of a final report.
Research reports should be submitted on the EDS as required.

Mr John Mouton.
Unisa SBL
ROOM 02-18, MIDRAND, 1685.
tmoutoj@unisa.ac.za
011 652 0206

PART A: PARTICIPANT INFORMATION			
Your Age:		**Gender:**	
Your Area:			

PART B: THE QUESTIONNAIRE						
No.	**Please answer below questions freely.**	**Strongly Agree**	**Agree**	**Moderately Agree**	**Disagree**	**Strongly Disagree**
1	Do you think business engages with your community as much as it could?					
2	Do you use any digital platforms in your community / organisation?					
3	Improving digital platforms and community engagement can encourage business growth in your area.					
4	Could business do more to improve engagement with the community?					
5	Are you aware of a Digital Strategy (or Online/ Internet Strategy) in your community?					
6	Should the municipality engage more with the community?					
7	Having a many local businesses is key to sustained economic growth and prosperity in Emfuleni.					
8	Are there challenges to local community engagement?					
9	Do you think using digital platforms can bring economic benefits in your community?					
10	Would you be interested in having a community engagement focus group in Emfuleni?					
11	Are there challenges to use of digital platforms in your community?					
12	Emfuleni can grown economically if the community is more involved in getting economic benefits.					
13	Would you cooperate with a community engagement organisation?					
14	Have you had any business-related engagement from Emfuleni Municipality?					
15	Would there be any value in investing in digital platforms for use by your community?					
16	Digital innovations and support for local businesses can lead to economic prosperity for the community.					
17	Would high-speed internet result in more customers for businesses?					
18	Economic development of the Emfuleni townships can create more jobs for local communities.					

Questionnaire Responses

Notes

Output Created				28-DEC-2021 16:51:10
N	Valid	120	120	120
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Frequency Table

Do you think business is not engaging with your community as much as it could?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	20	16.7	16.7	16.7
	Agree	56	46.7	46.7	63.3
	Moderately Agree	22	18.3	18.3	81.7
	Disagree	21	17.5	17.5	99.2
	Strongly Disagree	1	.8	.8	100.0
	Total	120	100.0	100.0	

Do you use any digital platforms in your community / organisation?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	37	30.8	30.8	30.8
	Agree	62	51.7	51.7	82.5
	Moderately Agree	8	6.7	6.7	89.2
	Disagree	13	10.8	10.8	100.0
	Total	120	100.0	100.0	

Improving digital platforms and community engagement can encourage business growth in your area.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	42	35.0	35.0	35.0
	Agree	39	32.5	32.5	67.5
	Moderately Agree	9	7.5	7.5	75.0
	Disagree	29	24.2	24.2	99.2
	Strongly Disagree	1	.8	.8	100.0
	Total	120	100.0	100.0	

Could business do more to improve engagement with the community?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	3	2.5	2.5	2.5
	Agree	8	6.7	6.7	9.2
	Moderately Agree	89	74.2	74.2	83.3
	Disagree	12	10.0	10.0	93.3
	Strongly Disagree	8	6.7	6.7	100.0
	Total	120	100.0	100.0	

Are you aware of a Digital Strategy (or Online/ Internet Strategy) in your community?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	29	24.2	24.2	24.2
	Agree	44	36.7	36.7	60.8
	Moderately Agree	7	5.8	5.8	66.7
	Disagree	36	30.0	30.0	96.7
	Strongly Disagree	4	3.3	3.3	100.0
	Total	120	100.0	100.0	

Should the municipality engage more with the community?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	26	21.7	21.7	21.7
	Agree	54	45.0	45.0	66.7
	Moderately Agree	20	16.7	16.7	83.3
	Disagree	19	15.8	15.8	99.2
	Strongly Disagree	1	.8	.8	100.0
	Total	120	100.0	100.0	

Having a many local businesses is key to sustained economic growth and prosperity in Emfuleni.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	35	29.2	29.2	29.2
	Agree	52	43.3	43.3	72.5
	Moderately Agree	15	12.5	12.5	85.0
	Disagree	15	12.5	12.5	97.5
	Strongly Disagree	3	2.5	2.5	100.0
	Total	120	100.0	100.0	

Are there challenges to local community engagement?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	30	25.0	25.0	25.0
	Agree	41	34.2	34.2	59.2
	Moderately Agree	20	16.7	16.7	75.8
	Disagree	25	20.8	20.8	96.7
	Strongly Disagree	4	3.3	3.3	100.0
	Total	120	100.0	100.0	

Do you think using digital platforms can bring economic benefits in your community?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	30	25.0	25.0	25.0
	Agree	47	39.2	39.2	64.2
	Moderately Agree	23	19.2	19.2	83.3
	Disagree	16	13.3	13.3	96.7
	Strongly Disagree	4	3.3	3.3	100.0
	Total	120	100.0	100.0	

Would you be interested in having a community engagement focus group in Emfuleni?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	23	19.2	19.2	19.2
	Agree	43	35.8	35.8	55.0
	Moderately Agree	27	22.5	22.5	77.5
	Disagree	23	19.2	19.2	96.7
	Strongly Disagree	4	3.3	3.3	100.0
	Total	120	100.0	100.0	

Are there challenges to use of digital platforms in your community?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	48	40.0	40.0	40.0
	Agree	51	42.5	42.5	82.5
	Moderately Agree	9	7.5	7.5	90.0
	Disagree	11	9.2	9.2	99.2
	Strongly Disagree	1	.8	.8	100.0
	Total	120	100.0	100.0	

Emfuleni can grown economically if the community is more involved in getting economic benefits.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	23	19.2	19.2	19.2
	Agree	54	45.0	45.0	64.2
	Moderately Agree	20	16.7	16.7	80.8
	Disagree	20	16.7	16.7	97.5
	Strongly Disagree	3	2.5	2.5	100.0
	Total	120	100.0	100.0	

Would you cooperate with a community engagement organisation?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	29	24.2	24.2	24.2
	Agree	47	39.2	39.2	63.3
	Moderately Agree	23	19.2	19.2	82.5
	Disagree	16	13.3	13.3	95.8
	Strongly Disagree	5	4.2	4.2	100.0
	Total	120	100.0	100.0	

Have you had any business-related engagement from Emfuleni Municipality?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	24	20.0	20.0	20.0
	Agree	39	32.5	32.5	52.5
	Moderately Agree	18	15.0	15.0	67.5
	Disagree	36	30.0	30.0	97.5
	Strongly Disagree	3	2.5	2.5	100.0
	Total	120	100.0	100.0	

Would there be any value in investing in digital platforms for use by your community?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	34	28.3	28.3	28.3
	Agree	38	31.7	31.7	60.0
	Moderately Agree	20	16.7	16.7	76.7
	Disagree	19	15.8	15.8	92.5
	Strongly Disagree	8	6.7	6.7	99.2
	11	1	.8	.8	100.0
	Total	120	100.0	100.0	

Digital innovations and support for local businesses can lead to economic prosperity for the community.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	38	31.7	31.7	31.7
	Agree	45	37.5	37.5	69.2
	Moderately Agree	8	6.7	6.7	75.8
	Disagree	16	13.3	13.3	89.2
	Strongly Disagree	13	10.8	10.8	100.0
	Total	120	100.0	100.0	

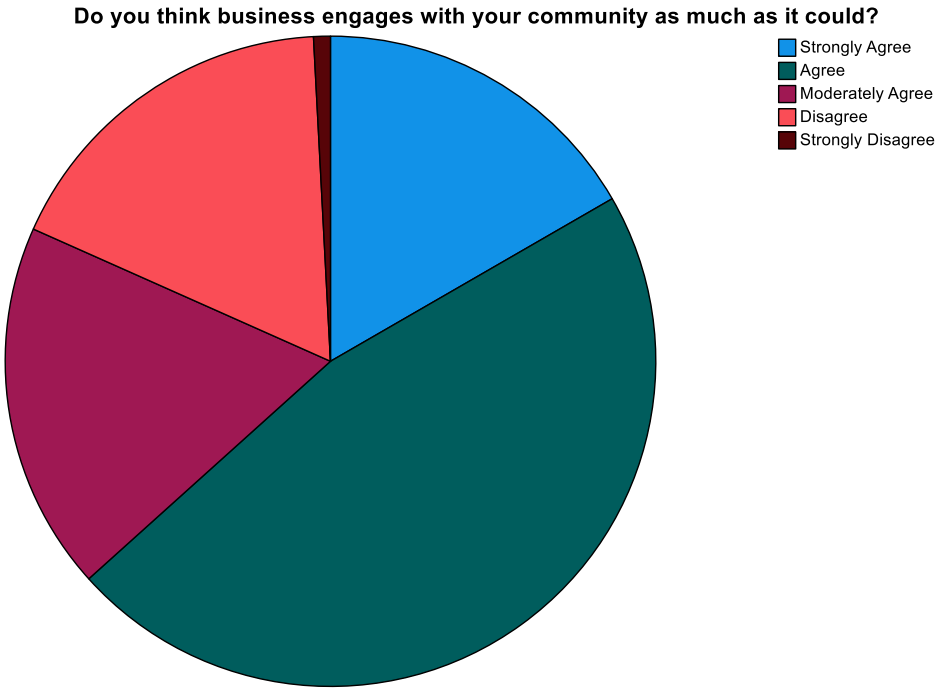
Would high-speed internet result in more customers for businesses?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	30	25.0	25.0	25.0
	Agree	44	36.7	36.7	61.7
	Moderately Agree	16	13.3	13.3	75.0
	Disagree	26	21.7	21.7	96.7
	Strongly Disagree	4	3.3	3.3	100.0
	Total	120	100.0	100.0	

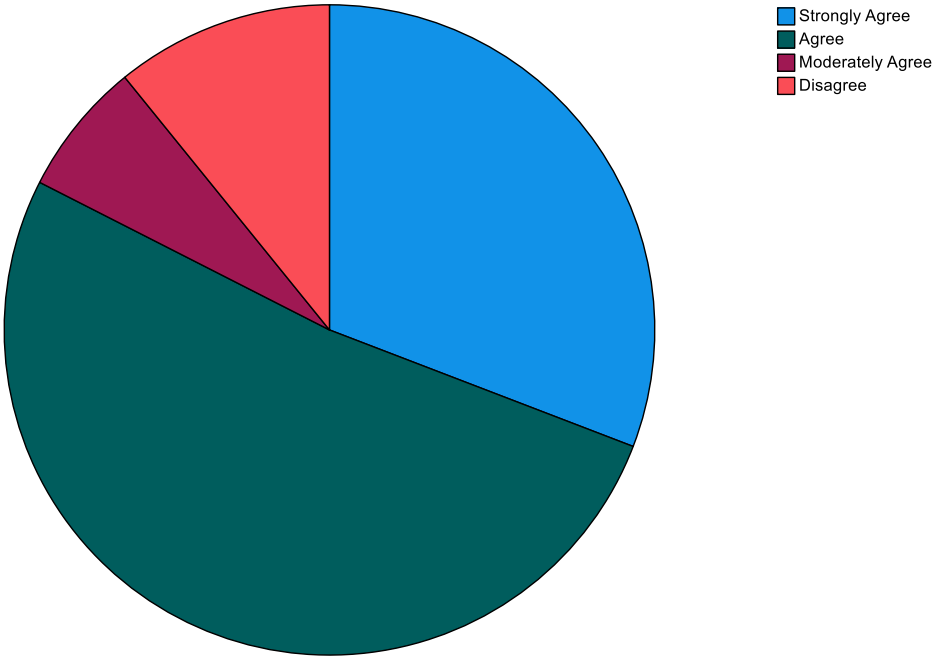
Economic development of the Emfuleni townships can create more jobs for local communities.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	41	34.2	34.2	34.2
	Agree	32	26.7	26.7	60.8
	Moderately Agree	25	20.8	20.8	81.7
	Disagree	19	15.8	15.8	97.5
	Strongly Disagree	3	2.5	2.5	100.0
	Total	120	100.0	100.0	

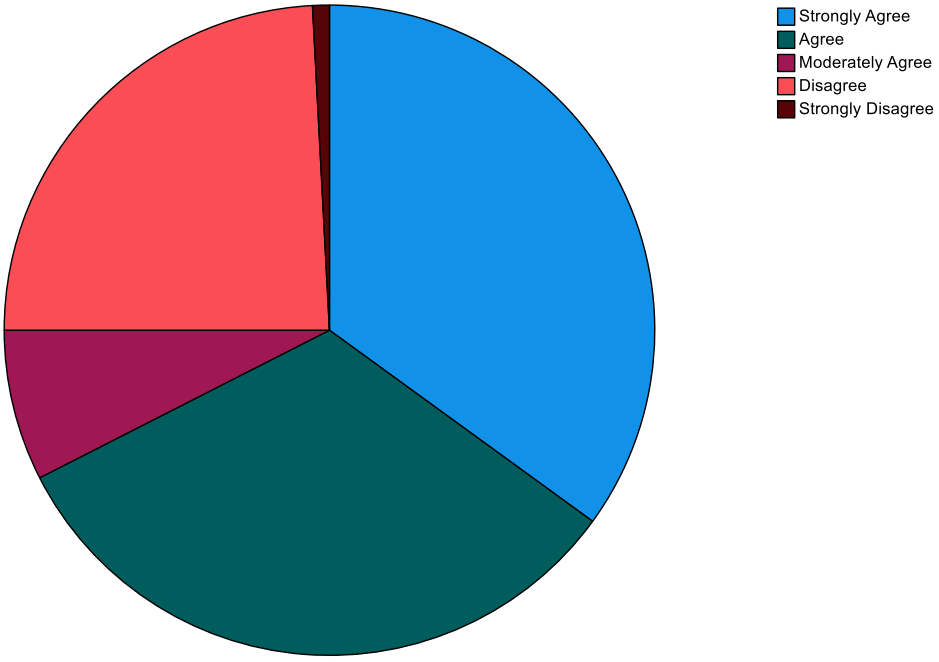
Pie Chart



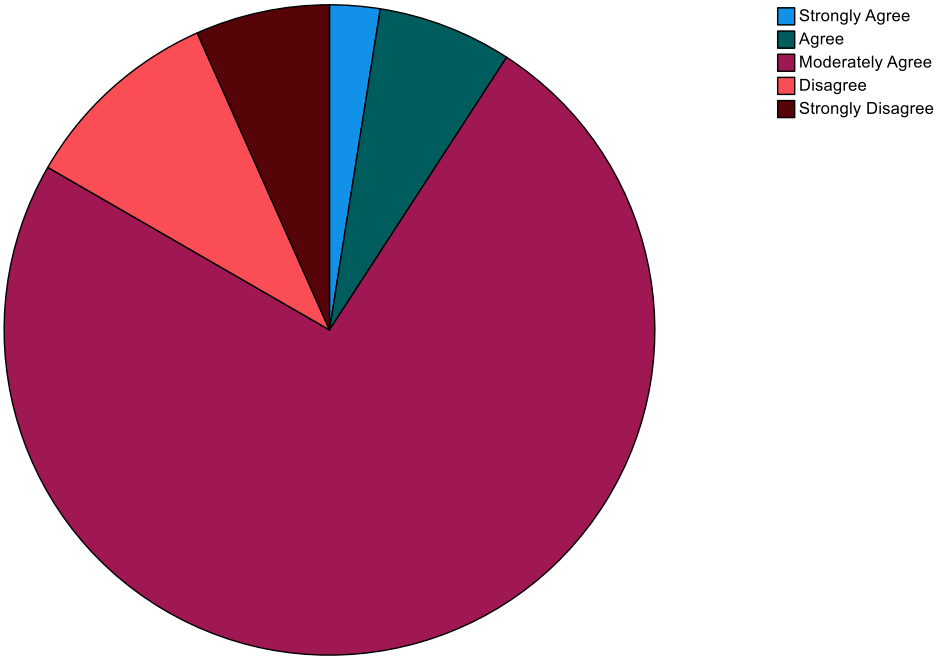
Do you use any digital platforms in your community / organisation?



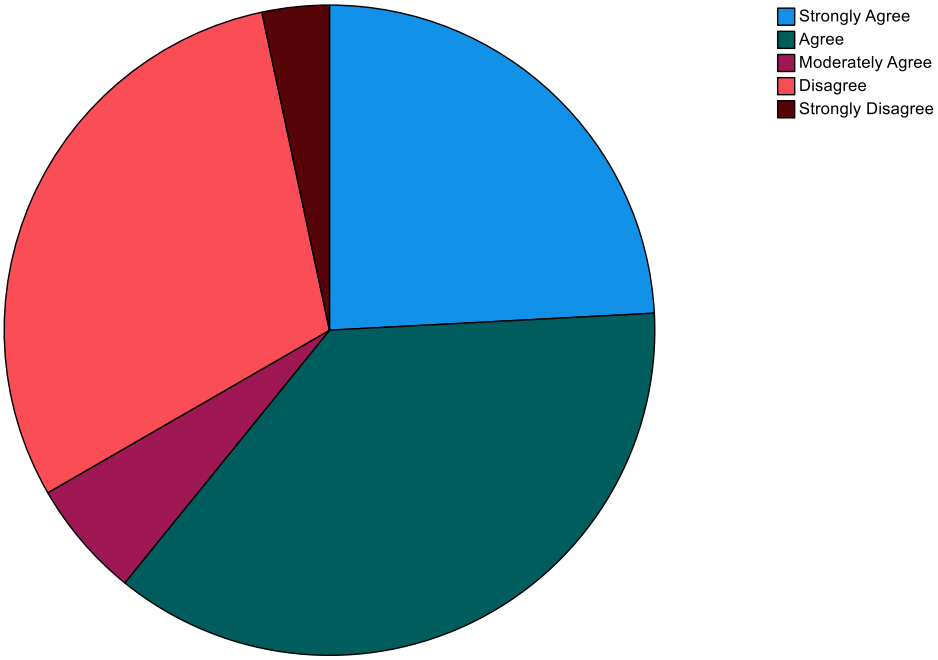
Improving digital platforms and community engagement can encourage business growth in your area.



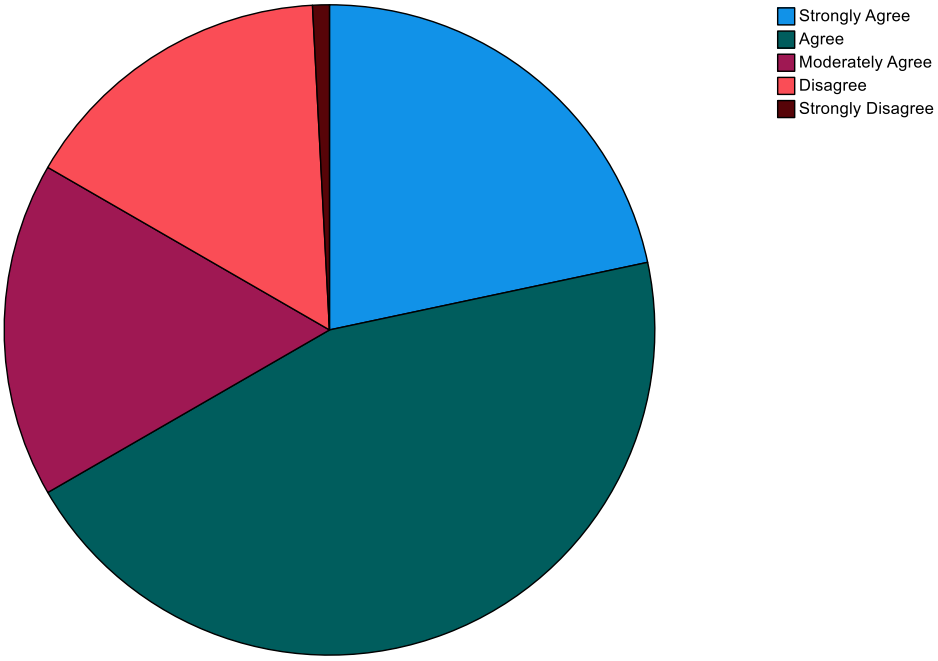
Could business do more to improve engagement with the community?



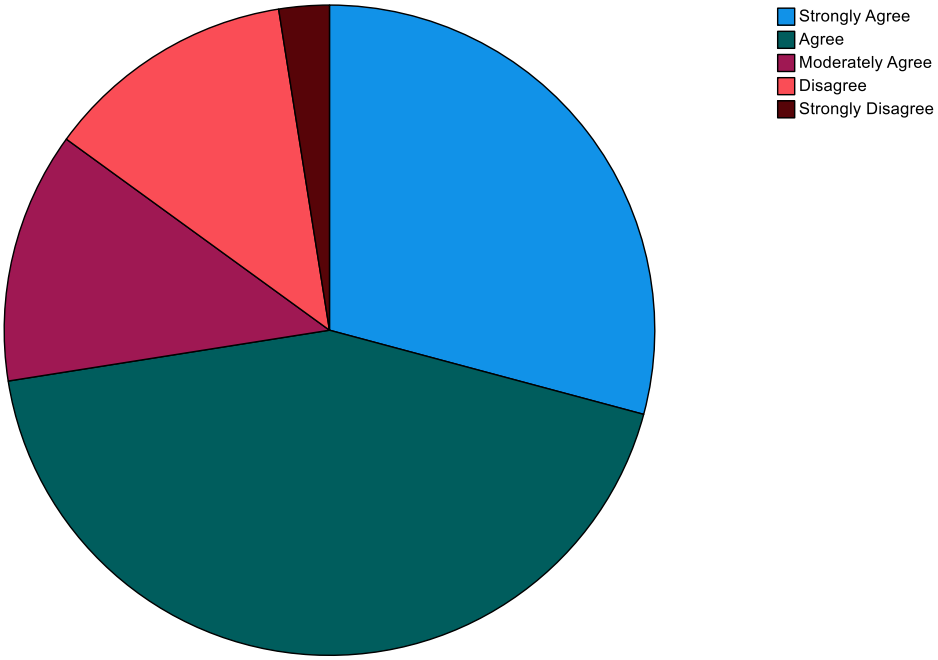
Are you aware of a Digital Strategy (or Online/ Internet Strategy) in your community?



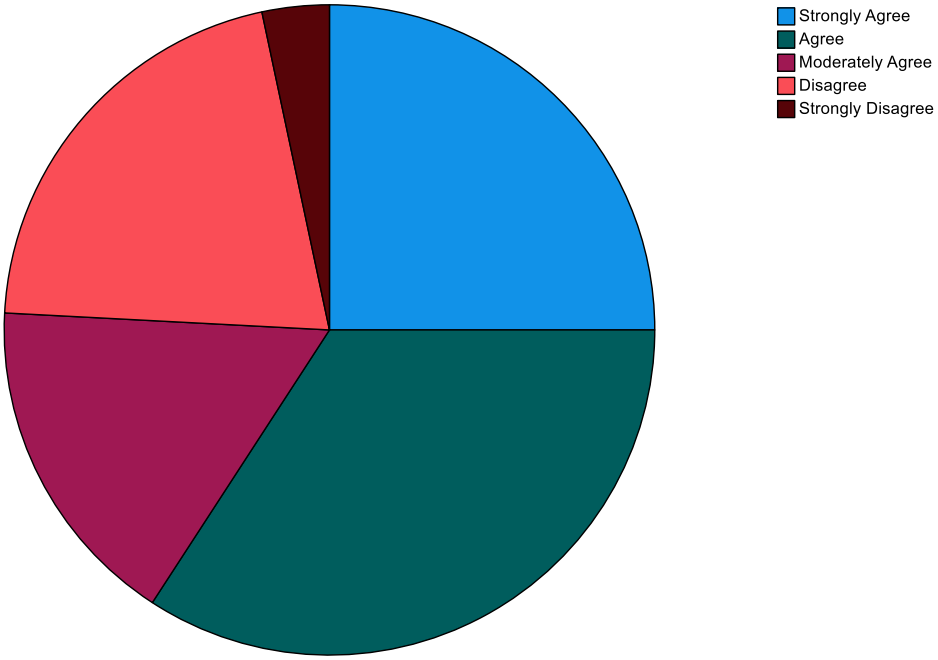
Should the municipality engage more with the community?



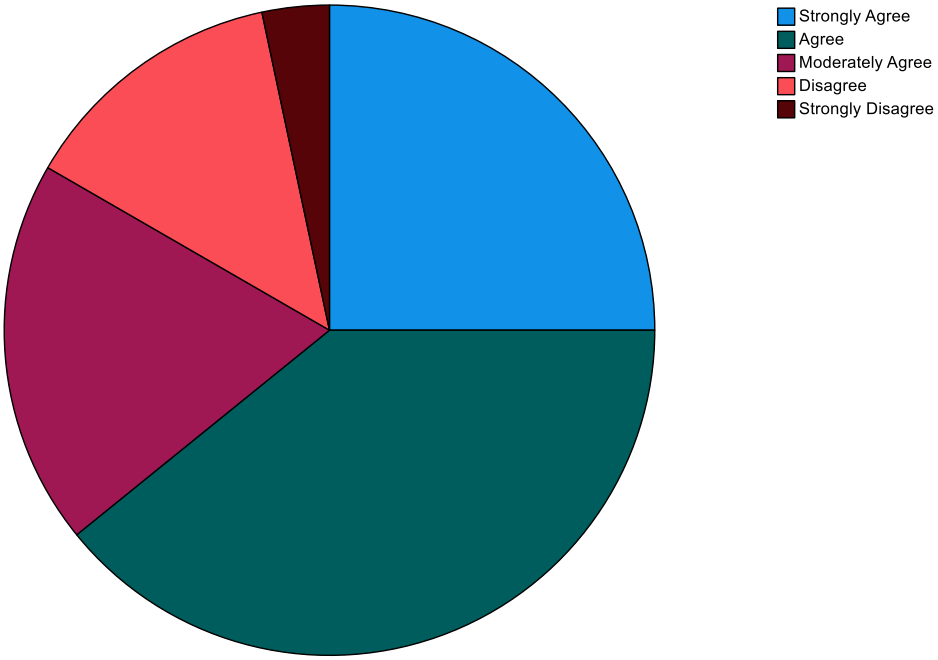
Having a many local businesses is key to sustained economic growth and prosperity in Emfuleni.



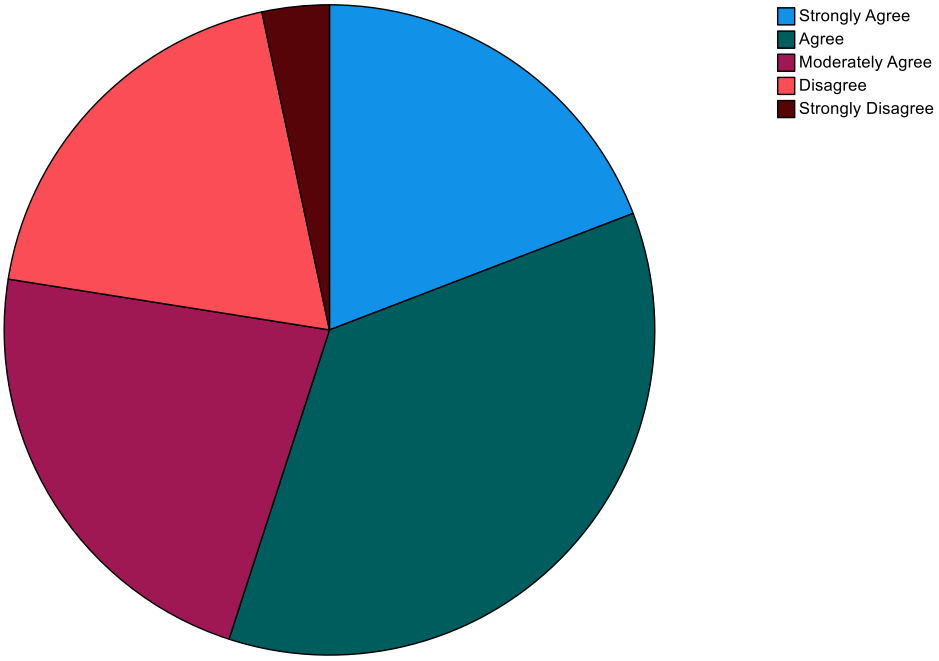
Are there challenges to local community engagement?



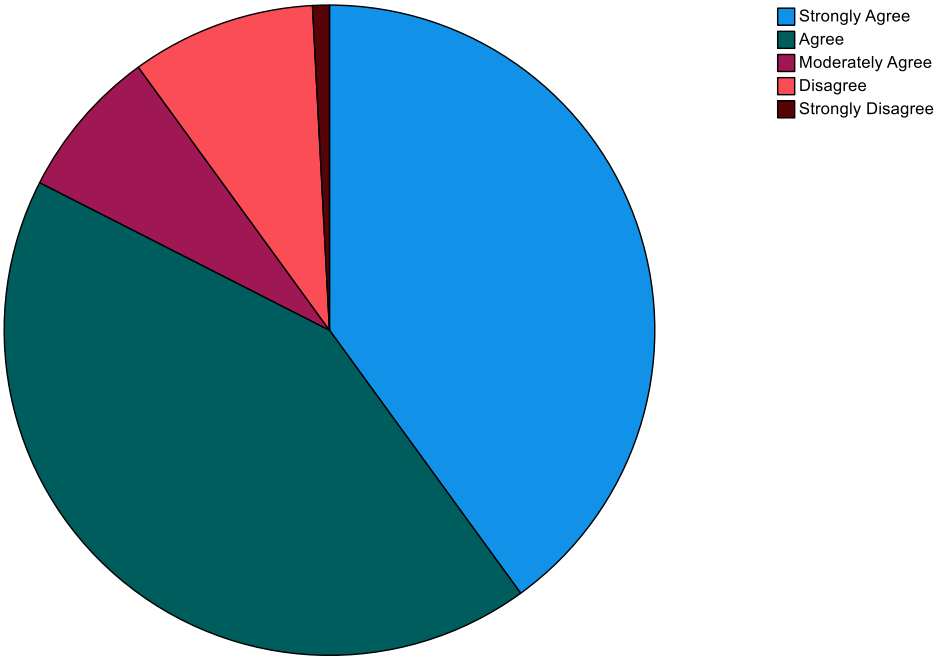
Do you think using digital platforms can bring economic benefits in your community?



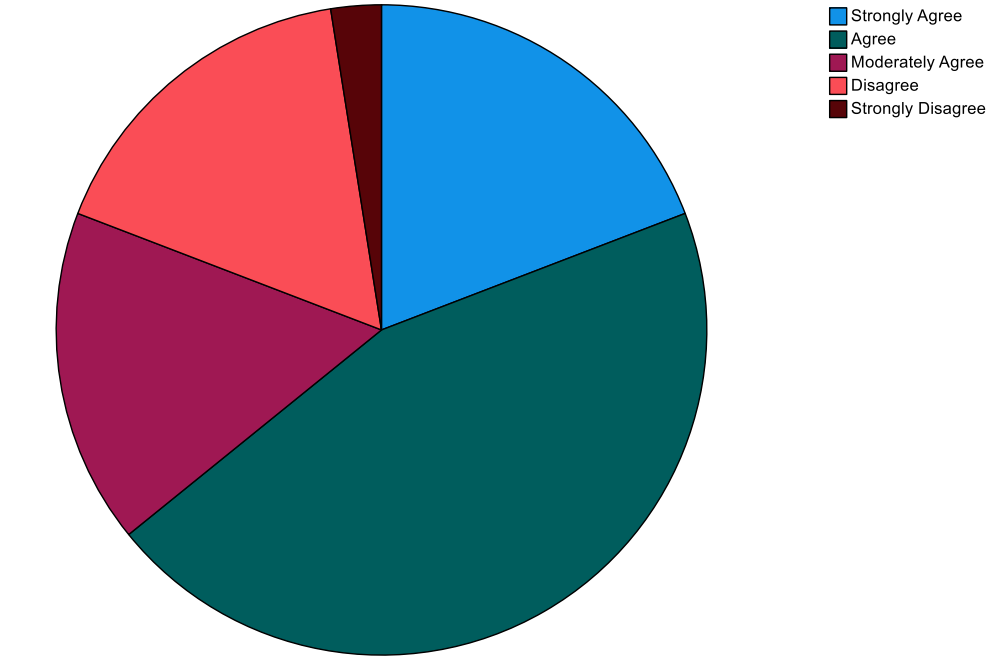
Would you be interested in having a community engagement focus group in Emfuleni?



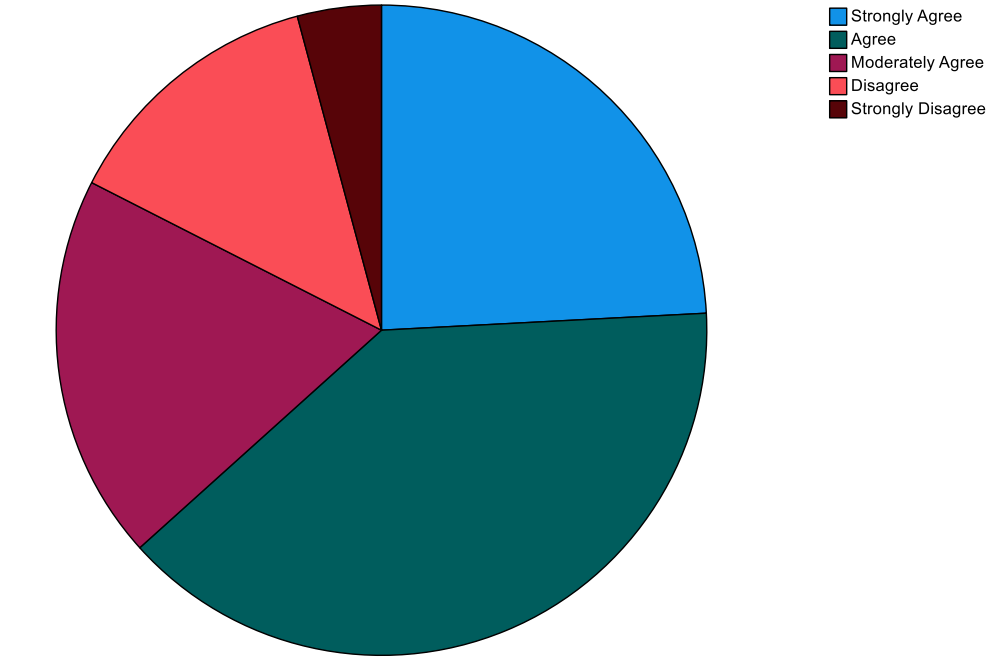
Are there challenges to use of digital platforms in your community?



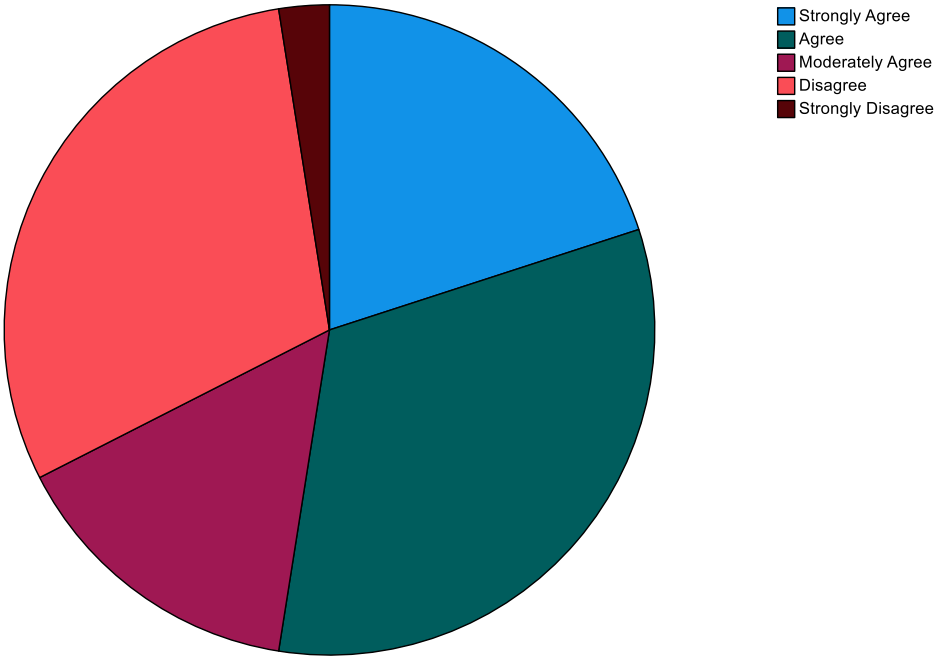
Emfuleni can grown economically if the community is more involved in getting economic benefits.



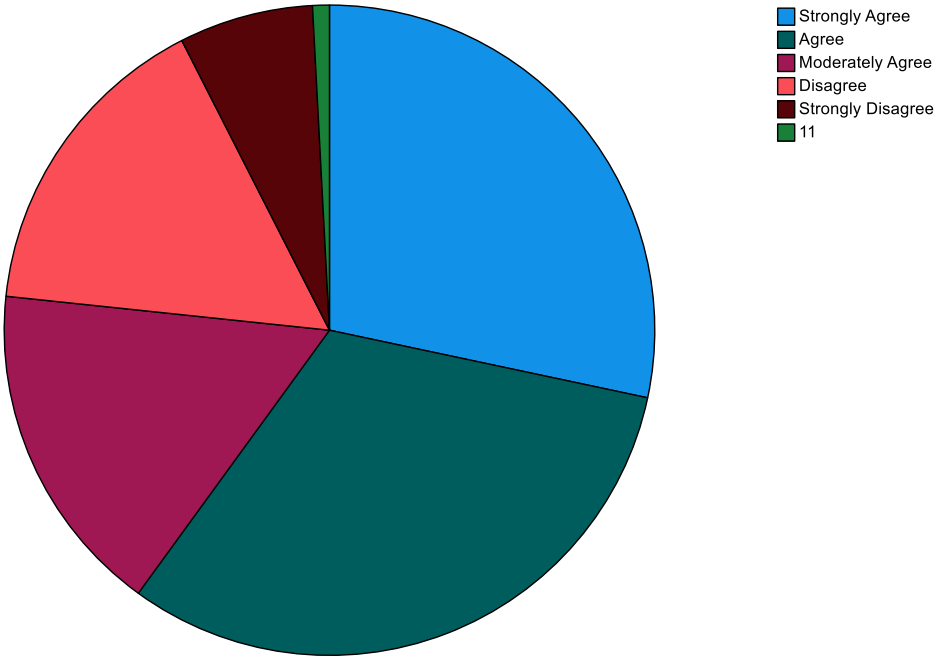
Would you cooperate with a community engagement organisation?



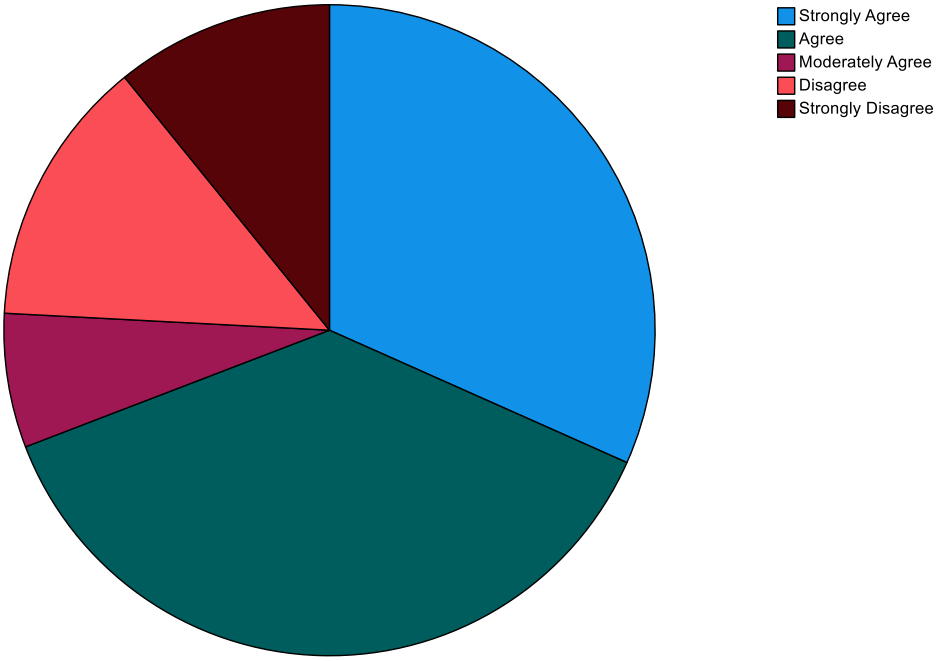
Have you had any business-related engagement from Emfuleni Municipality?



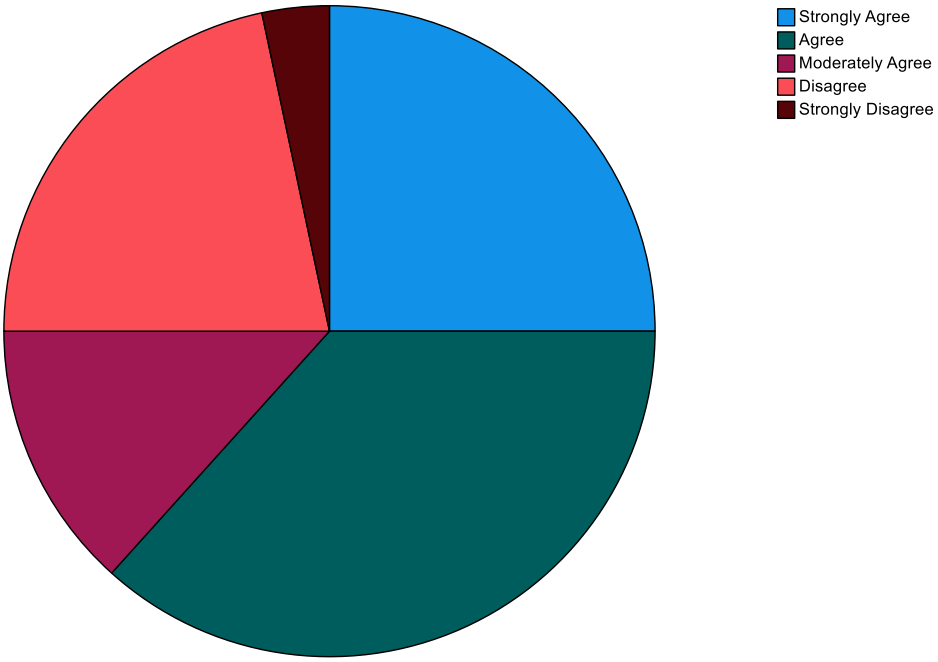
Would there be any value in investing in digital platforms for use by your community?



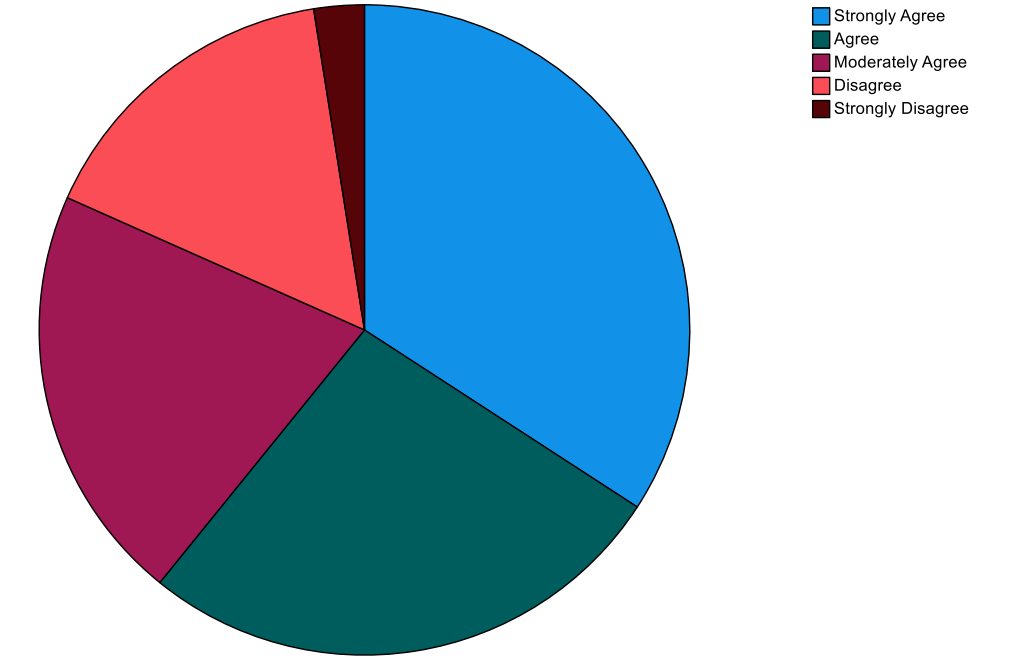
Digital innovations and support for local businesses can lead to economic prosperity for the community.



Would high-speed internet result in more customers for businesses?



Economic development of the Emfuleni townships can create more jobs for local communities.



Frequencies

Notes

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	Cases Used	Statistics are based on all cases with valid data.
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Statistics

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Frequency Table

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18	7	7.0	7.0	7.0
	19	8	8.0	8.0	15.0
	20	3	3.0	3.0	18.0
	21	2	2.0	2.0	20.0
	22	4	4.0	4.0	24.0
	23	1	1.0	1.0	25.0
	24	3	3.0	3.0	28.0
	25	1	1.0	1.0	29.0
	26	2	2.0	2.0	31.0
	27	5	5.0	5.0	36.0
	28	8	8.0	8.0	44.0
	29	4	4.0	4.0	48.0
	30	4	4.0	4.0	52.0
	31	3	3.0	3.0	55.0
	32	2	2.0	2.0	57.0
	33	1	1.0	1.0	58.0
	34	4	4.0	4.0	62.0
	35	2	2.0	2.0	64.0
	36	2	2.0	2.0	66.0
	37	2	2.0	2.0	68.0
	38	8	8.0	8.0	76.0
	39	3	3.0	3.0	79.0
	40	5	5.0	5.0	84.0
	41	3	3.0	3.0	87.0
	42	1	1.0	1.0	88.0
	44	3	3.0	3.0	91.0
	45	3	3.0	3.0	94.0
	46	3	3.0	3.0	97.0
	47	2	2.0	2.0	99.0
	48	1	1.0	1.0	100.0
	Total	100	100.0	100.0	

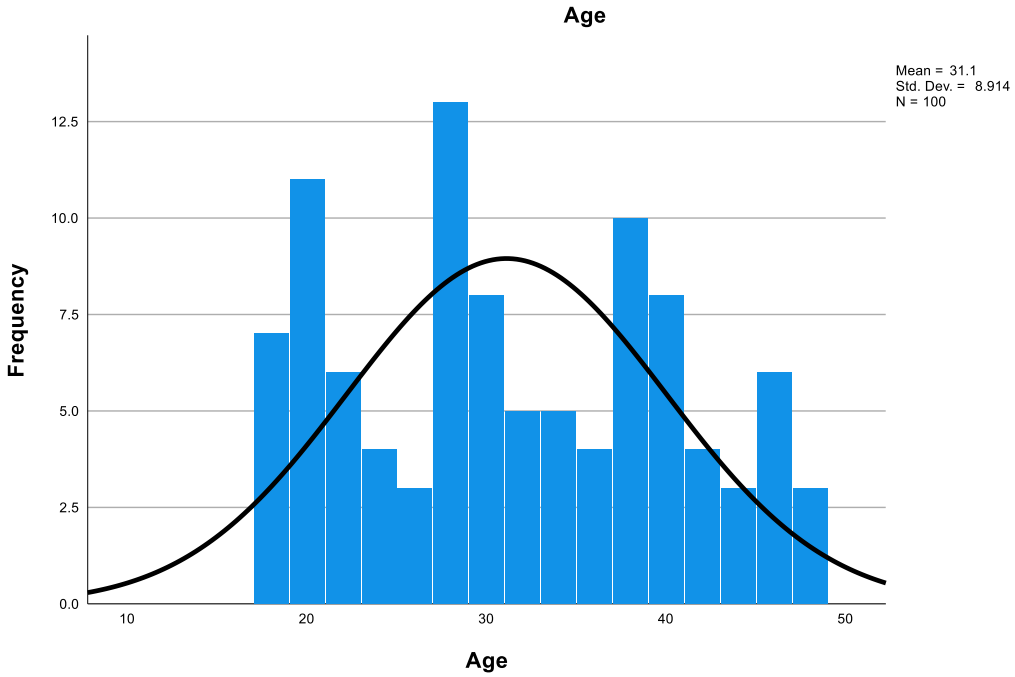
Gender

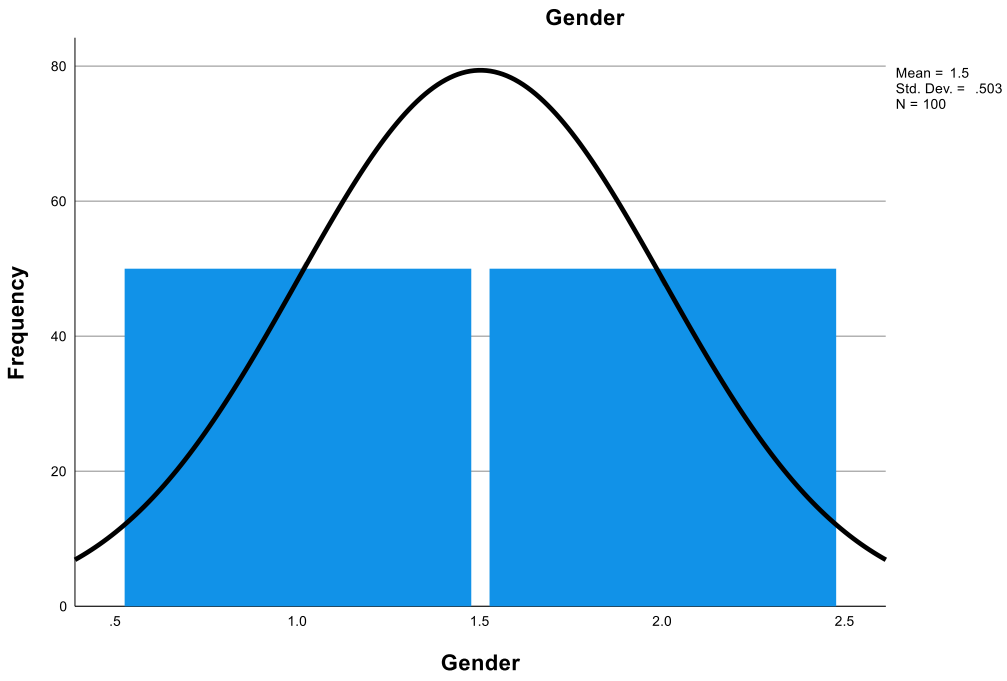
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	50	50.0	50.0	50.0
	Female	50	50.0	50.0	100.0
	Total	100	100.0	100.0	

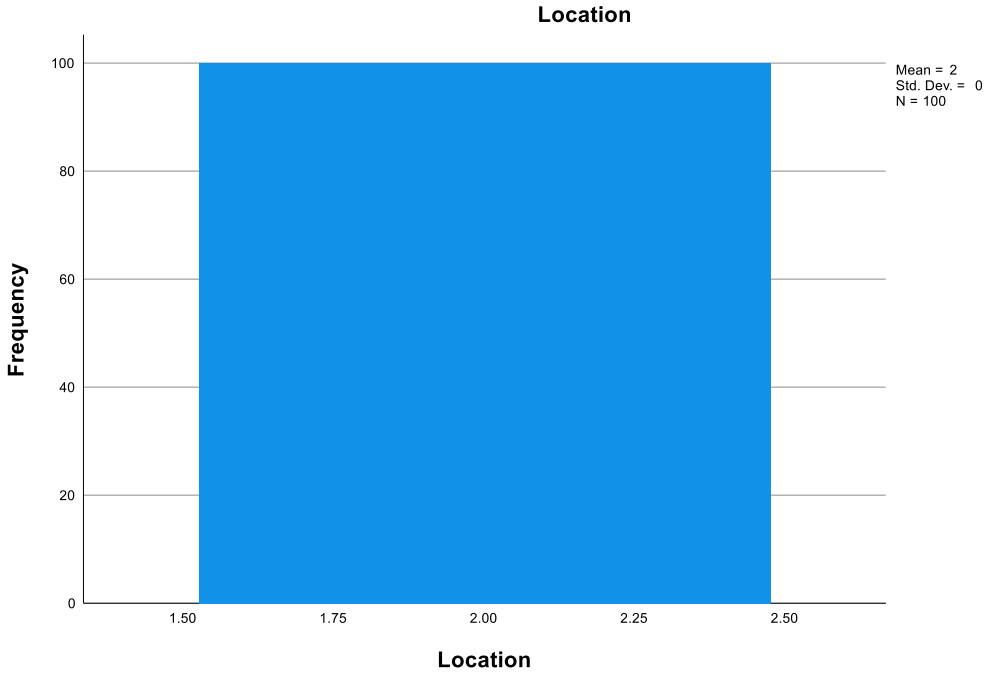
Location

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Evaton & Sebokeng	100	100.0	100.0	100.0

Histogram







Frequencies

Notes

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	Cases Used	Statistics are based on all cases with valid data.
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Statistics

		Do you think business engages with your community as much as it could?	Do you use any digital platforms in your community / organisation?	Improving digital platforms and community engagement can encourage business growth in your area.	Could business do more to improve engagement with the community?	Are you aware of a Digital Strategy (or Online/ Internet Strategy) in your community?
N	Valid	120	120	120	120	120
	Missing	0	0	0	0	0

Statistics

		Should the municipality engage more with the community?	Having a many local businesses is key to sustained economic growth and prosperity in Emfuleni.	Are there challenges to local community engagement?	Do you think using digital platforms can bring economic benefits in your community?	Would you be interested in having a community engagement focus group in Emfuleni?
N	Valid	120	120	120	120	120
	Missing	0	0	0	0	0

Statistics

		Are there challenges to use of digital platforms in your community?	Emfuleni can grown economically if the community is more involved in getting economic benefits.	Would you cooperate with a community engagement organisation?	Have you had any business-related engagement from Emfuleni Municipality?	Would there be any value in investing in digital platforms for use by your community?
N	Valid	120	120	120	120	120

	Missing	0	0	0	0	0

Statistics

		Digital innovations and support for local businesses can lead to economic prosperity for the community.	Would high-speed internet result in more customers for businesses?	Economic development of the Emfuleni townships can create more jobs for local communities.
N	Valid	120	120	120
	Missing	0	0	0

Frequency Table

Do you think business engages with your community as much as it could?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	20	16.7	16.7	16.7
	Agree	56	46.7	46.7	63.3
	Moderately Agree	22	18.3	18.3	81.7
	Disagree	21	17.5	17.5	99.2
	Strongly Disagree	1	.8	.8	100.0
	Total	120	100.0	100.0	

Do you use any digital platforms in your community / organisation?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	37	30.8	30.8	30.8
	Agree	62	51.7	51.7	82.5

	Moderately Agree	8	6.7	6.7	89.2
	Disagree	13	10.8	10.8	100.0
	Total	120	100.0	100.0	

Improving digital platforms and community engagement can encourage business growth in your area.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	42	35.0	35.0	35.0
	Agree	39	32.5	32.5	67.5
	Moderately Agree	9	7.5	7.5	75.0
	Disagree	29	24.2	24.2	99.2
	Strongly Disagree	1	.8	.8	100.0
	Total	120	100.0	100.0	

Could business do more to improve engagement with the community?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	3	2.5	2.5	2.5
	Agree	8	6.7	6.7	9.2
	Moderately Agree	89	74.2	74.2	83.3
	Disagree	12	10.0	10.0	93.3
	Strongly Disagree	8	6.7	6.7	100.0
	Total	120	100.0	100.0	

Are you aware of a Digital Strategy (or Online/ Internet Strategy) in your community?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	29	24.2	24.2	24.2
	Agree	44	36.7	36.7	60.8
	Moderately Agree	7	5.8	5.8	66.7
	Disagree	36	30.0	30.0	96.7

	Strongly Disagree	4	3.3	3.3	100.0
	Total	120	100.0	100.0	

Should the municipality engage more with the community?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	26	21.7	21.7	21.7
	Agree	54	45.0	45.0	66.7
	Moderately Agree	20	16.7	16.7	83.3
	Disagree	19	15.8	15.8	99.2
	Strongly Disagree	1	.8	.8	100.0
	Total	120	100.0	100.0	

Having a many local businesses is key to sustained economic growth and prosperity in Emfuleni.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	35	29.2	29.2	29.2
	Agree	52	43.3	43.3	72.5
	Moderately Agree	15	12.5	12.5	85.0
	Disagree	15	12.5	12.5	97.5
	Strongly Disagree	3	2.5	2.5	100.0
	Total	120	100.0	100.0	

Are there challenges to local community engagement?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	30	25.0	25.0	25.0
	Agree	41	34.2	34.2	59.2
	Moderately Agree	20	16.7	16.7	75.8
	Disagree	25	20.8	20.8	96.7
	Strongly Disagree	4	3.3	3.3	100.0
	Total	120	100.0	100.0	

Do you think using digital platforms can bring economic benefits in your community?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	30	25.0	25.0	25.0
	Agree	47	39.2	39.2	64.2
	Moderately Agree	23	19.2	19.2	83.3
	Disagree	16	13.3	13.3	96.7
	Strongly Disagree	4	3.3	3.3	100.0
	Total	120	100.0	100.0	

Would you be interested in having a community engagement focus group in Emfuleni?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	23	19.2	19.2	19.2
	Agree	43	35.8	35.8	55.0
	Moderately Agree	27	22.5	22.5	77.5
	Disagree	23	19.2	19.2	96.7
	Strongly Disagree	4	3.3	3.3	100.0
	Total	120	100.0	100.0	

Are there challenges to use of digital platforms in your community?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	48	40.0	40.0	40.0
	Agree	51	42.5	42.5	82.5
	Moderately Agree	9	7.5	7.5	90.0
	Disagree	11	9.2	9.2	99.2
	Strongly Disagree	1	.8	.8	100.0
	Total	120	100.0	100.0	

Emfuleni can grown economically if the community is more involved in getting economic benefits.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	23	19.2	19.2	19.2
	Agree	54	45.0	45.0	64.2
	Moderately Agree	20	16.7	16.7	80.8
	Disagree	20	16.7	16.7	97.5
	Strongly Disagree	3	2.5	2.5	100.0
	Total	120	100.0	100.0	

Would you cooperate with a community engagement organisation?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	29	24.2	24.2	24.2
	Agree	47	39.2	39.2	63.3
	Moderately Agree	23	19.2	19.2	82.5
	Disagree	16	13.3	13.3	95.8
	Strongly Disagree	5	4.2	4.2	100.0
	Total	120	100.0	100.0	

Have you had any business-related engagement from Emfuleni Municipality?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	24	20.0	20.0	20.0
	Agree	39	32.5	32.5	52.5
	Moderately Agree	18	15.0	15.0	67.5
	Disagree	36	30.0	30.0	97.5
	Strongly Disagree	3	2.5	2.5	100.0
	Total	120	100.0	100.0	

Would there be any value in investing in digital platforms for use by your community?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	34	28.3	28.3	28.3
	Agree	38	31.7	31.7	60.0
	Moderately Agree	20	16.7	16.7	76.7
	Disagree	19	15.8	15.8	92.5
	Strongly Disagree	8	6.7	6.7	99.2
	11	1	.8	.8	100.0
	Total	120	100.0	100.0	

Digital innovations and support for local businesses can lead to economic prosperity for the community.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	38	31.7	31.7	31.7
	Agree	45	37.5	37.5	69.2
	Moderately Agree	8	6.7	6.7	75.8
	Disagree	16	13.3	13.3	89.2
	Strongly Disagree	13	10.8	10.8	100.0
	Total	120	100.0	100.0	

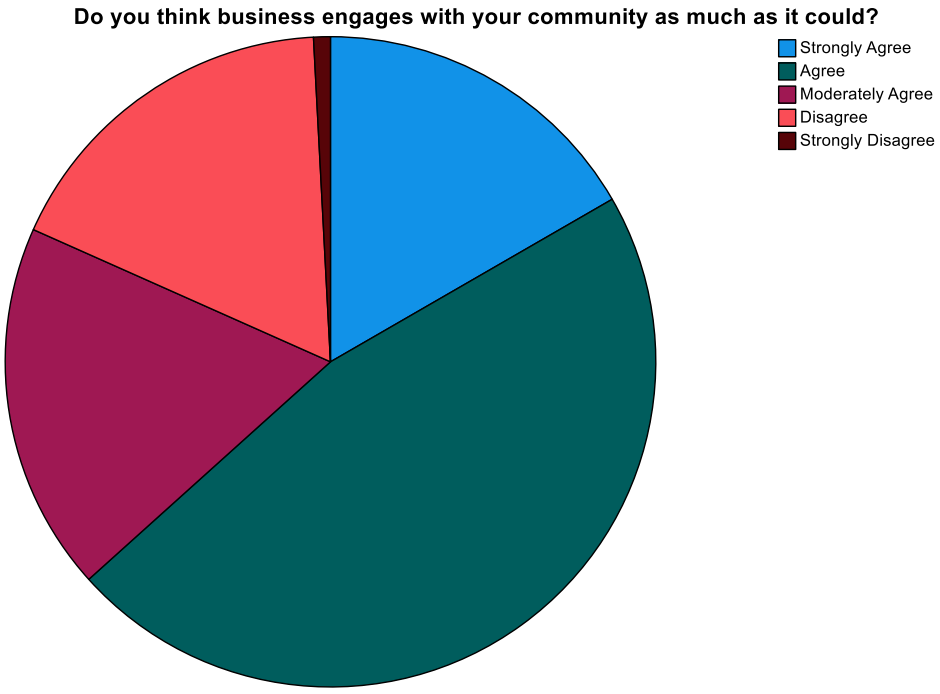
Would high-speed internet result in more customers for businesses?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	30	25.0	25.0	25.0
	Agree	44	36.7	36.7	61.7
	Moderately Agree	16	13.3	13.3	75.0
	Disagree	26	21.7	21.7	96.7
	Strongly Disagree	4	3.3	3.3	100.0
	Total	120	100.0	100.0	

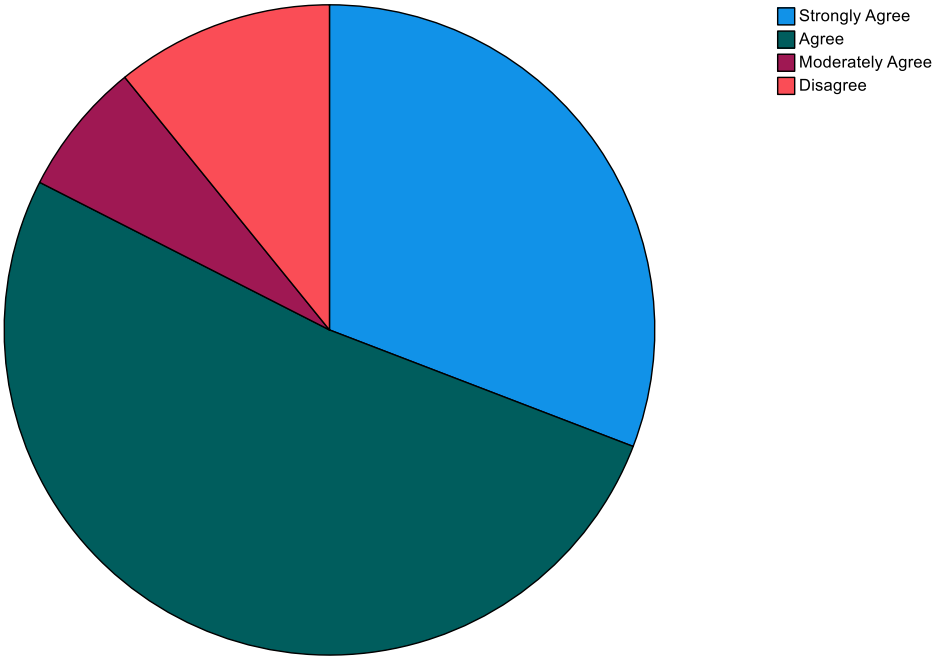
Economic development of the Emfuleni townships can create more jobs for local communities.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	41	34.2	34.2	34.2
	Agree	32	26.7	26.7	60.8
	Moderately Agree	25	20.8	20.8	81.7
	Disagree	19	15.8	15.8	97.5
	Strongly Disagree	3	2.5	2.5	100.0
	Total	120	100.0	100.0	

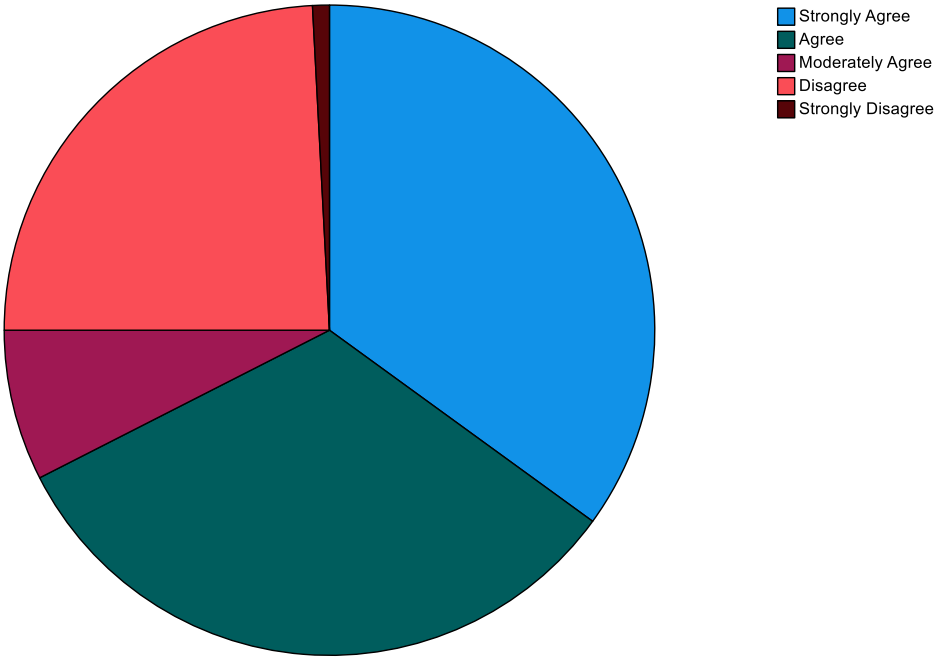
Pie Chart



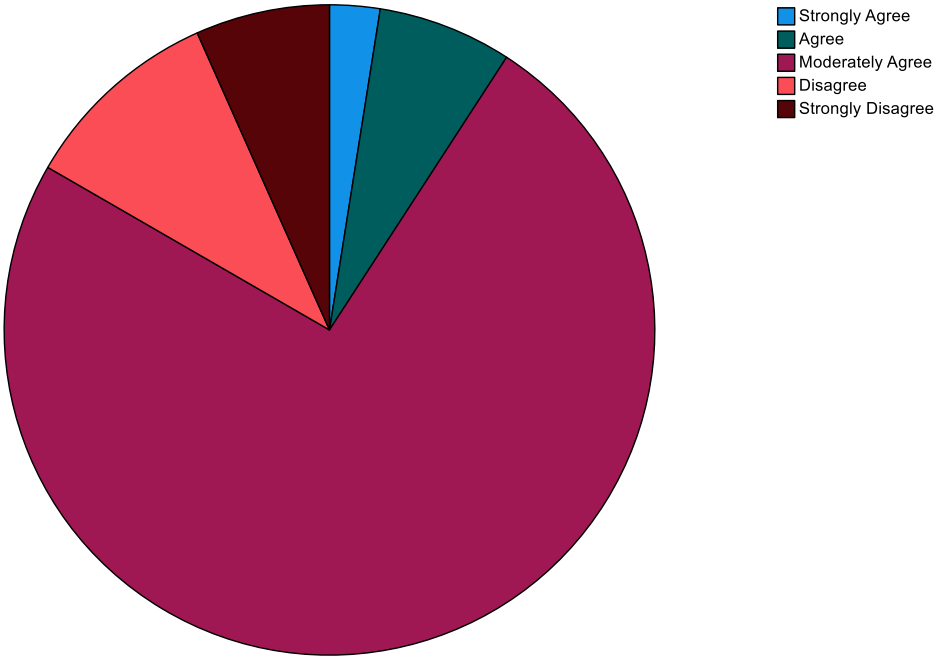
Do you use any digital platforms in your community / organisation?



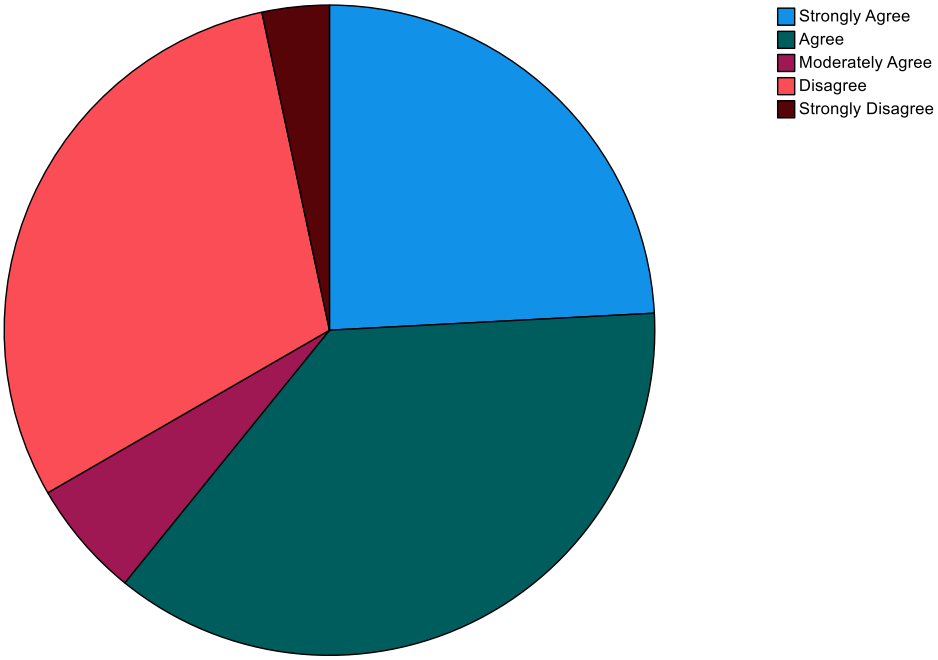
Improving digital platforms and community engagement can encourage business growth in your area.



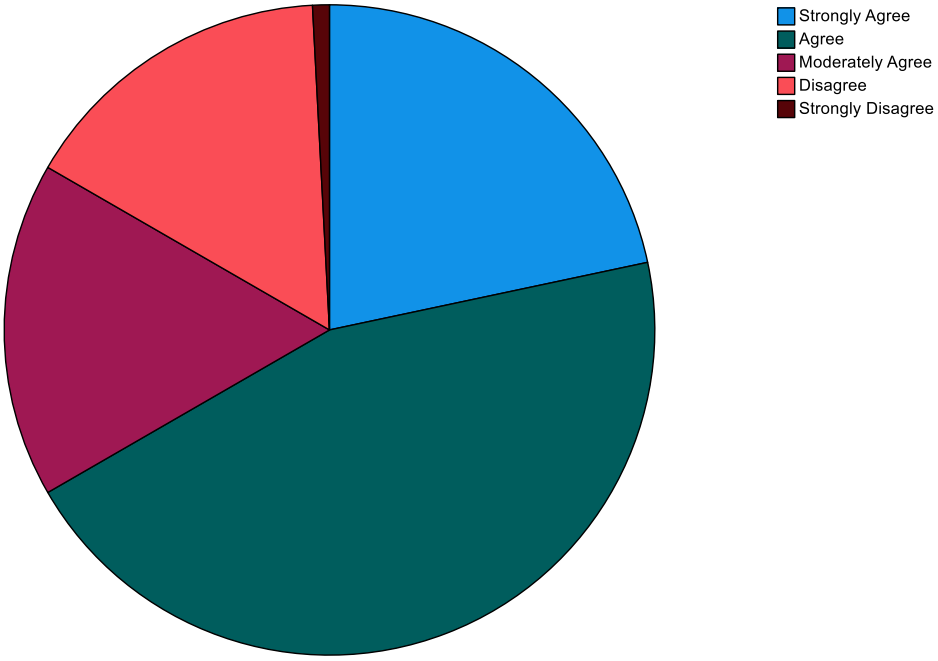
Could business do more to improve engagement with the community?



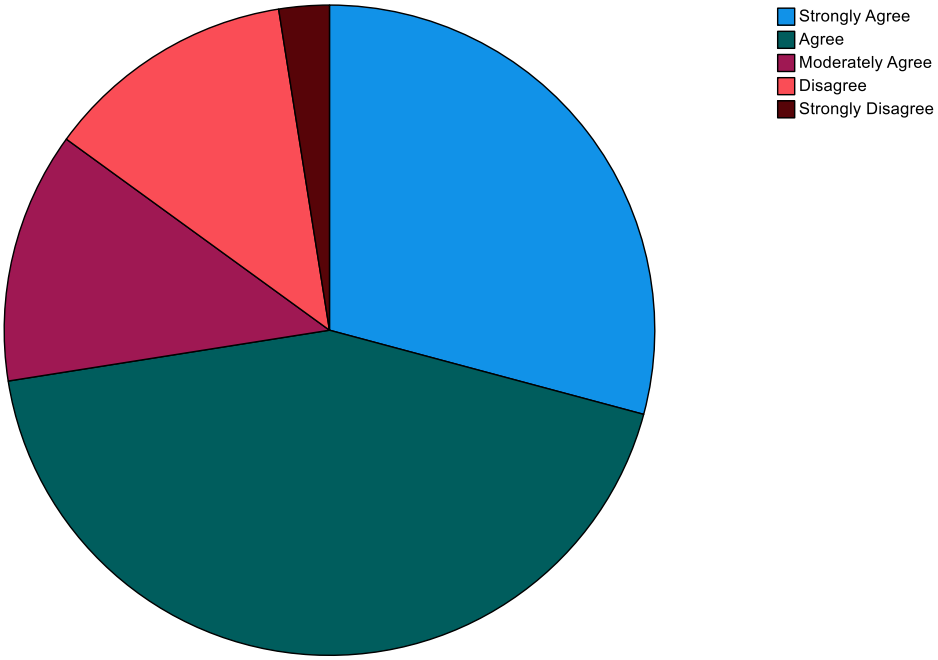
Are you aware of a Digital Strategy (or Online/ Internet Strategy) in your community?



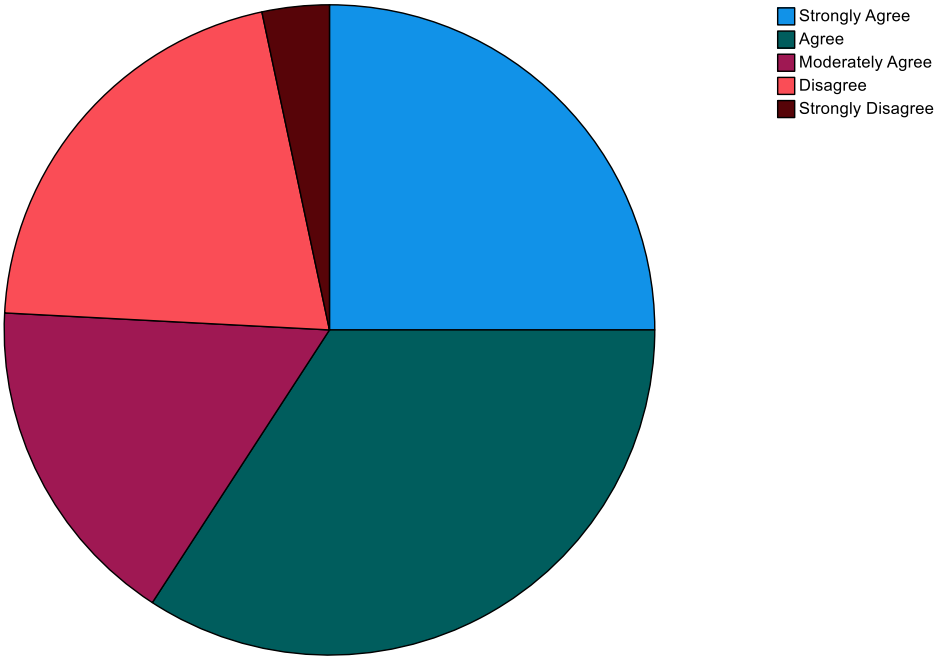
Should the municipality engage more with the community?



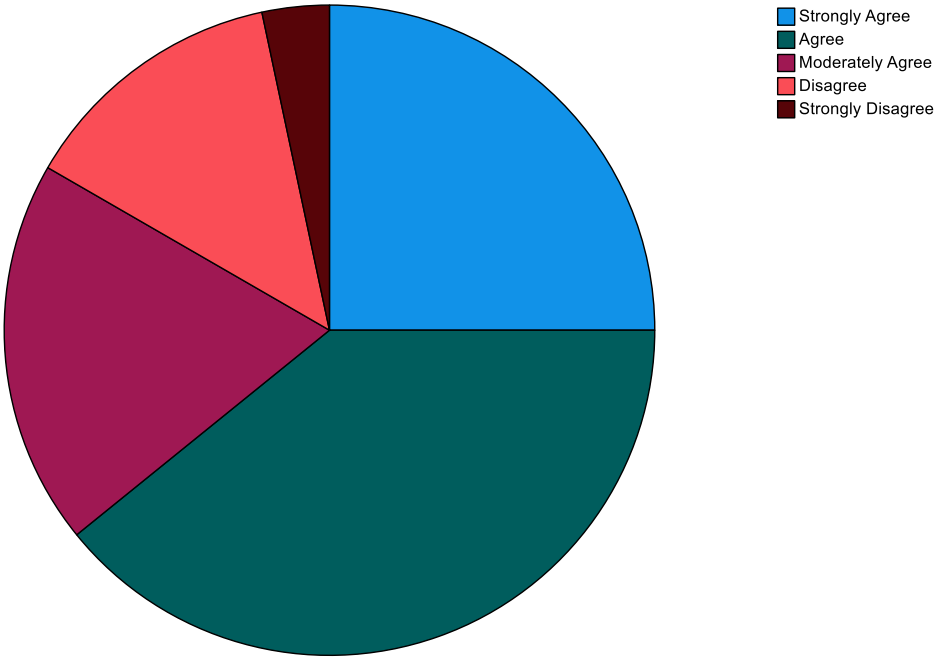
Having a many local businesses is key to sustained economic growth and prosperity in Emfuleni.



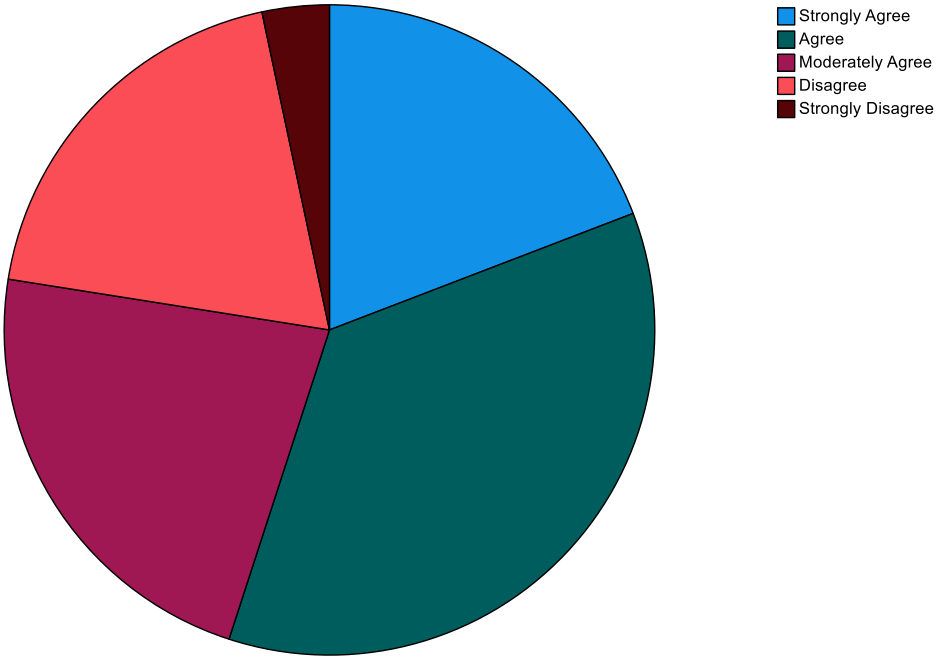
Are there challenges to local community engagement?



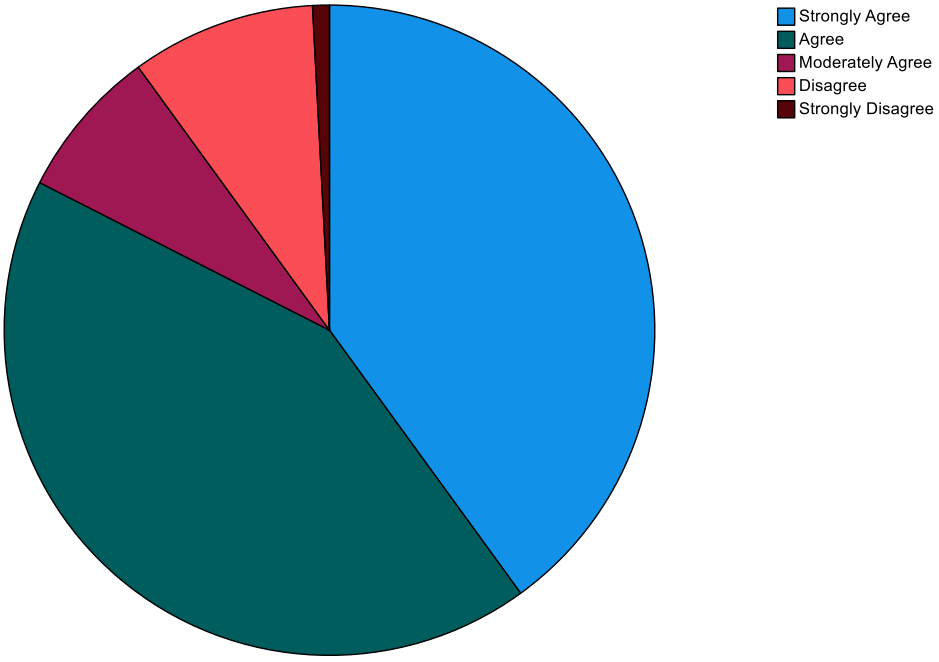
Do you think using digital platforms can bring economic benefits in your community?



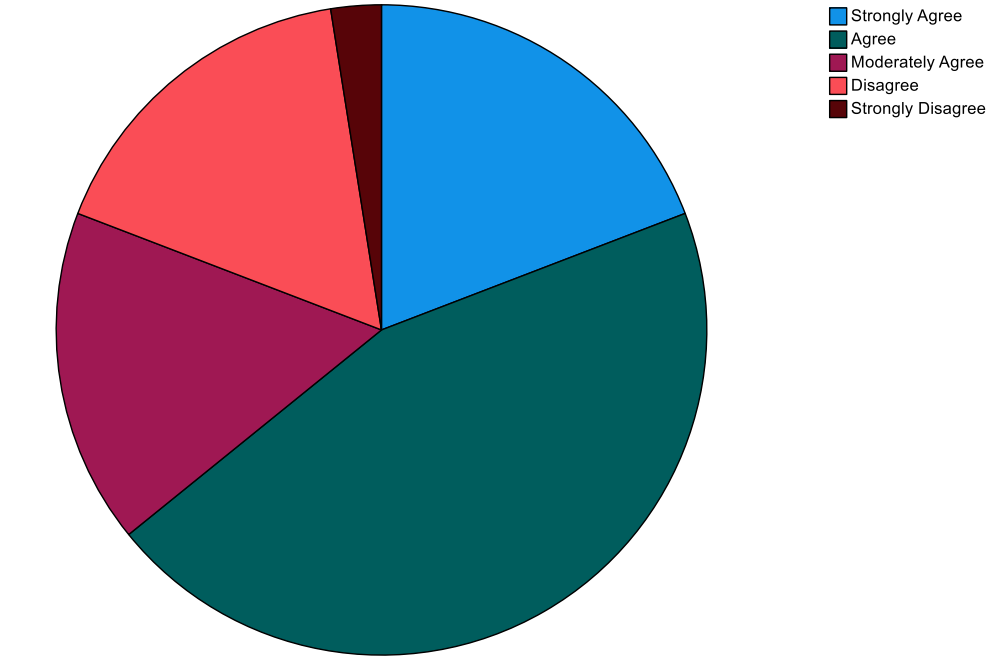
Would you be interested in having a community engagement focus group in Emfuleni?



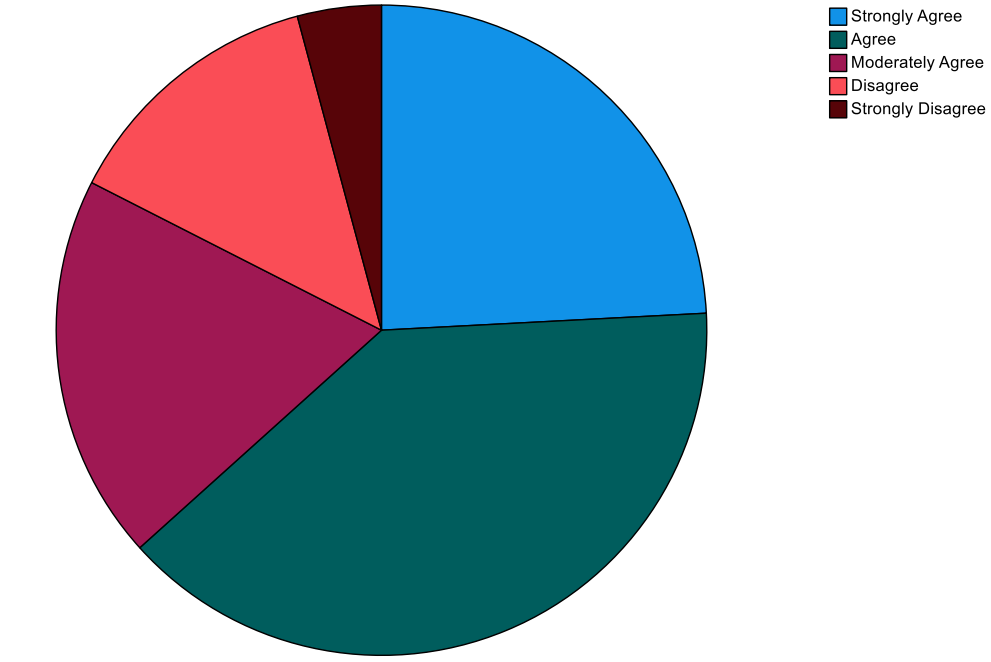
Are there challenges to use of digital platforms in your community?



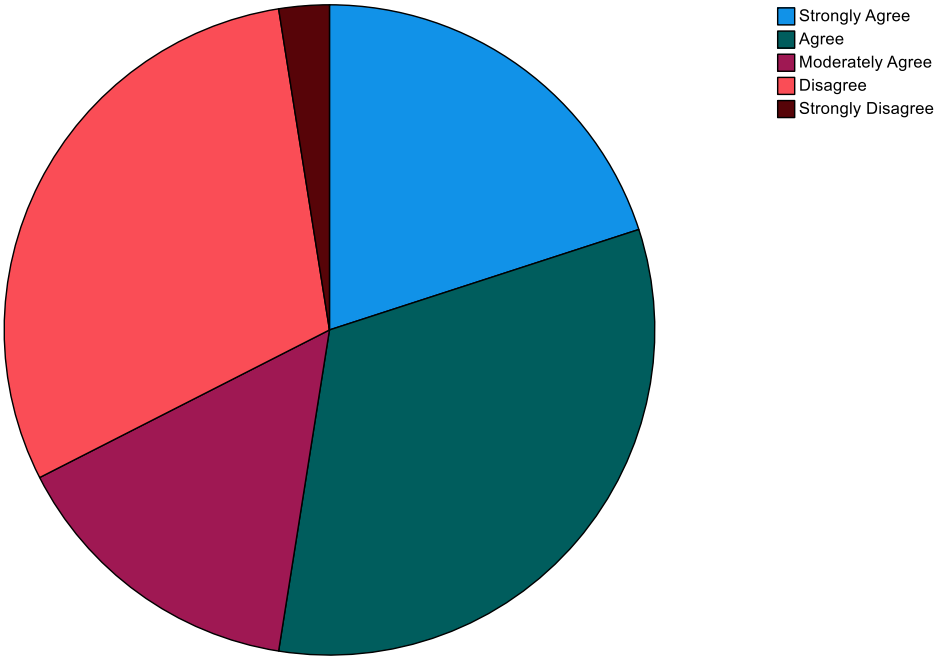
Emfuleni can grown economically if the community is more involved in getting economic benefits.



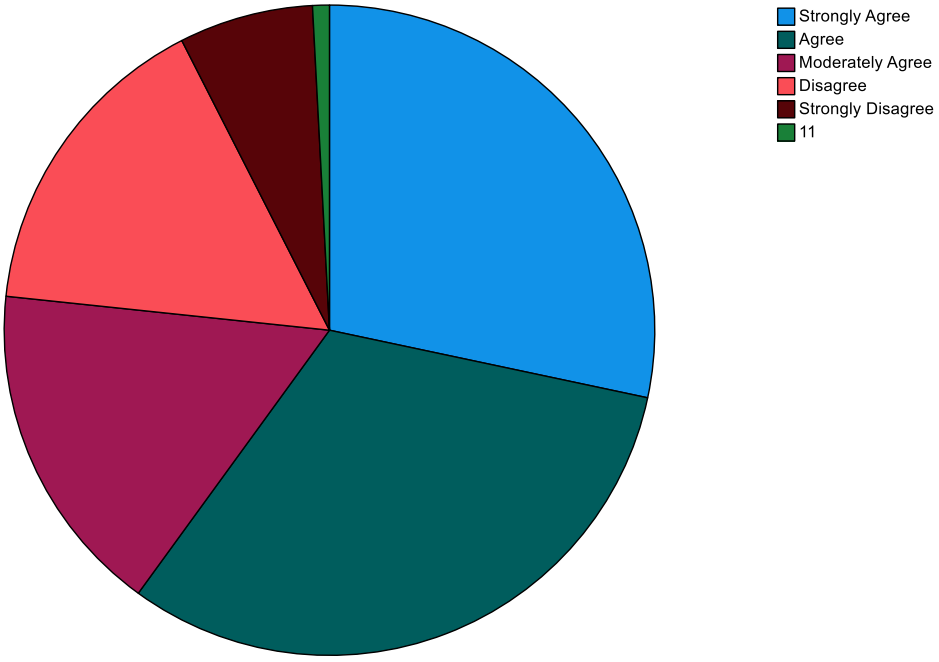
Would you cooperate with a community engagement organisation?



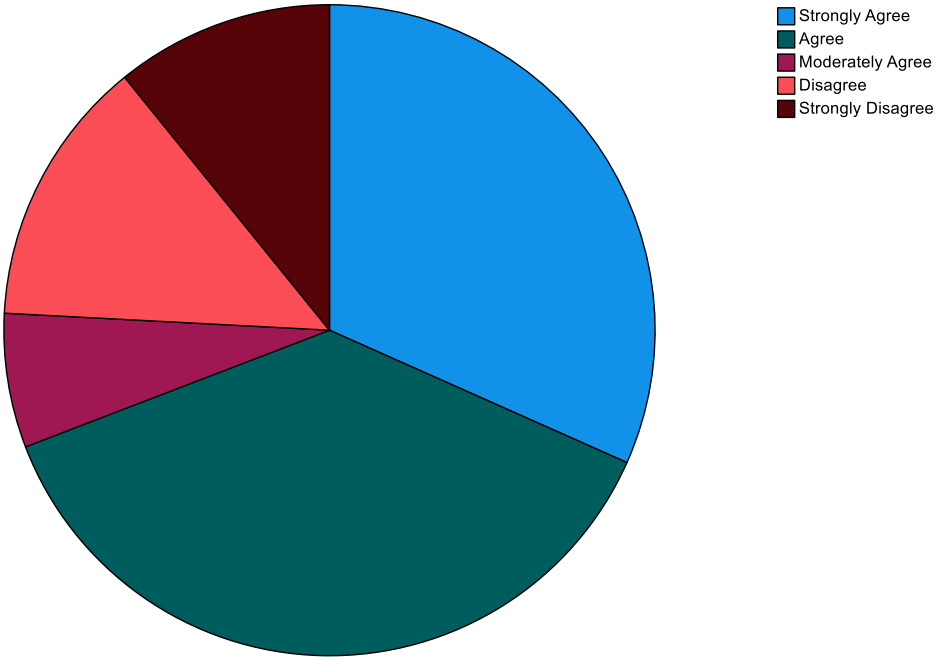
Have you had any business-related engagement from Emfuleni Municipality?



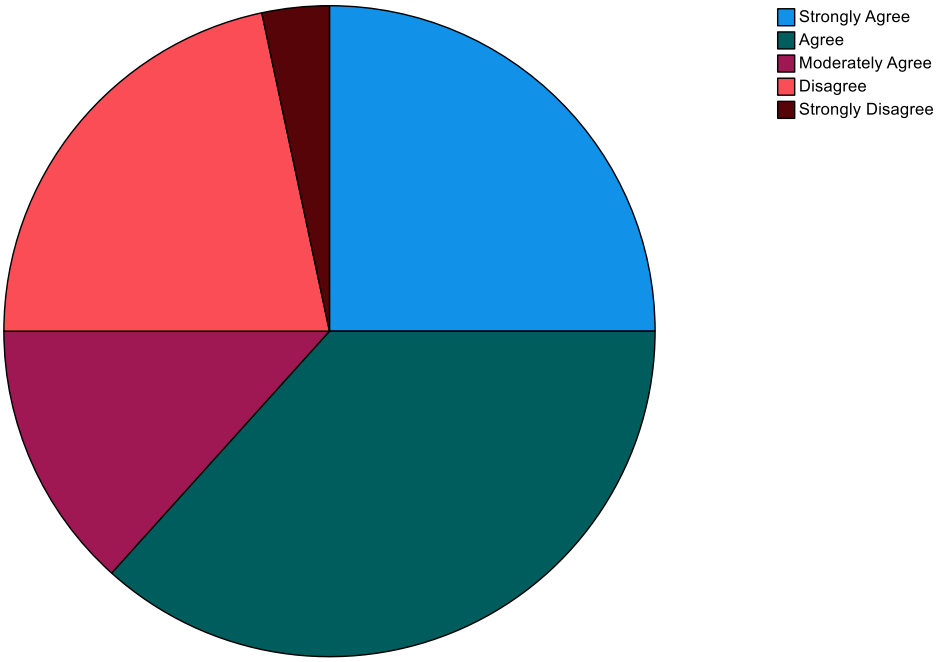
Would there be any value in investing in digital platforms for use by your community?



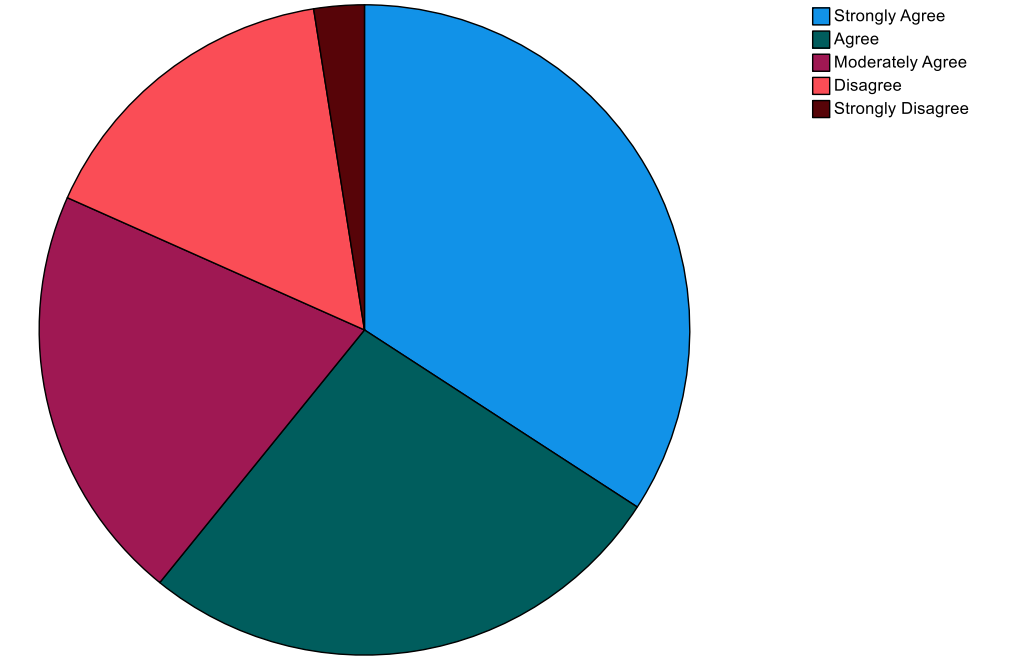
Digital innovations and support for local businesses can lead to economic prosperity for the community.



Would high-speed internet result in more customers for businesses?



Economic development of the Emfuleni townships can create more jobs for local communities.



Godfrey

27/12/2021

R Markdown

This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. For more details on using R Markdown see http://rmarkdown.rstudio.com.

When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

```
library(psych);
library(readxl);
library(lavaan);

## This is lavaan 0.6-6

## lavaan is BETA software! Please report any bugs.

##
## Attaching package: 'lavaan'

## The following object is masked from 'package:psych':
##
##     cor2cov

library(semTools);

##

## ################################################################################
#####

## This is semTools 0.5-3

## All users of R (or SEM) are invited to submit functions or ideas for funct
ions.

## ################################################################################
#####

##
## Attaching package: 'semTools'

## The following object is masked from 'package:psych':
##
##     skew
```

```
dat <- read_excel("HR/kliente/2021/Kliente/Private students/Godfrey/Data RECODED.xlsx")
```

```
## Registered S3 methods overwritten by 'tibble':
##   method     from
##   format.tbl pillar
##   print.tbl  pillar
```

```
# start 1
dat1 <- dat[,c(6:23)]; #

#dat1$Province <- as.factor(dat1$Province);
# REVERSE CODING
#dat1[[1]] <- 6-dat1[[1]];



#rename
#names(dat1)[[1]]  <- "TL1";
#rename Personality
#names(dat1)[[1]]  <- "Q2.1";

# reliability
alpha(dat1[,1:7],check.keys=TRUE); # community engagement
```

```
## Warning in alpha(dat1[, 1:7], check.keys = TRUE): Some items were negative
ly correlated with total scale and were automatically reversed.
##  This is indicated by a negative sign for the variable name.
```

```
##  Item statistics
##        n raw.r std.r r.cor r.drop mean   sd
## Q1   120  0.34  0.35 0.067  0.040  3.6 0.98
## Q4-  120  0.35  0.44 0.264  0.133  3.1 0.70
## Q6   120  0.48  0.49 0.338  0.187  3.7 1.01
## Q8-  120  0.41  0.37 0.105  0.048  2.4 1.17
## Q10- 120  0.41  0.42 0.224  0.076  2.5 1.11
## Q13  120  0.53  0.51 0.383  0.216  3.7 1.11
## Q14  120  0.51  0.48 0.302  0.165  3.4 1.18
##
## Non missing response frequency for each item
##        1    2    3    4    5 miss
## Q1  0.01 0.17 0.19 0.47 0.17    0
## Q4  0.06 0.10 0.75 0.07 0.03    0
## Q6  0.01 0.16 0.17 0.44 0.22    0
## Q8  0.03 0.20 0.17 0.34 0.26    0
## Q10 0.03 0.19 0.22 0.37 0.19    0
## Q13 0.04 0.13 0.19 0.39 0.24    0
## Q14 0.03 0.30 0.16 0.32 0.20    0
```

```
alpha(dat1[,8:13],check.keys=TRUE); # digital recovery
```

```
##
## Reliability analysis
## Call: alpha(x = dat1[, 8:13], check.keys = TRUE)
##
##   raw_alpha std.alpha G6(smc) average_r  S/N  ase mean   sd median_r
##        0.5      0.49    0.47      0.14 0.94 0.07  3.8 0.59     0.15
##
##  lower alpha upper     95% confidence boundaries
## 0.36 0.5 0.63
##
##  Reliability if an item is dropped:
##     raw_alpha std.alpha G6(smc) average_r  S/N alpha se  var.r med.r
## Q2       0.49      0.49    0.46      0.16 0.95    0.072 0.0110  0.17
## Q5       0.41      0.40    0.39      0.12 0.67    0.083 0.0136  0.07
## Q9       0.40      0.38    0.35      0.11 0.62    0.084 0.0074  0.11
## Q11      0.49      0.49    0.46      0.16 0.96    0.072 0.0098  0.16
## Q15      0.40      0.40    0.36      0.12 0.66    0.086 0.0045  0.14
## Q17      0.48      0.47    0.45      0.15 0.89    0.073 0.0113  0.17
##
##  Item statistics
##       n raw.r std.r r.cor r.drop mean   sd
## Q2  120  0.40  0.45  0.22   0.15  4.0 0.90
## Q5  120  0.61  0.59  0.44   0.32  3.5 1.24
## Q9  120  0.60  0.61  0.51   0.35  3.7 1.06
## Q11 120  0.41  0.45  0.23   0.15  4.1 0.95
## Q15 120  0.63  0.59  0.50   0.34  3.6 1.23
## Q17 120  0.51  0.48  0.28   0.20  3.6 1.18
##
## Non missing response frequency for each item
##        1    2    3    4    5 miss
## Q2  0.00 0.11 0.07 0.52 0.31    0
## Q5  0.03 0.29 0.06 0.38 0.24    0
## Q9  0.03 0.13 0.19 0.40 0.25    0
## Q11 0.01 0.09 0.07 0.42 0.40    0
## Q15 0.06 0.16 0.17 0.32 0.30    0
## Q17 0.03 0.21 0.13 0.37 0.26    0
```

```
alpha(dat1[,14:18],check.keys=TRUE); # economic development
```

```
## Warning in alpha(dat1[, 14:18], check.keys = TRUE): Some items were negati
vely correlated with total scale and were automatically reversed.
##  This is indicated by a negative sign for the variable name.

##
## Reliability analysis
## Call: alpha(x = dat1[, 14:18], check.keys = TRUE)
##
##   raw_alpha std.alpha G6(smc) average_r  S/N  ase mean   sd median_r
##       0.16      0.15    0.13     0.035 0.18 0.12  2.8 0.56    0.027
##
```

```
##  lower alpha upper     95% confidence boundaries
## -0.08 0.16 0.39
##
##  Reliability if an item is dropped:
##     raw_alpha std.alpha G6(smc) average_r   S/N alpha se   var.r med.r
## Q3-      0.16     0.154   0.126     0.043 0.182     0.12 0.00242 0.037
## Q7-      0.11     0.104   0.082     0.028 0.116     0.13 0.00085 0.027
## Q12      0.16     0.158   0.130     0.045 0.188     0.12 0.00258 0.037
## Q16      0.05     0.052   0.041     0.013 0.055     0.14 0.00079 0.021
## Q18      0.16     0.157   0.128     0.044 0.186     0.12 0.00271 0.037
##
##  Item statistics
##       n raw.r std.r r.cor r.drop mean  sd
## Q3- 120  0.47  0.46 0.107  0.046  2.2 1.2
## Q7- 120  0.46  0.49 0.230  0.091  2.1 1.1
## Q12 120  0.41  0.45 0.096  0.036  3.6 1.0
## Q16 120  0.59  0.53 0.335  0.130  2.3 1.3
## Q18 120  0.45  0.45 0.100  0.042  3.7 1.2
##
## Non missing response frequency for each item
##        1    2    3    4    5 miss
## Q3  0.01 0.23 0.07 0.32 0.36    0
## Q7  0.03 0.12 0.12 0.43 0.30    0
## Q12 0.03 0.17 0.17 0.46 0.18    0
## Q16 0.32 0.38 0.07 0.13 0.11    0
## Q18 0.03 0.16 0.21 0.27 0.34    0
```

Including Plots

You can also embed plots, for example:

Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated the plot.

Multivariate Correlations

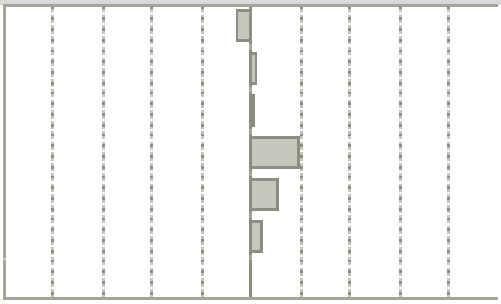
	Q1	Q4	Q6	Q8	Q10	Q13	Q14
Q1	1.0000	0.1146	-0.0172	0.0748	-0.0494	0.0639	0.1515
Q4	0.1146	1.0000	-0.0990	0.0112	0.2472	-0.0441	-0.0668
Q6	-0.0172	-0.0990	1.0000	-0.0983	-0.0021	0.2116	0.1086
Q8	0.0748	0.0112	-0.0983	1.0000	-0.0966	-0.1598	-0.0306
Q10	-0.0494	0.2472	-0.0021	-0.0966	1.0000	-0.0399	-0.0555
Q13	0.0639	-0.0441	0.2116	-0.1598	-0.0399	1.0000	0.0514
Q14	0.1515	-0.0668	0.1086	-0.0306	-0.0555	0.0514	1.0000

The correlations are estimated by Row-wise method.

Cronbach's α

	α
Entire set	0.0576

Excluded Col	α
Q1	-0.0516
Q4	0.0260
Q6	0.0136
Q8	0.1902
Q10	0.1049
Q13	0.0415
Q14	-0.0009



Multivariate Correlations

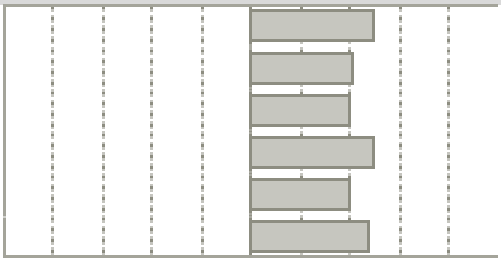
	Q2	Q5	Q9	Q11	Q15	Q17
Q2	1.0000	0.1393	0.1827	0.0161	0.0688	0.0331
Q5	0.1393	1.0000	0.1727	0.1780	0.2240	0.1473
Q9	0.1827	0.1727	1.0000	0.1738	0.3593	0.0449
Q11	0.0161	0.1780	0.1738	1.0000	-0.0070	0.0710
Q15	0.0688	0.2240	0.3593	-0.0070	1.0000	0.2336
Q17	0.0331	0.1473	0.0449	0.0710	0.2336	1.0000

The correlations are estimated by Row-wise method.

Cronbach's α

	α
Entire set	0.4954

Excluded Col	α
Q2	0.4927
Q5	0.4116
Q9	0.4015
Q11	0.4949
Q15	0.3972
Q17	0.4797

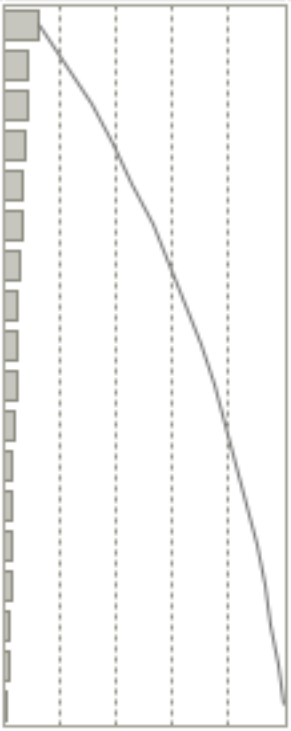


Multivariate Correlations

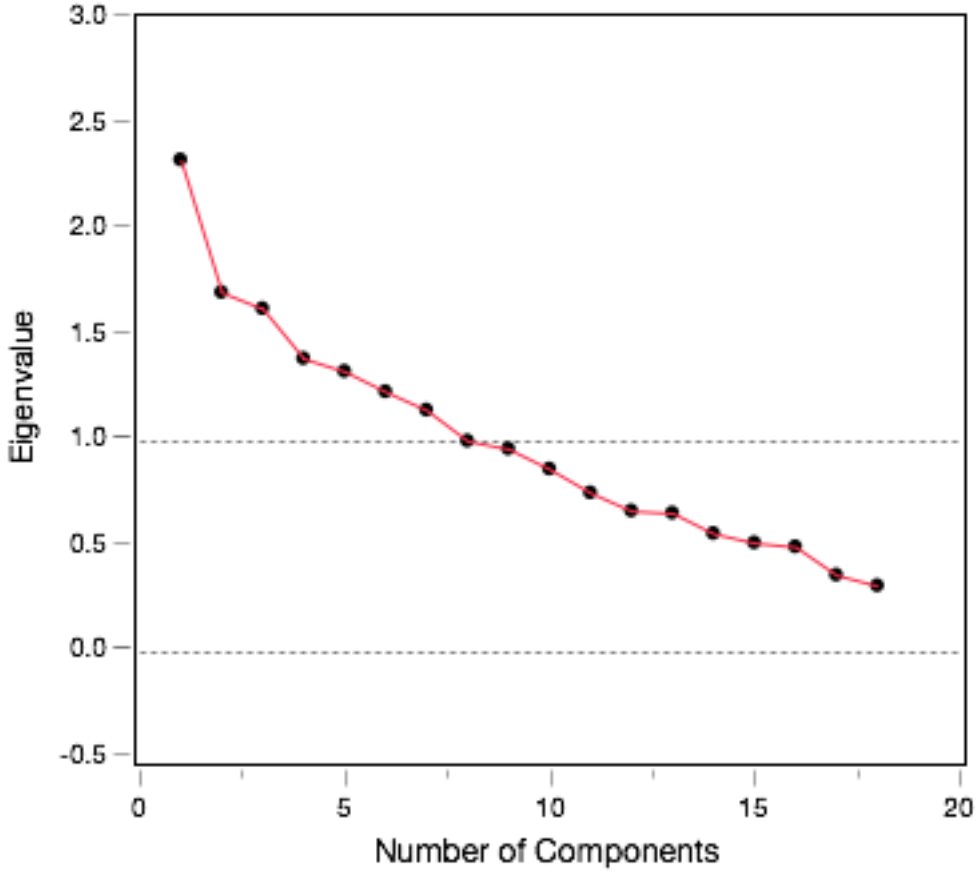
	Q3	Q7	Q12	Q16	Q18
Q3	1.0000	0.0164	0.0217	-0.0659	-0.0271
Q7	0.0164	1.0000	-0.0502	-0.1311	0.0177
Q12	0.0217	-0.0502	1.0000	0.0243	0.0266
Q16	-0.0659	-0.1311	0.0243	1.0000	0.0464
Q18	-0.0271	0.0177	0.0266	0.0464	1.0000

Factor Analysis

Eigenvalues

Number	Eigenvalue	Percent	20 40 60 80	Cum Percent
1	2.3343	12.968		12.968
2	1.7070	9.483		22.452
3	1.6302	9.057		31.508
4	1.3939	7.744		39.252
5	1.3333	7.407		46.659
6	1.2372	6.874		53.533
7	1.1500	6.389		59.922
8	1.0039	5.577		65.499
9	0.9664	5.369		70.868
10	0.8711	4.840		75.708
11	0.7585	4.214		79.922
12	0.6728	3.738		83.659
13	0.6625	3.681		87.340
14	0.5660	3.144		90.484
15	0.5218	2.899		93.383
16	0.5030	2.795		96.177
17	0.3692	2.051		98.228
18	0.3189	1.772		100.000

Scree Plot



Factor Analysis on Correlations with 8 Factors: Principal Axis / Quartimin

Factor Structure

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7
Q1	0.492638	-0.080992	0.265597	0.092482	0.045843	-0.056915	-0.116284
Q4	0.133466	-0.200219	0.046912	-0.141126	0.115793	0.478680	-0.438506
Q6	0.008646	0.174042	-0.000366	0.490792	-0.082516	-0.110681	0.054761
Q8	0.045455	0.076321	0.199701	-0.167487	-0.181817	-0.091032	-0.084249
Q10	-0.196258	-0.001793	0.004433	0.004762	-0.080173	0.493680	-0.005078
Q13	0.173738	-0.144069	-0.195936	0.419643	0.014417	-0.054899	0.218711
Q14	0.039247	0.155165	0.095261	0.189044	0.358011	-0.160886	-0.057382
Q2	0.555415	0.148805	0.067725	0.020289	-0.093600	-0.227591	0.134763
Q5	0.121520	0.257681	0.247438	-0.080970	-0.039018	0.015498	0.017885
Q9	0.165519	0.548170	0.057244	0.222722	-0.101645	-0.154489	0.047799

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7
Q11	0.006036	0.133554	0.139508	0.237559	-0.461706	-0.054169	0.337512
Q15	0.028648	0.615708	0.295021	-0.030625	-0.049963	-0.103249	-0.059415
Q17	0.030243	0.206931	0.596855	-0.083410	-0.038146	-0.070398	-0.055043
Q3	0.536038	0.118861	-0.030782	0.072036	-0.037345	-0.053481	-0.069973
Q7	0.024181	0.173386	0.282439	0.219706	-0.038347	-0.388481	-0.104297
Q12	0.007034	-0.091943	-0.101637	0.105709	-0.074526	0.005164	0.299017
Q16	-0.101540	-0.198787	-0.074730	-0.142614	0.516809	0.098381	-0.000133
Q18	-0.036936	0.343447	0.322374	-0.186633	0.026175	-0.089153	0.367643

Final Communality Estimates

Q1	0.34325
Q4	0.44760
Q6	0.26966
Q8	0.19315
Q10	0.29527
Q13	0.27008
Q14	0.22271
Q2	0.37325
Q5	0.34772
Q9	0.37205
Q11	0.37573
Q15	0.40271
Q17	0.36088
Q3	0.31621
Q7	0.29213
Q12	0.10962
Q16	0.32488
Q18	0.39847

Variance Explained by Each Factor Ignoring Other Factors

Factor	Variance	Percent
Factor 1	0.9850	5.472
Factor 2	1.1665	6.481
Factor 3	0.8925	4.958
Factor 4	0.7500	4.166
Factor 5	0.7041	3.912
Factor 6	0.7914	4.397

Factor	Variance	Percent
Factor 7	0.6486	3.604
Factor 8	0.6229	3.461

Rotated Factor Loading

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7
Q2	0.546543	0.096033	-0.005286	-0.069630	-0.055094	-0.143213	0.143817
Q3	0.533581	0.113659	-0.112135	0.006647	-0.032122	0.007489	-0.073035
Q1	0.473464	-0.159241	0.296773	0.102481	0.060350	0.019549	-0.057617
Q15	0.004636	0.583961	0.130764	-0.029841	0.010665	0.025460	-0.051592
Q9	0.133191	0.538067	-0.092845	0.169572	-0.043816	-0.019310	0.003521
Q17	-0.002741	0.046962	0.577687	-0.028117	-0.001177	0.009791	0.004360
Q7	-0.059621	-0.004833	0.211057	0.182321	-0.053638	-0.366222	-0.157503
Q8	0.037853	0.068496	0.189351	-0.127943	-0.152400	-0.050014	-0.042662
Q6	-0.042596	0.149369	0.007508	0.486141	-0.045318	-0.010986	-0.001330
Q13	0.159501	-0.129716	-0.106812	0.384306	0.040977	-0.002602	0.187209
Q16	-0.066250	-0.151854	-0.015978	-0.122937	0.493160	0.039273	0.063643
Q14	0.010659	0.151535	0.086333	0.201193	0.386124	-0.085293	-0.025926
Q10	-0.152951	0.066671	0.059006	0.086298	-0.070208	0.506056	0.010396
Q4	0.172791	-0.137757	0.080264	-0.047637	0.058101	0.438455	-0.380096
Q18	-0.025676	0.254777	0.262753	-0.215377	0.101186	-0.011585	0.408221
Q12	0.018809	-0.090928	-0.041347	0.076226	-0.046704	0.017390	0.285086
Q11	-0.022161	0.012492	0.140559	0.193627	-0.419286	0.003810	0.265758
Q5	0.111800	0.115837	0.119908	-0.140782	-0.059099	0.012112	-0.013010

Suppress Absolute Loading Value Less Than0.3
Dim Text0.4

Factor Analysis on Correlations with 6 Factors: Principal Axis / Quartimin

Factor Structure

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
Q1	-0.005056	0.522094	0.019585	-0.119130	0.017119	-0.034453
Q4	-0.167572	0.155457	-0.218821	-0.262986	0.157167	0.529095
Q6	-0.035486	0.030300	0.463109	0.163449	-0.067757	-0.032572
Q8	0.004872	0.051890	-0.089015	-0.274669	-0.243056	-0.173672

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
Q10	0.058556	-0.206751	-0.043399	0.034600	-0.068808	0.478058
Q13	-0.187242	0.144602	0.181091	0.404159	0.017466	-0.052247
Q14	0.055129	0.072156	0.251431	-0.063156	0.340891	-0.116133
Q2	0.149589	0.539076	0.107252	0.073730	-0.113715	-0.221676
Q5	0.468613	0.167943	0.158639	-0.054161	0.017523	0.162768
Q9	0.280663	0.180448	0.519812	0.003652	-0.085733	-0.060975
Q11	0.238736	0.006260	0.232549	0.253047	-0.462982	-0.035505
Q15	0.434572	0.069716	0.383583	-0.287445	-0.067271	-0.044056
Q17	0.392318	0.104664	0.083989	-0.355767	-0.093762	-0.052870
Q3	0.024690	0.529217	0.142263	0.028792	-0.011259	0.015383
Q7	0.143226	0.105114	0.344198	-0.141906	-0.012106	-0.243379
Q12	0.011786	-0.030542	-0.021378	0.298736	-0.092504	-0.050932
Q16	-0.011154	-0.107086	-0.225159	0.031332	0.511860	0.075297
Q18	0.597110	-0.033680	0.057619	-0.001887	-0.037574	-0.141994

Final Communality Estimates

Q1	0.28401
Q4	0.44467
Q6	0.24970
Q8	0.17616
Q10	0.27588
Q13	0.24386
Q14	0.20427
Q2	0.35908
Q5	0.28709
Q9	0.31658
Q11	0.34646
Q15	0.35467
Q17	0.26291
Q3	0.29137
Q7	0.18922
Q12	0.10243
Q16	0.32058
Q18	0.38387

Variance Explained by Each Factor Ignoring Other Factors

Factor	Variance	Percent
Factor 1	1.1694	6.496
Factor 2	1.0411	5.784
Factor 3	1.0769	5.983
Factor 4	0.7468	4.149
Factor 5	0.7304	4.058
Factor 6	0.7304	4.058

Rotated Factor Loading

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
Q18	0.617953	-0.056194	-0.069692	0.071492	0.030576	-0.128792
Q5	0.462546	0.152276	0.071891	0.004292	0.049646	0.201013
Q17	0.341419	0.062593	0.022161	-0.316876	-0.071990	-0.020217
Q2	0.129769	0.531732	-0.030722	0.123709	-0.079060	-0.172340
Q3	-0.002651	0.528165	0.064471	0.058468	-0.006800	0.064451
Q1	-0.027449	0.525972	-0.051766	-0.084158	0.013844	-0.000457
Q8	-0.040799	0.035757	-0.099234	-0.280048	-0.249508	-0.161823
Q6	-0.117506	-0.030932	0.483706	0.117580	-0.057188	0.019529
Q9	0.182656	0.099877	0.469060	0.001719	-0.050763	0.014576
Q15	0.337332	-0.015102	0.337654	-0.271120	-0.035446	0.015986
Q7	0.056933	0.028030	0.314466	-0.148861	0.015008	-0.201098
Q13	-0.181193	0.149570	0.167082	0.385268	0.027226	-0.035613
Q12	0.048095	-0.008968	-0.055755	0.304321	-0.073130	-0.053499
Q11	0.195687	-0.015001	0.169702	0.246172	-0.429640	0.023465
Q16	0.089911	-0.067667	-0.215329	0.071149	0.513878	0.007793
Q14	0.029349	0.023297	0.246050	-0.056032	0.359654	-0.111596
Q4	-0.146510	0.209263	-0.144294	-0.259515	0.088201	0.517684
Q10	0.078272	-0.175203	0.020080	0.021501	-0.098830	0.477772

Suppress Absolute Loading Value Less Than0.3
Dim Text0.4

Factor Loading Plot

[x] Label variables