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Integration of cooperative business model in the South African taxi industry: A case study of Johannesburg municipality

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Executive summary

The objective of this business venture is to establish a cooperative minibus transportation organization structured around shared ownership. Members of this cooperative will be drawn from the DORLJOTA and FARADAY Taxi Associations, both active in the Johannesburg metro area. This cooperative will operate independently from traditional taxi associations, with its own operational protocols, policies, and governance structures.

This venture aims to provide taxi owners with opportunities to explore new markets and business segments. By participating in the cooperative, members will not only diversify their revenue streams but also access skills development programs for themselves and their drivers. Additionally, they will gain valuable business insights and achieve economies of scale through efficient fleet management.

The primary goal of the proposed cooperative is not to disrupt the current operations of minibus taxis serving predominantly low-income communities. Instead, it seeks to introduce a specialized taxi service catering to the urban middle class. This service will offer competitive pricing comparable to e-hailing services, adhere to stringent policies, and provide the urban middle class with a reliable public transport option.

By doing so, this initiative offers two-fold benefits: cooperative members expand their income sources while the urban middle class gains access to a more affordable alternative to costly e-hailing services and private vehicle ownership. The growing challenges faced by urban vehicle owners, including high ownership costs, rising fuel prices, and traffic congestion, highlight the need for such initiatives.

This cooperative venture will selectively recruit taxi owners with well-maintained vehicles, positioning them as both shareholders and clients. The vehicles provided by owners and associations constitute the primary assets enabling the business to serve middle-class commuters. Recognizing the greater spending power of the urban middle class, the business will price its services, accordingly, setting itself apart from traditional taxi services.

Key words: Taxi industry, Taxi cooperatives, middle class, new market segment, new business opportunities, sustainable transport, accessible public transport, safe public transport, affordable public transport, formalisation, transport transformation.

Overview

1.1 Topic of interest

Integration of cooperative business model in the South African taxi industry: A case study of Johannesburg municipality.

1.2 Statement of Purpose

This business venture proposal aims to investigate the viability of establishing a minibus (taxi) public transportation service tailored for the urban middle class residing in Johannesburg West & North. The study intends to analyse the transportation requirements and preferences of this demographic while evaluating the potential of a taxi cooperative to address the unmet transportation demands of both the urban middle class and private businesses in the area.

1.3 Background of South African taxi industry and middle-class.

The South African taxi industry originated in the early 1960s under the apartheid regime to meet the demand for an alternative, unscheduled transportation option for the impoverished and marginalized Black community. Recognizing that Black people lacked legal access to economic opportunities, the government introduced the Road Transportation Act in 1977. This act created a loophole, allowing Black people to apply for legal permits to transport passengers across South Africa (Molobela, 2021).

The South African Black Taxi Association was the first nationally recognized taxi owners ‘association and through its genesis brought together hundreds of local taxi associations (Taxi, 2017). Over the years minibus taxis emerged as the most dominant mode of public transport in South Africa, operating without fixed schedules or timeframes unlike conventional modes of transport such as buses and trains. This flexible operating model enabled drivers and owners to serve commuters in cities, towns, townships, and villages, maximizing the number of trips and profits from their operations (Molobela, 2021).

Today taxis operate from designated terminals known as taxi ranks and make stops at various points along their routes to pick up and drop off passengers. Passengers signal for a taxi by using hand gestures, indicating their destination to the approaching driver. If the driver is traveling in the same direction, the taxi will stop. Given that the industry primarily serves the lower-income demographic, fares (typically paid in cash) are kept affordable and are usually regulated by regional taxi councils overseeing the

associations (Yende, 2024).

The taxi industry unquestionably holds a pivotal role in the SA economy as it generates approximately R50 billion in annual revenue and spends over R20 billion on fuel alone. Thus, it provides a livelihood for taxi owners and drivers, as well as indirectly supporting their families and passengers. The benefits of the taxi industry extend beyond just the owners, drivers, and passengers it currently serves (Mathabathe, 2020). Despite its influence and impact the industry has often disregarded the urban middle class in its business model, and conversely, the middle class has never considered the taxi industry as a transport option that aligns with their standards and requirements. Arguably this perception by the middle class stems from the belief that minibus taxis are unsafe, unhygienic, and lacking in organization (Govender, 2006).

The South African middle class, particularly the black middle class, is currently experiencing significant growth and represents 7% of the nation's black population, excluding Indians, Coloureds, and Black Africans (Hamilton, 2022). Comprising a population of 3.4 million individuals, they represent almost half of South Africa's overall middle-class population of 7 million people. The South African middle class is defined by an income range between R22,000 and R40,000 per month and despite their earnings, many face financial strain, particularly with the challenge of meeting instalment payments on private vehicles, which constitute the primary mode of transport within this demographic (Businesstech, 2022).

Moreover, escalating fuel costs pose a growing challenge for this LSM segment in maintaining private vehicles, with fuel prices having surged by 21% since the onset of 2018. These fuel price hikes are exacerbating inflation and diminishing disposable income for middle-class households within an already sluggish economy characterized by issues like load shedding, widespread unemployment, and crime (Meyer, 2018).

Under such conditions, there exists a significant opportunity for the taxi industry to organize itself and leverage the desires of the middle class to reduce reliance on private transportation and opt for more accessible public alternatives, should they be made available.

1.4 Scope of the proposed business venture

This proposed business venture aims to assess the potential for urban taxi operators in the Johannesburg municipality to explore new market segments, particularly the urban middle class, through a cooperative business model. The utilization of a cooperative framework offers a structure for taxi associations to collaborate and combine resources to address the social needs of a specific demographic while safeguarding their economic interests. Furthermore, the venture explores the possibility of 'cooperatizing' urban taxi operators to engage with or capitalize on opportunities within the private sector, given that a significant portion of middle-class individuals are employed by or own businesses in this sector.

The proposed business venture serves as a facilitator for urban taxi associations, organizing their resources to meet the potential demand of the urban middle class for a public transportation system characterized by safety, reliability, punctuality, customer-centricity, and operational excellence.

1.5 Business Problem of Proposed Business Venture

Urbanization, heightened inflation, and escalating fuel expenses are amplifying the cost of living in South Africa, leading to a decline in household income among middle-class residents of Johannesburg, thereby limiting their spending capacity on ownership of private vehicles. Taxi association partnerships and collaboration, particularly in a cooperative format, have historically been viewed as avenues for exploring new business opportunities, formalization, and accessing untapped market segments like the middle class. However, the industry has yet to grasp and, more importantly, implement these suggestions in meeting the transport needs of a broader South African population.

The research problem will explore the extent of transportation and business prospects within the urban middle-class market for Johannesburg taxi associations operating within a formalized cooperative business model.

The research will investigate the private business sector's willingness to pursue new ventures with the industry, dependent on efforts to enhance its reputation. Ideally, the study will identify and validate the obstacles that prevent the industry from exploring new business opportunities and contribute to its negative societal and business image.

The subsequent research will use a mixed methods approach, including surveys and semi structured interviews with South African middle-class citizens and private sector businesses. It will also encompass a review of academic and industry literature.

1.6 Research Objectives

The business venture proposal aims to achieve several objectives related to introducing cooperative business models in the taxi industry. Its primary goal is to determine the feasibility of the taxi industry offering public transportation services to Johannesburg's urban middle class. Moreover, the research will investigate potential collaborations between the taxi industry and the private sector. Additionally, it will identify the primary barriers preventing the industry from accessing new market segments and fostering growth.

1.7 Research Questions

To fulfil the specified research goals, the research initiative for the business venture will aim to explore a series of research questions:

1. Does a viable market or opportunity exist for the taxi industry to cater to the urban middle class for transportation needs?
2. Are there potential business prospects for the taxi industry to engage with the private sector?
3. What are the primary obstacles hindering the taxi industry from accessing new market segments and diversifying its business, and how might cooperatives address these challenges?

1.8 Justification/Rationale of the study

The primary objective of this business venture proposal is to bridge the gap in understanding and practical application concerning the effects and potential implications of cooperative business models within the South African taxi industry. It also aims to address the possible market demand that the taxi industry could fulfil by meeting transportation needs of the urban middle class. While cooperatives have been proposed as a solution to various challenges within the taxi industry, there is limited literature documenting the establishment or impact of cooperatives within the industry.

The proposed venture research intends to assess the viability and impact of cooperatives on influencing the urban middle classes to utilize taxis as a mode of public transportation, as well as the willingness of the private sector to engage in new ventures within the industry.

The research holds significance as it may contribute to the limited understanding of the effects and impact of cooperatives on the informal South African taxi sector. It will offer insights for future academic research, policy development, businesses research and implementation strategies aimed at enhancing the industry's performance.

1.9 Delimitations of the study

The delimitations of this proposed business venture proposal include:

Geographical scope: This study is concerned with the impact of co-operative business models on the South African urban taxi business. The findings and recommendations of the study may be applicable in other developing African countries but not first world economies where minibus taxis may not be in use.

Sample size: The study is limited to the sample size of 10 private companies, and 47 middle-class citizens chosen for the purpose of the research. A larger sample size may provide more accurate and representative data.

Timeframe: The study is limited by the timeframe in which it is conducted and may not reflect any future developments or alterations in the taxi industry.

Access to data: Since limited research exists about the taxi industry, the study may be limited to the available data that has been undertaken by researchers so far.

Methodology: This study is limited to the methodology used.

1.10 Assumptions

For this business venture proposal, the following assumptions will be made:

Assumption 1: It is assumed that taxi stakeholders (owners, associations, private sector and civilians) being interviewed for this study have adequate knowledge and expertise about the industry and are able to provide valuable insights and feedback.

Assumption 2: It is to be assumed that the literature reviewed for the purpose of this study is up to date and relevant to the SA Taxi industry.

Assumption 3: It assumed that the findings of the study will be valid and reliable based on appropriate collection of data and analysis methods. Any biases or limitations in the study will be acknowledged and addressed.

Literature Review

2.1 Introduction

The literature review focused on three aspects, the **first** was to understand the nature of business cooperatives and their impact in new market expansion plans and meeting broader social and economic needs of members and customers that cooperatives serve. The **second** was to use literature to understand and highlight unmet transport needs of the urban middle class and the possible business opportunities thereof for taxi operators. The **third** aspect goes on to explore existing barriers that the urban taxi industry would first have to rectify to unlock new market segments and business opportunities with the private sector.

Theoretical frameworks such as Business model canvas, PESTEL and SWOT Analysis were used to study the public transport market. The SWOT analysis tool was used to identify the opportunities in the public transport market.

2.1.2. Cooperatives as a step to unlocking new market segments and new business opportunities for urban taxi operators.

In the past, multiple efforts to establish partnerships within the taxi industry, including with businesses and government stakeholders, have been made but failed due to poor implementation and governance. This situation may stem from a continuous blame game whereby the taxi industry frequently cites insufficient government support and overly stringent and inconsistent regulatory frameworks as major obstacles (Yende, 2024), while the government, conversely, attributes these failures to the taxi industry's resistance to formalization, regulatory compliance, and internal conflict (Fobosi, 2019).

Despite governments policy efforts like the widely known taxi recapitalization program of 2006, the release of two additional strategy documents in 2007, and the enactment of the National Land Transport Transition Act, significant challenges and gaps persist for many South Africans, including the middle class, in accessing dependable, safe and cost-effective public transportation options (Thomas, 2016).

Cooperatives have been known to improve precarious business practices and have often been suggested as a remedy for many of the taxi industry's problems. They are defined in many ways and usually are flexible depending on the objective and vision of the cooperative. More distinctly they are a group of self-governing individuals who come together voluntarily to fulfil their shared cultural needs and aspirations through an entity where each member co-owns the business, and decisions and procedures are determined through democratic voting (Wanjare, 2023). Mazzarol (2018) takes on a more social description describing cooperatives as having more of a societal role to play by addressing social gaps that in return can be economically profitable for the members of the cooperative. Irrespective of the perspective, a commonality is that the cooperative business model is mutually beneficial not only for its members but the environment in which it functions.

According to Mtsi (2021), for cooperatives to work in the South African taxi industry there are four primary stakeholders who significantly need to contribute to its success. These stakeholders include the minibus taxi industry in itself, private business sector, public transport commuters, and government (MBUS Model), each of which would hold distinct ideals, expectations, and interests, which can and would shape the objective and vision of the cooperative. Contrarily, Thomas (2016) suggests that although the aforementioned stakeholders are necessary for success, an additional stakeholder is needed in the form of an independent governing structure which would be responsible for establishing & enforcing policies through strict and ethical governance. This is further supported by Wakelin-Theron (2022) who suggests that a sustainable taxi industry must culminate from good independent governance structures overlooking it.

Such overlooking structures could consist of a diverse and inclusive group of individuals and be staffed by individuals who possess a comprehensive understanding of public taxi transportation, and its importance in catering to the transport needs of all citizens and not just that of the urban poor.

A cooperative business model not only enables independent governance policies and structure but, more importantly, fosters the development of innovative business initiatives. From the perspective of a taxi cooperative, potential business initiatives with industry stakeholders could include the following:

- Data collection

- Advertising
- Outsourcing logistics
- Green driving initiatives

In addition, collaborations with government could involve joint policymaking that facilitates rather than prohibits urban taxi operations and thus end ongoing back and forth between the industry and government (Mtsi, 2021). This could also assist and drive governments vision of achieving its strategic development goals of building a SMART city through a functional public transportation network for all. (Wilson, 2020) .

The cooperative business model, as demonstrated in industries like the South African agricultural sector, has historically shown resilience and stability when compared to alternative business models. It is clear this model significantly contributes to economic development, job creation, and addressing market failures. Despite its crucial role, cooperative models have often been overlooked in economic and management literature, and this could also potentially explain why the taxi industry has yet to implement the model as an alternative business model for accessing new market segments and opportunities (Mazzarol, 2018).

The South African taxi industry, historically informal in nature has clearly struggled to cultivate a positive image that resonates with the urban middle class or private businesses. However, taxi cooperatives with clear mandates and governance structures may possibly offer the industry a chance to improve its reputation and thus venture into new business opportunities and new market segments.

2.1.3 Transport gaps and unmet needs of the urban middle class

2.1.3.1 Growing middle class: Globally, urban populations are on the rise, and South Africa is no exception to this trend. The urban middle class in South Africa is experiencing growth, predominantly attributed to post-apartheid democracy as an increasing number of black, coloured, and Indian individuals enter the economic market. The South African black middle class have made the most notable inroads as they make up half of the country's total middle-class count of 7 million people (Hamilton, 2022).

An expanding urban population such as that of Johannesburg could present both challenges and opportunities. On one hand, rapid urbanization fueled by a growing middle

class should be controlled according to Beer (2019) to control strain on infrastructure like transportation. Conversely Transport (2018) argues that such growth is good and can only foster opportunities in that it opens avenues for transport businesses to expand and cater to the social needs of the population, thereby fostering economic benefits for all.

This latter raises the question of whether urban taxi operators can identify and capitalize on the pros of a growing middle class by consolidating and pooling their resources through unique cooperative business models to meet their needs. Embracing such forward-thinking strategies could empower the industry to broaden their revenue sources, earn favour from the government as a formalized, tax-paying industry, and, above all, contribute significantly to serving the nation.

2.1.3.2 Reduced expenditure on transport for the middle class: Almost a decade ago Yesikar (2015) found that the South African middle class encountered longstanding issues such as debt, increased taxes, and the rising cost of living. Further exacerbated by inflation, this resulted in diminished household income allocated for transportation as households had to priotitise their expenditures. A few years later the economic situation and trend remains unchanged according to Masoga (2022) who reiterates that petrol prices and electricity tariffs continue to exhibit a negative effect on inflation in South Africa and thus continues to burden the pockets of the middle class causing them to spend less on transportation by downgrading vehicles or buying fewer private cars.

Although current economic trends in 2024 continue to challenge the middle class, this presents a potential opportunity for urban taxi operators. By offering safe, affordable, and high-quality public transportation, they can effectively cater to this specific demographic. The taxi industries economies of scale enables it to provide cost-effective public transportation options, benefiting taxi owners, private businesses government and commuters through a shared value approach (Yende, 2024)

2.1.3.3 Middle class and private business sector prioritise green sustainable transport.

Globally, businesses and societies are increasingly emphasizing environmental conservation through sustainable business practices and social development. Despite this, Tongwane (2015) noted that Gauteng province reported the highest greenhouse gas (GHG) emissions in the country, surpassing even countries like Lesotho and accounting for one-third of total road transport emissions in South Africa.

Central to combating such issues and attaining sustainable development through transport is the establishment of a viable public transport system that would alleviate the strain on the environment (Transport, 2018). Such a system would be able to decrease the number of vehicles on roads, incentivizing more individuals to utilize public transportation and thereby alleviating the strain on the environment. Another more aggressive approach to conserving the environment is that of going green and promoting use of more electric private and public vehicles amongst the South African population (Wakelin-Theron, 2022). However, Rajper (2020) argues that this is not viable as electric vehicles (private or people carriers) carry high purchase prices and the charging infrastructure is not readily available in a developing economy facing huge electricity provision issues such as South Africa.

According to Kadlubek (2015) the imperative elements of sustainable transport are those initiatives that encompass the following distinct features:

- Effective customer service
- Just in time
- Rapid responding
- Intelligent transport systems
- Clean transportation processes
- Reengineering of transport processes

An evaluation of the present condition of the urban taxi industry evidently reveals that the industry, operating under its current methods and business models, is significantly distant from achieving these attributes. This is likely why the industry has struggled to capture a share of the middle-class transport market and secure business opportunities with the private sector. However, with a revitalized image and a cooperative business model, the industry could attain such operational sophistication, positioning itself as a key player in expanding public transportation to cater to the needs of both the economically challenged middle class and the disadvantaged.

Sustainable development encompasses multiple dimensions and can be characterized as a series of transformations involving the exploitation of resources, redirection of investments, and implementation of institutional changes, all aimed at creating opportunities to fulfil human needs and aspirations. It incorporates environmental and social value in the core of business (Kadlubek, 2015). Opportunities are thus present for

the urban taxi industry to align with global sustainability objectives by providing a taxi service tailored to the transportation needs of the middle class and thus reduce the environmental burden of private vehicle usage in Gauteng.

2.1.4 Barriers to unlocking middle class transport segment and private sector business opportunities.

2.1.4.1 Precarious business practices: The existing operational frameworks within the urban taxi industry pose significant challenges for operators to adjust to the evolving economic, social, and environmental conditions of the country (Browning, 2001). Arguably the industry's informal and unstable business practices may have hindered its advancement in attracting new market segments and have made the private sector reluctant to associate with the negative public image the taxi industry has historically acquired.

To remedy this, literature proposes cooperative business models whereby founding members could organize themselves and their resources under a rigorous constitution and governing policies that would promote professionalism, safety, customer satisfaction, cleanliness, and good driving behaviour to name a few (Fobosi, 2019). In theory Yende (2024) argues that this approach seems straightforward, but implementation could be challenging, especially without skilled management and leadership, he emphasises that key to success is not the actual structure of the cooperative but the leadership and management of it. He further goes on to explain that if leadership is not put at the forefront this might result in apathy and a return to unstable work practices, nonetheless.

2.1.4.2 Lack of customer centricity: Taxi drivers interact with numerous customers daily, making a customer-centric approach essential for ensuring customer satisfaction. Unfortunately, customer-centricity has not always been the norm, as taxi drivers are sometimes perceived as rude and dismissive toward the commuters they serve (Govender, 2006). This is confirmed by department (2020) which states that minibus taxi passengers have endured strained relationships with taxi operators, with some issues dating as far back as 24 years.

In addition to inadequate customer service provided to passengers, problematic driving behaviour and vehicle conditions among drivers have also been recognized as significant factors that need to be addressed. Such discouraging factors can certainly deter the middle class from viewing taxis as a viable public transport option, thereby preventing the

industry from tapping into new market segments that prioritize customer-centric services. According to Fobosi (2019) The potential rationale behind these behaviors exhibited by drivers could be attributed to their exposure to unfavorable working conditions , which may not adhere to the basic standards outlined in the Basic Conditions of Employment Act. Conversely, Thomas (2016) attributes these driver behaviors to a lack of education and the nature of the job, which requires minimal education and continuous training. Drivers can typically secure employment with just a driver's license and familiarity with the region they work in, leaving little opportunity for professional development that could enhance customer service.

Day to day driver working conditions consist of the following

- Irregular working schedules
- Low pay
- Poor protection from termination of employment
- Lack of benefits
- Lack of union representation

These working conditions highlight a gap in the industry for sound working policies that protect workers and govern conduct between all stakeholders such as associations, drivers, owners etc. This is confirmed by Mmakwena (2022) who proposes the necessity of regulating the industry to improve these conditions for drivers and customers alike.

2.1.4.3 Vehicle conditions and driving behaviours: The state of vehicles remains a worry in the industry and acts as a deterrent for many urban citizens to consider taxis as a transportation option. Numerous vehicles have been found to be non-compliant with traffic regulations, had notable defects, lacked proper maintenance, and were excessively dirty (department, 2020). In terms of driving behaviour, issues such as speeding, tailgating, hazardous overtaking, failure to use headlights after sunset, lack of seatbelt usage, overloading, and disregarding red traffic lights were among the primary concerns identified in the daily operations of urban taxi operators. Arguably, these ongoing operational issues remain hinderances to the industry's ability to tap into new market segments within the middle class.

The potential of Cooperative business models, however, may instil positive driving behaviours through formal codes of conduct and driving policies that all members and

their drivers should adhere to to maintain the reputation of the cooperative and its affiliated stakeholders. This premise operates under the assumption that if Cooperatives attract new investment and interest from the private sector and the urban middle class, the industry will consequently exhibit improved driving conduct on the roads.

2.1.4.4 Poor Oversight and management: From a Capital perspective Browning (2001) argues that the minibus taxi industry has been inefficient for high-density, high-demand urban services, resulting in numerous costs that should be allocated to it not being so allocated, such as planned maintenance and driver training. Additionally, he explains that in the industry's attempts to minimize costs, they are neglecting business practices that could enhance operations, such as avoiding employment of operational managers who would are qualified to overlook processes. While this approach avoids additional costs, it also leaves drivers to manage themselves, leading to implications for service and safety standards. Such issues deter the industry from tapping into new market segments of the middle class who demand good service and safety from a public transport system (Browning, 2001).

2.1.4.5 Lack of Road infrastructure: Transit priority lanes, which would facilitate quicker and safer transit for minibus taxis in urban areas, have still not been made available to taxis by government. These are methods that alleviate delays for buses and other public transport modes on congested urban roads, such as designated lanes, etc. Beer (2019) explains that the taxi industry has not enjoyed the same level of success as the bus services industry in obtaining such privileges from the government and has often had to resort to poor driving behaviours.

The structural infrastructure studied by Beer (2019) includes four alternative service options to the traditional curb side stop of urban taxis, these include queue-jumping lanes, queue bypass lanes, a single lane pre signal strategy and a dedicated minibus lane. One of the numerous advantages of the Cooperative business model is unity, and this can facilitate collective bargaining. If the industry could capitalize on collective bargaining, it could persuade the government to prioritize road infrastructure improvements suggested by Beer (2019) and thus align with industry needs and benefit all road users.

2.2 Literature Matrix

Author	**Methods**	**Arguments**	**Who do they agree with?**	**Who do they disagree with?**
Mist (2021)	Institutional frameworks for integrated mobility services (IRIMS): analytical framework that identifies institutional enablers and barriers.	Partnerships in taxi sector are key to realising safe, resilient, and sustainable public transport sector.	Browning (2001)	
Thomas (2016)	Analysis of transport policies.	SA government struggling to build inclusive public transport infrastructure.		
Browning (2001)	Analysis of minibus taxi industry.	Taxi owners must combine operations in cooperative format and combine capital to participate in new opportunities.	Mtsi (2021)	
De Beer (2019)	Participant observation.	Transit priority measures as a	Thomas (2016)	

		capital infrastructure investment for taxi operators has economic and environmental benefits.		
Fobosi (2019)	Interviews (n=58)	Taxi drivers precarious working conditions are reinforced by taxi owners.	Clake (2019)	
Antrobus (2019)	Survey (n= 570)	There are both direct and indirect indications that taxi drivers work in a market that is not competitive		
Clarke (2019)	Interviews (n=47)	Partners gain physical/financial , human, and organizational resources from participating in multi-stakeholder partnerships	Mtsi (2021) Thomas (2016)	
Traffic department (2018)	Proposed Government strategy	Decarbonising transport is a challenge that needs robust solutions.		

Govender (2006)	Analysis of accident reports.	Taxi owners lack of maintenance and precarious running of operations are equally to blame to road accidents as drivers poor driving practices.	Fobosi (2019)	
Kadlubek (2015)	Secondary data analysis.	Business entities must minimise negative impacts on the environment.	Tongwane (2015)	
Masoga (2022)	Econometric analysis comprising of vector autoregression model, impulse response function, variance decomposition & granger causality analysis	Rising petrol prices exhibit a positive effect on inflation in South Africa.	Meyer (2018	
Meyer (2018)	Literature review & quantitative analysis	Rising fuel prices have negative impacts on inflation and economic growth thus placing heavy burden on	Masoga (2018)	

		citizens expenditure.		
Mmakwena (2022)	Qualitative case study.	Department of transport, Police and taxi associations must work together to ensure safety and overcoming taxi violence.	Mtsi (2021)	
Mazzarol (2018)	Case study.	The Co-operative business model has many benefits such as economic development, job creation and addressing market failures.	Wanjare (2023)	
Tongwane (2015)	Intergovernmental panel on climate change tier 2	Modal shift from private to public transport in South Africa would result in in reduction in GHG emissions.	Transport departmen t (2018) Kadlubek (2015)	
Wanjare (2023)	Surveys and interviews.	Co-operative business models integrate environmental and social policies.	Mazzarol (2018)	
Yesikar (2015)	Observational study (n=200)	Price inflation highly Restrict	Meyer (2018)	

		the Public in terms of utilizing their basic needs and day to day activities like Use of Public transport.	Masoga (2018)	
Business Venture/Research Gaps: There is a lack of research regarding the specific characteristics of cooperatives necessary for the minibus taxi industry to expand into new markets, such as the middle class. While the literature prescribes the formation of independent cooperatives, it lacks details on their key responsibilities that would help the industry achieve operational excellence. These elements are crucial for implementation and to attract new market segments. Furthermore, there is also a gap in research regarding the transportation needs of the South African middle class.				

2.3 Literature review conclusion

The literature review offers insights into various opportunities accessible to urban taxi operators and associations in Johannesburg. Among these opportunities are the increasing societal demand for greener transport strategies, the impact of rising fuel prices on private vehicle ownership, and the potential for partnerships. These highlighted opportunities underscore the necessity for the proposed business venture, which aims to address the specific need for a safe, dependable, and modernized taxi transport service tailored to the urban middle class.

Furthermore, the literature review sheds light on several barriers that may hinder urban taxi operators from tapping into new market opportunities. These barriers include precarious work practices, safety concerns, insufficient capital investment, operational inefficiencies, and limited partnership and collaboration, particularly within cooperatives.

Analytical Framework

The analytical framework used to assess the potential for market expansion into the middle class and private sector under cooperative business models for selected Johannesburg Taxi associations entails identifying areas ripe for cooperative ventures, outlining their advantages, and evaluating the current operational landscape of the taxi industry.
To pinpoint opportunities that could be used by taxi operators within cooperatives, the SWOT framework was utilized. This framework not only illuminates potential opportunities but also addresses another vital aspect of this research—identifying barriers hindering the industry from venturing into new markets, which is highlighted in weaknesses.

Additionally, the PESTEL analysis was further employed to scrutinize the external environmental factors impacting the daily operations of the taxi industry. Through this framework, it became feasible to uncover further opportunities by comprehending the transportation needs and challenges faced by the middle class, as well as their socio-economic conditions in South Africa.

Theoretical and conceptual frameworks were used to offer a comprehensive approach to identifying potential opportunities for unlocking new business ventures and market segments with the private sector and middle class, respectively, under cooperative business models.

3.1 Market Analysis: Pestel Analysis

a) **Political analysis:**

The South African taxi industry operates within a highly volatile political landscape. There is frequent turnover in the positions of transport ministers, which undermines the establishment of enduring partnerships with the government, a pivotal stakeholder in the taxi industry. Despite numerous national taxi lekgotlas and agreed-upon resolutions,

implementation often falters due to national and industry politics compounded by unpredictable leadership changes in decision making roles. Moreover, persistent disagreements between the taxi industry, current governing structures and the government persist regarding subsidies, an issue that has persisted for decades. This contrasts sharply with the bus industry, which continues to benefit from ongoing subsidy support from the South African government. By fostering greater cooperation among taxi associations through cooperatives, the industry could leverage collective bargaining to exert greater influence and urge the government to honour its agreements and implementation plans.

b) Economic analysis:

The South African taxi industry, along with its existing and potential customer base (middle class), currently are faced with elevated interest rates. These rates are negatively impacting the disposable income and transportation budgets of South African households (Marais, 2023). Presently in South Africa 41% of consumers perceive their financial situation has deteriorated in the past year. Elevated interest rates translated to increased expenses for taxi operators in acquiring vehicles, leading to escalated transport costs as the industry typically burdens customers with these expenses. Additionally, escalating fuel prices worsen financial strain on both the poor and middle class, prompting them to downgrade vehicles or even sell them outright. According to Marais (2023) The prevailing economic conditions, affected by factors like load shedding, sluggish global growth, and inefficiencies in state-owned enterprises, will persistently strain middle-class consumers and dampen demand for various goods and services. This economic stress highlights the need for a fresh, cost-effective, safe, and efficient public transport solution, which the taxi industry hopefully can provide.

Social analysis:

The South African taxi industry has typically had a negative reputation within the urban community. It has frequently been associated with violence, subpar customer service, and reckless driving behaviour. Consequently, the urban middle class and private business sector has hesitated to embrace a transport service originating from an industry with such a tarnished public image.

Furthermore, the urban middle class is experiencing notable growth, both globally and particularly within local contexts. In the Johannesburg metro area, the population has

increased by 2.19% from 2022 to 2023, and by 2.33% from 2021 to 2022. As urban populations expand, so do their transportation requirements, placing pressure on the government to provide accessible, safe, clean, and affordable urban transport alternatives.

Technological analysis

the South African taxi industry has largely overlooked the integration of new technologies that could facilitate its growth and unlock its full potential. It has remained in its traditional operating model without embracing significant innovations. Presently, its primary competitor the e-hailing sector, continually introduces advancements and allocates substantial budgets to research and development.

Implementing technological advancements in the industry may pose challenges due to the limited education and skills of many workers. Given the industry's informal and unstable nature, it predominantly employs low-skilled labourers such as drivers, cooks, entry-level receptionists, marshals, and mechanics, who may feel apprehensive or resistant to technological changes.

In contrast, the South African urban middle class is typically technologically adept and values technology for its convenience. They expect amenities like Wi-Fi, swift transit times, and the ability to provide feedback on their journeys. To appeal to this market segment and address their preferences, the taxi industry must innovate and collaborate with relevant stakeholders to transition from traditional analogue practices to a more digital approach.

Ecological analysis:

In South Africa motorcars and trucks accounted for 70.6% of total greenhouse gas emissions from road transport and Gauteng is the largest producer of road transport emissions. (Tongwane, 2015). Additionally, as result of inadequate public transportation options serving all demographics, urban roads face heavy traffic congestion, which contributes to global warming. Additionally, factors such as load shedding and malfunctioning traffic signals result in extended delays for private vehicles, trucks, and freight vehicles, further worsening the environmental impact. Leveraging the taxi industry more efficiently could potentially alleviate traffic congestion and reduce strain on overloaded road infrastructure.

Legal Analysis:

The informal structure of the taxi industry is impacted by numerous legal considerations affecting its operations. Despite government enforcement of regulatory measures like taxi ownership permits and professional driving permits, numerous taxis continue to operate without proper documentation, rendering them illegal operators. Taxi drivers frequently encounter roadblocks where their vehicles are impounded due to the inability to furnish required documentation. These incidents pose legal challenges for both the industry and the government, straining their relationship.

3.2 SWOT Analysis

Strengths	**Opportunities**
The urban taxi industry has extensive knowledge on route demands in Johannesburg. The industry is semi-formalised. Ability to offer cost effective transport. Ability to transport more passengers in same direction.	Reducing traffic congestion and greenhouse gas emissions from private vehicles. Growing urban middle-class with growing transport needs. Exploiting new markets where private ownership of vehicles is expensive. Offering middle class, a cost-effective public transport alternative. Exploitation of new business with private sector and middle-class e.g., advertising, data collection, crime prevention, push for green environment initiatives. Reducing road fatalities of private vehicle owners. Healthy tourism sector that requires fast, efficient, and safe public transport alternatives for tourists. Meeting UN sustainable development goals on transport.
Weaknesses	**Threats**

Limited road infrastructure e.g., specialized lanes and stops. Resistance to change among some owners and associations. Tainted public image. Precarious business practices. Strained relationships with government. Lack of investment in training and upskilling in the taxi industry.	Political instability in the country. High interest rates, inflation, and cost of living make taxis expensive to purchase for owners. Corruption. Poor governance and policy implementation in the taxi industry. Lack of subsidies from government.

3.3 Market opportunity and research gaps.

The needs and preferences of customers serve as a driving force for businesses venturing into new market segments (Lisowska, 2019). Traditional business opportunities usually present themselves in four categories:

1. **Those opportunities resulting from information asymmetry,**
2. **The traditional demand and supply,**
3. **Opportunities oriented towards an increase in productivity and profits,**
4. **Those resulting from the nature of the entity initiating the change.**

All three of the last categories are imperative to the taxi industry's efforts to attract a fresh market segment and capitalize on new business prospects within the private sector.

The following are unique attributes about the SA Taxi industry and the possible opportunities that can be exploited in its environment.

- The South African government wants to urgently minimize the adverse effects of transport activities on the environment (Transport, 2018).
- The expense associated with private vehicle ownership is increasingly burdensome for individuals from lower-income and middle-income brackets. Therefore, there is a growing

demand for affordable alternative transportation options.

- As the urban middle class population expands, there will be a greater need for accessible, affordable, clean, and secure public transportation systems in the Johannesburg Metro.
- The absence of efficient public transportation options generally has adverse effects on industries like tourism. Addressing this issue will result in a favourable increase in the number of tourists and economic activity in the country.
- SA taxi associations have yet to employ functional co-operative business models in the industry.
- The United Nations Sustainable Development Goals 11.2 states that governments should aim to provide access to safe, affordable, accessible, and sustainable transport systems.

The identifiable market gaps within the private sector offer opportunities for exploitation if taxis do adopt a cooperative business model. The research outlined in this proposal aims to validate these suggestions.

- Schools incur transportation costs for match days and field trips, a burden shared by both the school and parents. These expenses could potentially be outsourced to an external vendor with substantial economies of scale.
- Middle-class employees commuting to office parks heavily rely on private vehicles due to congested traffic. Introducing a reliable, punctual, and safe public transport system could alleviate traffic congestion and reduce the costs associated with private vehicle ownership.
- High airport parking fees and expensive e-hailing services for airport transit pose challenges. Implementing scheduled bulk airport transit vehicles from suburbs could mitigate these costs for the middle class.
- Despite the abundance of shopping malls surrounding urban middle-class consumers, there lacks an efficient public transportation system connecting them on weekdays or weekends. In essence, a taxi industry operating within a cooperative business model facilitated by an aggregator business has the potential to efficiently and effectively organize resources to develop innovative public transport solutions catering to the daily requirements of the urban middle class. This proposal aims not only to identify and validate these opportunities but also to assess the willingness of the urban middle class and private business sector to utilize such services and engage in associated new business ventures.

Theoretical Framework

This proposal examined several articles analysing the present condition of the taxi industry, potential opportunities within the sector, and the barriers preventing it from accessing new business prospects. Thomas (2016) established that the South African government faces challenges in constructing an inclusive public transport system that adequately serves the requirements of all South Africans and not just the poor. Furthermore, Browning (2001) postulated that taxi owners/associations must combine operations in cooperative format and combine capital to participate in new opportunities and fight off barriers to these opportunities. This later reaffirmed by Mtsi (2021) who stated that partnerships in the taxi sector are key to realising a safe, resilient, and sustainable public transport sector for all and not just the poor.

A well organised and well governed co-operative may possibly provide lucrative business opportunities for urban taxi owners and associations (Thomas, 2016). In addition to unlocking a new market segment such as the middle class, it may be able to unlock business and collaborative projects with the private sector, government, and civil society (Clarke, 2019).

This research has provided a strong foundation that will enable the development of a theoretical framework based on the findings of the literature review.



Figure 1: Benefits of Co-operatives to members and customers (Fourie, 2021)

Fourie (2021) Presents a theoretical framework outlining the potential opportunities co-operatives offer their members. This framework suggests that co-operatives could play a crucial role in enabling taxi operators to access new market segments and business opportunities. He further elaborates that while co-operatives exist within the South African business landscape, many falter due to insufficient access to resources, inadequate business management skills, and challenges in managing the unique member relationships in co-operatives.

In general, theoretical investigations have not extensively examined or verified the success or failure of co-operatives within the South African taxi industry, nor have they fully explored the potential opportunities they could offer to the sector. Consequently, there are still gaps in understanding co-ops within the industry, as well as a lack of clear identification regarding the opportunities that exist under these models.

Conceptual Framework

5.1 The Co-operative business model canvas

The conventional business model canvas functions as a framework illustrating how a business creates, delivers, and captures value for its customers. It serves as an effective tool for describing and organizing the aspects to be examined and studied. Consisting of nine building blocks, each comprehensively addressed contributes to the successful delivery of a product or service.

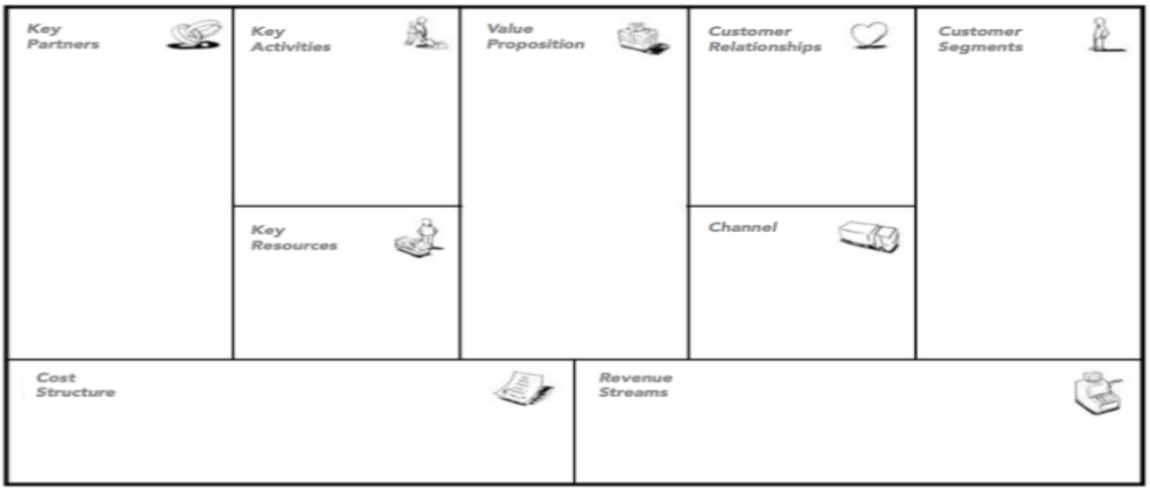


Figure 2: Business Model Canvas. Adapted from Business Model Generation (2010) by Osterwalder A. & Pigneur Y.

The below framework (see figure 3) , is a modified version of the traditional business model and is the chosen primary framework for this business venture proposal. It outlines the process of establishing a cooperative and highlights the essential aspects required for its functionality and long-term viability. Each element within the framework is pivotal to the cooperative's structure and can be applied across multiple sectors, including the South African taxi industry, irrespective of the business's type.

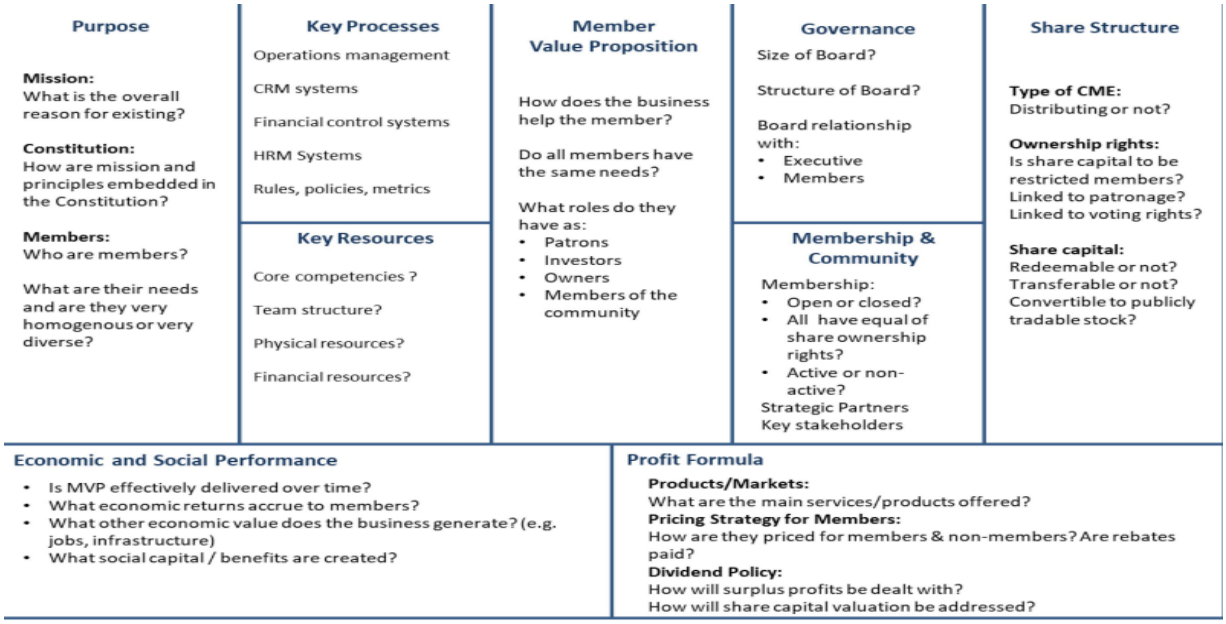


Figure 3: Co-operative key elements Business Model.

The framework offers insight into the strategic arrangement of a taxi cooperative. Similar to the conventional business model canvas, this model consists of nine elements, with some tailored to the distinct features of the cooperative business model (only three elements align with the traditional model). Each element provides a comprehensive description and guidance on the factors to consider ensuring sustainability and competitive advantage as a cooperative business.

This conceptual framework facilitated the exploration and illustration of how cooperatives within the urban taxi industry could structure themselves and leverage opportunities to unlock new business prospects and tap into new market segments represented by the urban middle class.

The independent variables for the purpose of this venture proposal were as follows:

1. The organization of the taxi industry under a Co-operative business model (structured state).
2. The organization of the taxi industry under a non-Co-operative business model (current state).

The dependent variables for the purpose of this venture proposal were as follows:

1. The inclination of urban middle class LSM 8-10 to utilize taxis as a mode of public transport under a co-operative model.
2. The possible emergence and characteristics of new business prospects from the private sector for taxi co-operatives.

Research Methodology

6.1 Introduction

This section outlines the research methodology behind the proposed business venture, encompassing the research paradigm, research design, population and sampling, data collection, and data analysis methods. The business venture proposal incorporated an extensive literature review, along with surveys conducted with both the urban middle class and the private sector.

Additionally, visits were conducted to two taxi associations (FARADAY and DORLJOTA) situated in the Johannesburg North and West regions respectively. The visits aimed to evaluate the viability of the business proposal, especially regarding the creation of an autonomous organisation distinct from the conventional taxi sector. The envisioned organization would supervise and administer the cooperative venture between these two Johannesburg-based taxi associations, with the objective of introducing tailored transportation services to cater to the middle class. Furthermore, it sought to investigate prospective collaborations with the private sector within the taxi industry.

6.2 Research approach/design

The proposed research strategy for this business venture aimed to assess the feasibility of establishing an independent management and consulting enterprise, referred to as an aggregator. This aggregator will oversee collaborative partnerships among taxi associations, with the goal of accessing new market segments within the urban middle class and private business sector. The primary research methodology utilized in the proposal is that of a **quantitative analysis.**

This approach was well-suited because the quantitative research component, which involves surveys of both the urban middle class and private business sectors, gathered crucial numerical data. This data was helpful in quantifying the percentage of the middle class most likely to utilize taxis as their mode of public transportation. A quantitative approach was suitable to analyse market trends, consumer behaviour, and demand patterns among the urban middle class.

The survey employed covered various aspects such as past and current taxi usage, frequency, experiences, and willingness to engage with such services.

6.3 Research paradigm

The research paradigm which will be adopted for this research and subsequent business venture proposal is that of a **positivist paradigm,** focusing on empirical observations and objective measurement of market factors**.**

6.4 Data collection methods & instruments

Surveys

Surveys were chosen for their appropriateness in gathering data from sizable participant pools. They were conducted digitally and remotely via Google Forms. The survey consisted of closed-ended questions and open-ended questions.

Procedures for data collection

There are several survey tools that can be used to collect data, but for the purpose of this venture proposal **Google forms** was used to gather quantitative data from both the urban middle class group and the private business sector.

6.5 Population and Sample

Population

Population 1: Urban middle-class residents (LSM 8-10) living in suburban areas of Johannesburg's western and northern regions.

Population 2: Private enterprises that regularly employed light or heavy-duty vehicles for transporting individuals or goods or depended on public transportation for their employees' commuting needs. Primary data was collected from respondents whose daily business operations involved a substantial need for transportation. These respondents included various entities such as private and public schools, freight transport services, manufacturing firms, construction companies, sports and recreation clubs, bars and restaurants, and courier services.

Sample

The **sample size of population 1** comprised 47 participants from the middle class LSM of northern and western Johannesburg suburbia. Participants were chosen for convenience and ease of access. Since surveys were confined to these two regions, as per Etikan (2017) , this constituted a form of area sampling where a subdivision of the environment represented clusters of units centred on terrestrial location. This approach was advantageous since the two identified taxi associations, considered as potential candidates to form a cooperative, operate in these regions. Should the business venture succeed, the urban middle class of these areas would be the primary beneficiaries of a new public transport service connecting the two regions.

The **sample size of population 2** consisted of 10 privately owned businesses/companies with active operations in the north or west of the Johannesburg region. Participants were selected based on the nature of their business, the level of transport demand required to fulfil their daily operations, ease of access, and reduced travel time when approaching respondents before or during the data collection process. This sampling method was a purposive sample, focusing only on businesses that would provide the most relevant

information due to the nature of their businesses and daily transport needs. This approach was ideal as businesses with lower demand for transport activities would not have been able to offer the most relevant information for the study.

6.6 Data Analysis

Primary data was gathered through surveys incorporating both closed and open-ended questions, facilitating quantitative analysis. Surveys were distributed to middle-class individuals and chosen private businesses via Google Forms, enabling the quantification of data through the platform's features. Statistical analysis was employed to detect relationships and correlations among various variables. The software allowed for the coding and categorization of data, identification of patterns and themes and visualization of relationships and connections between different themes and concepts.

6.7 Ethical Considerations

During the research, it was important to consistently acknowledge the ethical implications involved to ensure the study is conducted with integrity and responsibility. Exploring the middle class and private business inclination towards using taxis as a public transport alternative and participating in new business ventures, particularly under a cooperative business model, necessitated careful consideration of various ethical aspects.

Ethical Consideration 1: Prior to participation, individuals received information regarding the research objectives, procedures, potential benefits, and risks. They were explicitly informed of their right to withdraw from the study at any point.

Ethical Consideration 2: Participant information remained confidential and anonymous, unless explicitly requested otherwise. Anonymity was ensured through anonymous surveys and secure data storage methods.

Ethical Consideration 3: Data collected from participants was strictly used for the study's purposes and was not shared with external parties.

Ethical Consideration 4: Efforts were made to minimize biases and conflicts of interest that could influence the research outcomes, employing necessary measures to avoid their impact.

Ethical Consideration 5: Participant safety was paramount, with steps taken to mitigate any potential harm or risks associated with participation.

Ethical Consideration 6: All participants were treated with respect, and their rights and welfare were safeguarded. Surveys and interviews refrained from using offensive language, and consideration was given to participants' cultural, religious, and personal beliefs when formulating and presenting questions.

Key Findings

7.1 Urban middle class perceptions about the Taxi Industry

The prevailing viewpoint by respondents regarding the public transport system is that it fails to meet the expectations of the middle class, as indicated by 62% of respondents who rated it as below par **(see Figure 1)**.

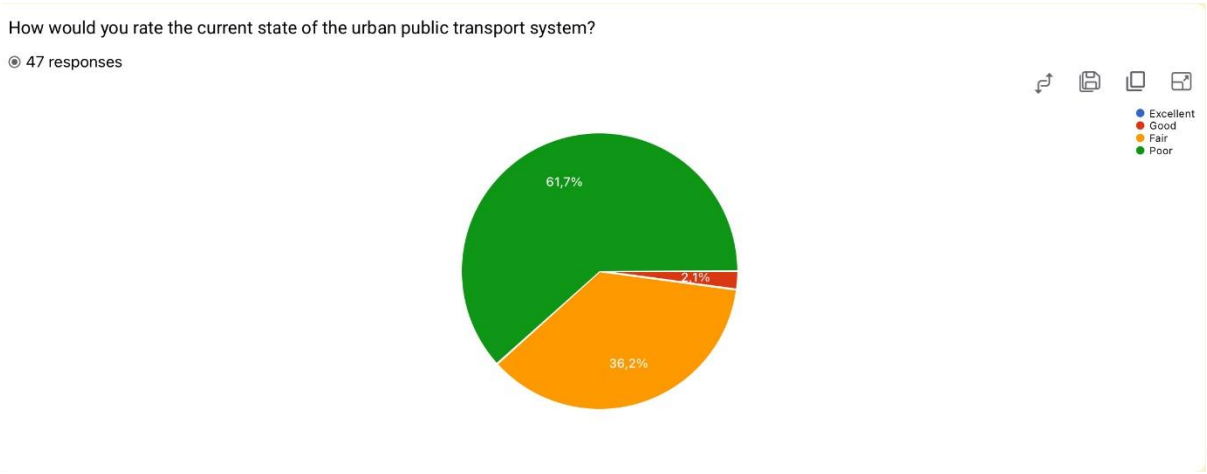


Figure 1.

The below par conditions of public transportation have compelled the urban middle class to choose private vehicle ownership despite the persistently high costs associated with it, including elevated interest rates and fuel expenses, which diminish disposable household incomes. This trend is apparent, with 83% of respondents indicating private vehicle ownership **(see Figure 2)**, yet only 27% of respondents finding it financially feasible to maintain to own a vehicle **(see Figure 3)**.

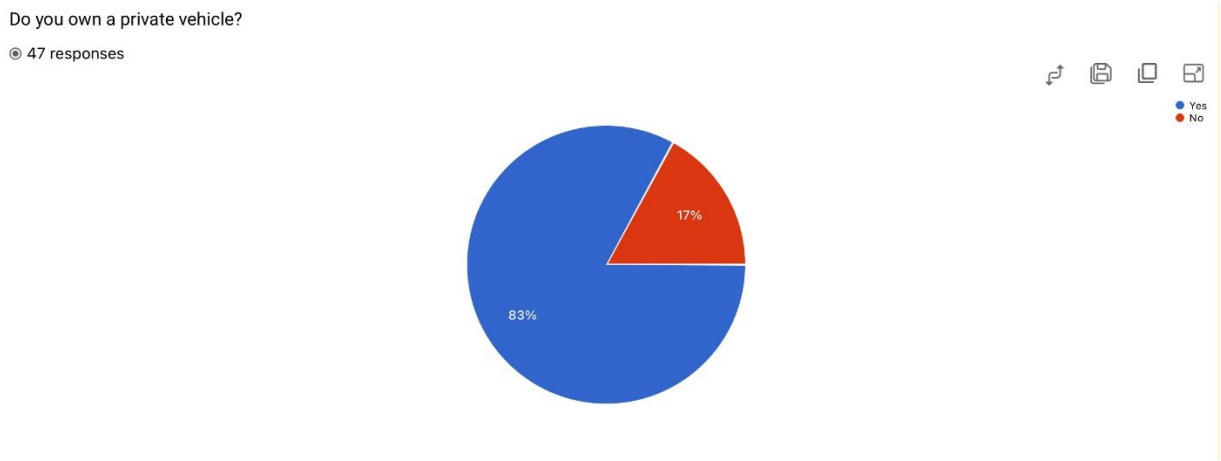


Figure 2.

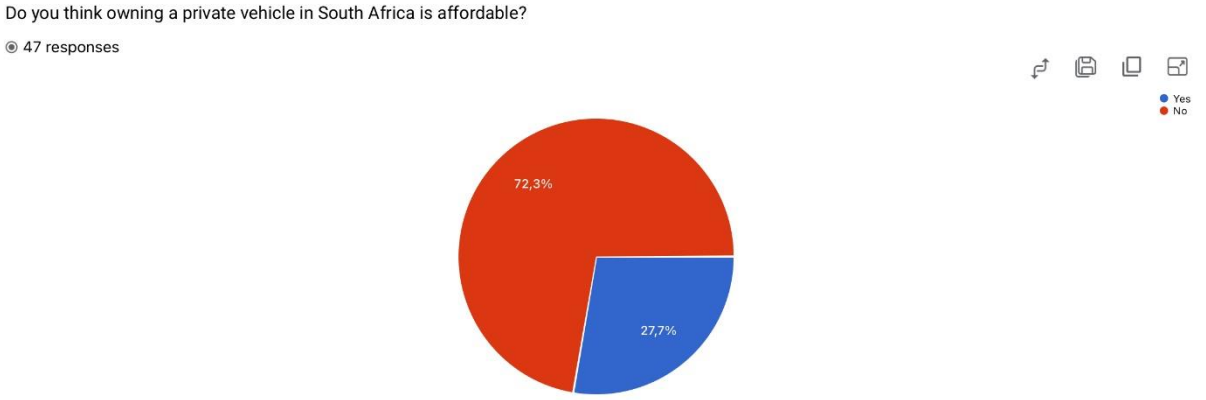


Figure 3.

Despite the challenging conditions facing the middle class, the gathered data further supports the notion that there are numerous opportunities for minibus taxi operators to leverage these transportation challenges by expanding their services to a new market segment, namely the urban middle class of Johannesburg. Findings indicate that a majority of middle-class urban residents are open to using taxis, with 68% of respondents having utilized minibus taxi services prior taking the survey **(see Figure 4**), and 63.8% expressing no objection to group transportation **(see Figure 5)**, provided it fulfils their commuting requirements, such as traveling to and from office parks, shopping malls, restaurants, and residences to name a few destinations.

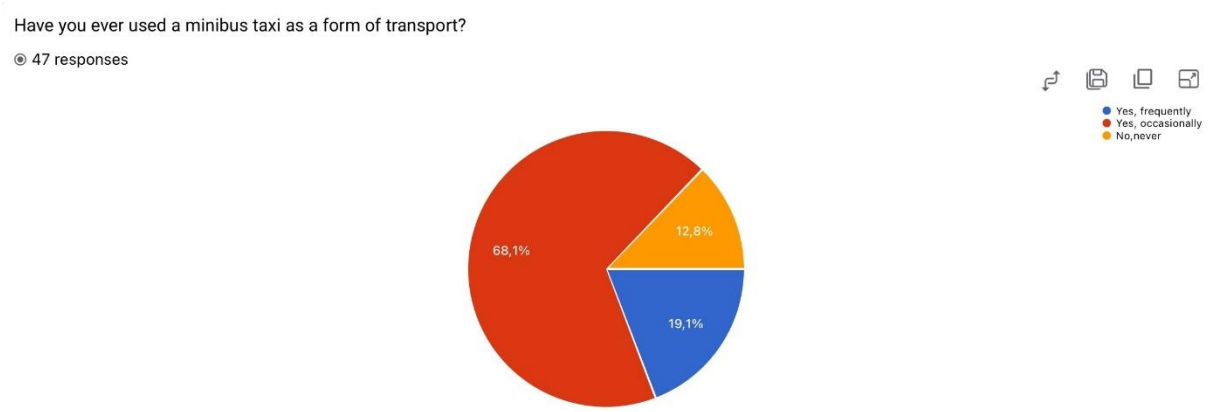


Figure 4.

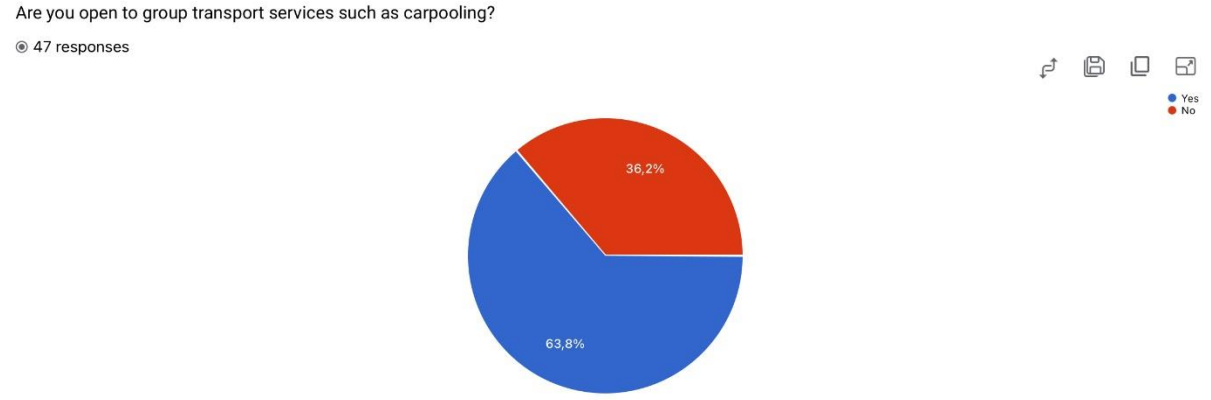


Figure 5.

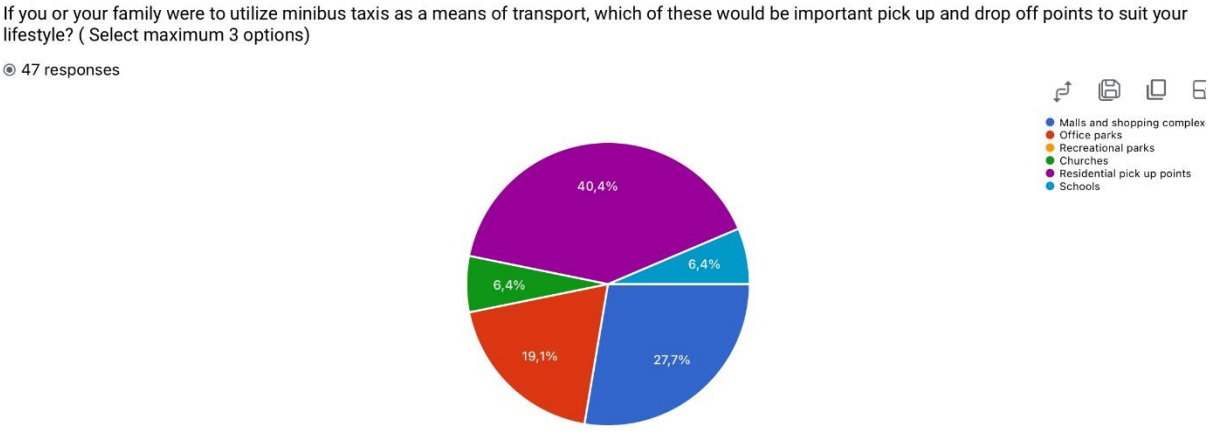


Figure 6.

Furthermore, 59.6% of participants indicated their intention to use minibus taxis on a regular basis, given that they are reliable, safe, and affordable **(see Figure 7).**

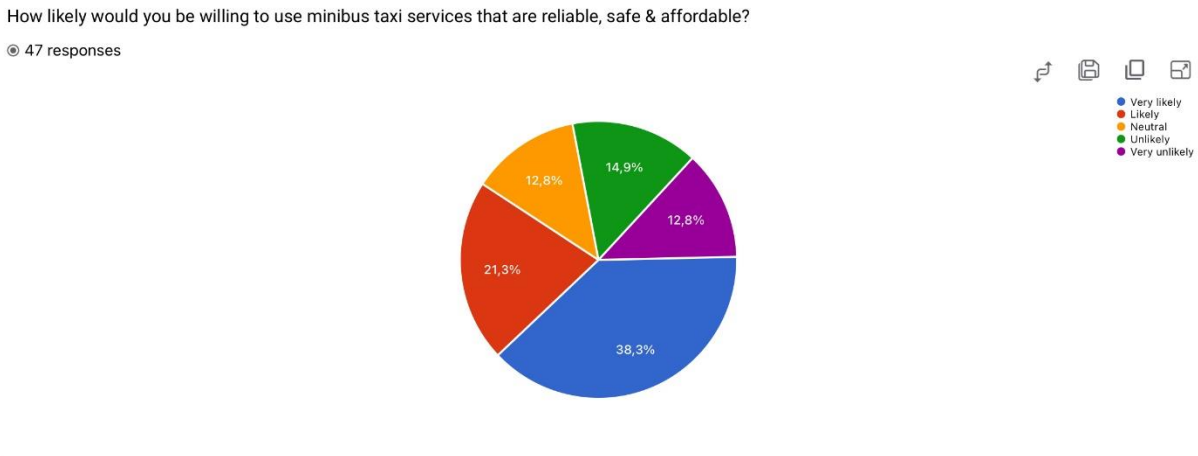


Figure 7.

Safety and reliability emerge as prominent concerns and significant deterrents, as respondents who had not previously utilized taxi services cited safety concerns, lack of familiarity, and unreliability as contributing factors for their avoidance of minibus taxi services **(see Figure 8).**

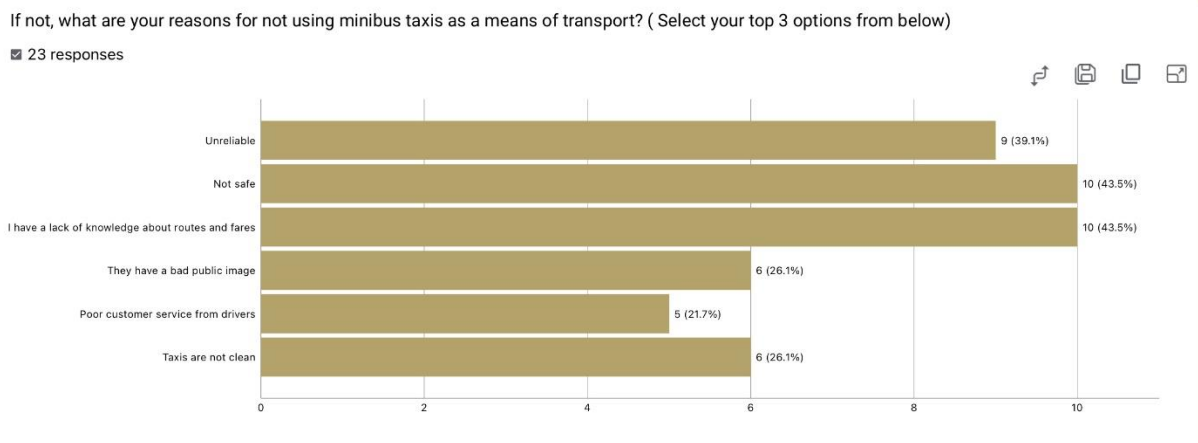


Figure 8.

In summary, the gathered data had several common themes regarding the main transport needs and challenges faced by the urban middle-class citizen residing in the Johannesburg Metro:

1. **Safety and Security**: Concerns about safety feature prominently in the responses. This includes worries about the safety and roadworthiness of minibus taxis, as well as personal security while using public transport or waiting at pick up and drop points, there are also mentions of feeling unsafe, due to aggressive driving behaviours, crime at taxi ranks, and general violence within the taxi industry.
2. **Reliability and Accessibility**: There is a clear desire amongst respondents for reliable and accessible transportation options. The lack of reliable public transport services, limited route availability, and inconvenient pick-up and drop-off locations, particularly when carrying heavy items are a clear frustration and concern amongst respondents. The need for punctuality, predictable schedules, and late-night transportation options is also highlighted.
3. **Cost and Affordability**: The cost of transportation, including high petrol prices, is a significant concern for urban middle class commuters. Rising costs and the overall expense of owning a car are mentioned as challenges, particularly for middle-class individuals whose budgets are impacted by transportation expenses.
4. **Infrastructure and Urban Planning**: Issues related to traffic congestion, inadequate infrastructure development, and urban planning are also mentioned. This includes concerns about busy roads, traffic congestion, and insufficient investment in roads and public transportation infrastructure to accommodate growing urban populations.
5. **Professionalism and Service Quality**: Respondents express dissatisfaction with the professionalism and service quality of minibus taxi operators. Complaints include unprofessional behaviour, long waiting times and unclean vehicles,
6. **Environmental Concerns**: While not as prominently mentioned, there are indirect references to environmental concerns, such as the high cost of petrol and the reliance on private vehicles due to inadequate public transportation options.

   Overall, the data reflects a complex interplay of factors influencing the transportation needs and challenges faced by urban middle-class citizens in Johannesburg and South Africa as a whole, including safety, reliability, affordability, infrastructure, and service quality.

7.2 Private business sector perception on Minibus Taxi industry.

Based on the feedback provided by respondents, it's clear that the private sector is cognisant of the taxi industry and its workings, as *over* 50% of respondents **(see figure 9)** verified this awareness. This highlights the extensive geographical coverage of minibus taxis, as one can reliably locate a taxi almost in every corner of South Africa, which presents a significant competitive advantage for the industry to other modes of transport.

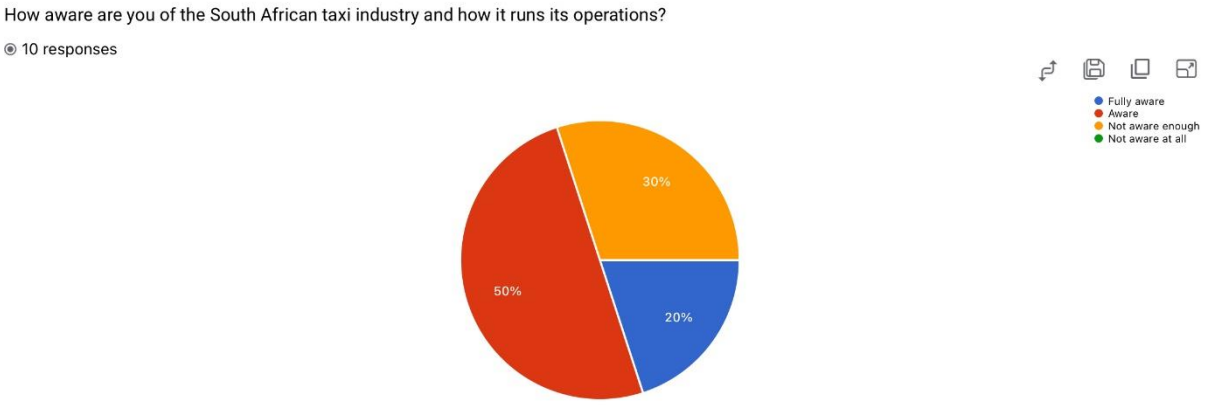


Figure 9.

Despite being knowledgeable about the taxi industry and its operations, 70 % of private businesses interviewed **(see figure 10) r**evealed that they have not pursued business opportunities within the industry, despite its potential and annual revenue of R15 billion.

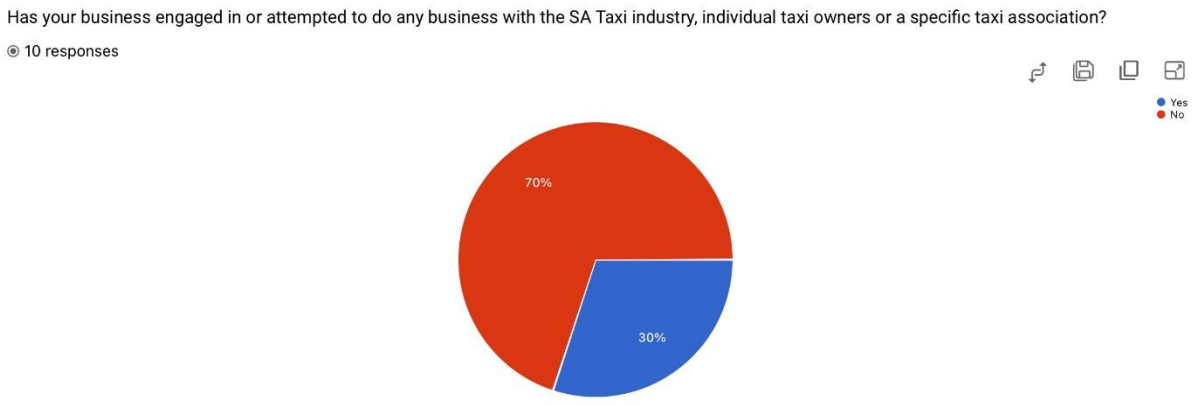


Figure 10.

When questioned about the reasons for not engaging in business with the industry, 50% of respondents **(see figure 11)** stated that their businesses lacked common interests and couldn't benefit from the minibus taxi industrys offerings. Another 50% expressed concerns about the industry's informality(10%), the absence of clear points of contact for business (30%), and its negative reputation over the years(10%). This indicates that while they recognize the industry's potential, they would actually consider doing business with the industry only if certain issues were addressed.

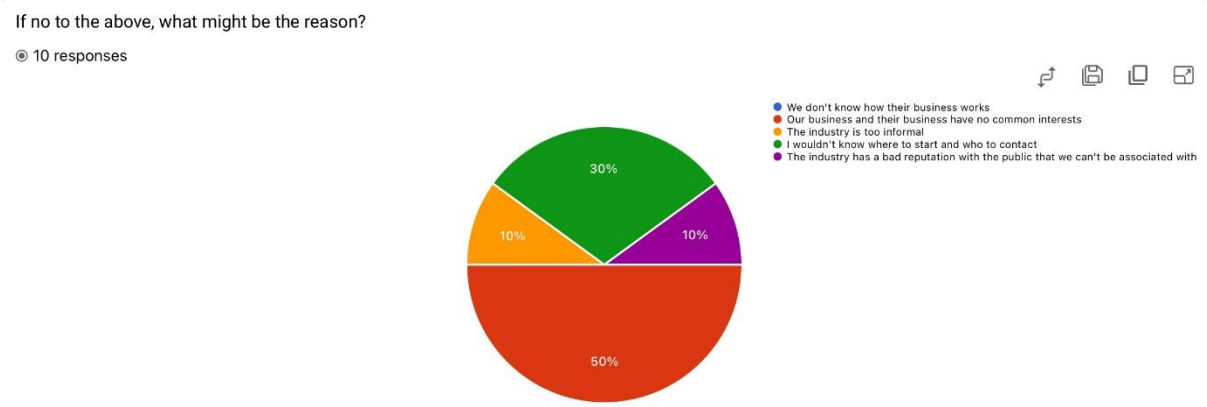


Figure 11.

The proposal of a unified cooperative structure, aimed at facilitating direct communication with a singular organization for business transactions, received overwhelming approval from the interviewed private businesses **(see figure 12)**. This may signal a readiness for the taxi industry to consolidate and centralize under a unified umbrella coopertaive, should such measures be implemented.

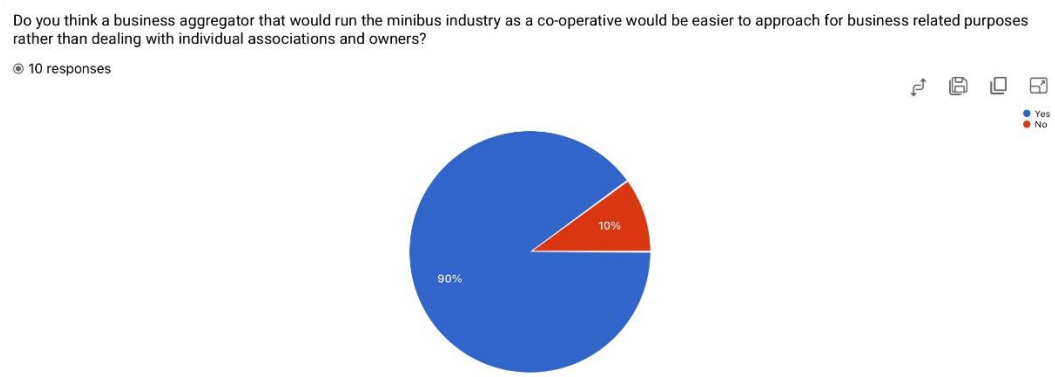


Figure 12.

Further confirmation was observed in the current misalignment of values and principles when 50% of respondents indicated that their business values and principles are fundamentally misaligned with the current operational practices and public image of the taxi industry **(see Figure 13)** , while the remaining 50% did not completely dismiss the industry.

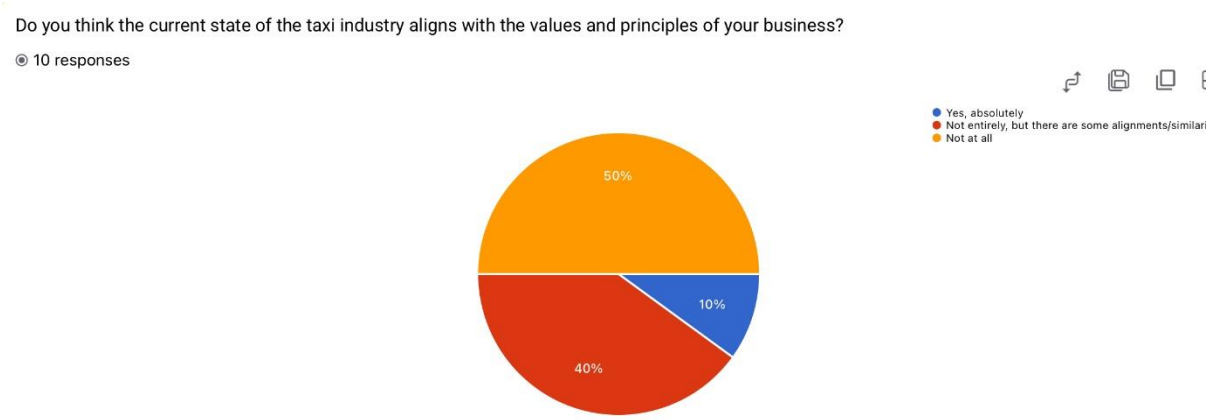


Figure 13.

While half of the interviewed businesses expressed skepticism about engaging with the taxi industry, an overwhelming majority recognized its potential to address a crucial public transportation gap that could benefit their own operations in various ways **(see Figure 14).** For instance, by transporting tourists to their establishments, scheduled efficient transportation of employees to work, or allowing employees to allocate more of their income to other expenses instead of transportation, which currently consumes a significant portion of their salaries.

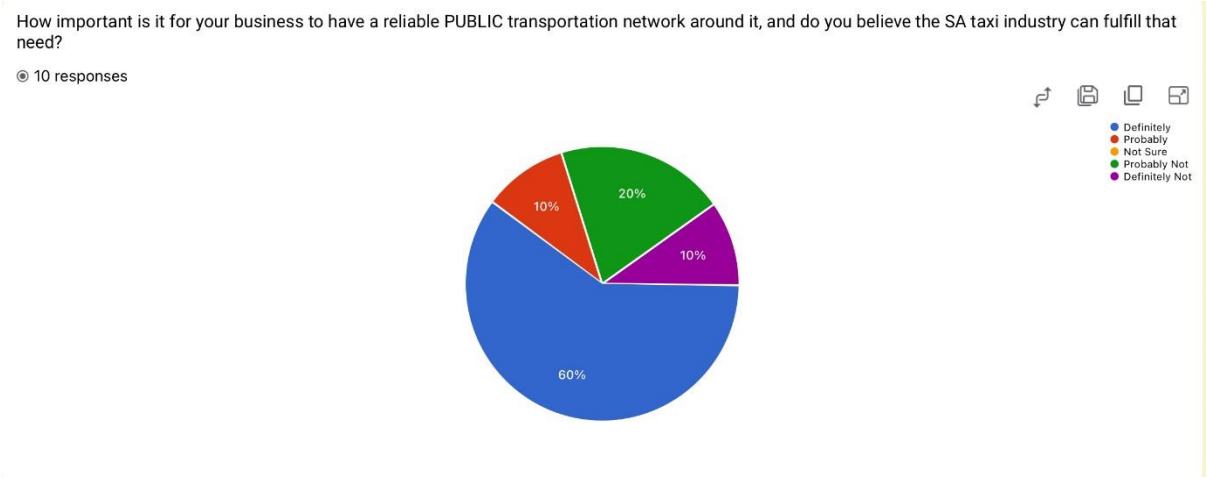


Figure 14.

During interviews when respondents where asked **How they perceive the overall impact of the SA taxi industry on the local economy and community,** the summary was that the South African taxi industry has a complex impact on the local economy and community. It serves as a vital transportation lifeline for the majority of the workforce, especially those unable to afford private vehicles. Respondents said while recognized as a significant economic sector, it should however be criticized for its perceived selfishness and disregard for safety. Despite this, the industry remains a key source of business and employment within the black community.

Another common theme was the industry's informal nature and the challenges this poses, yet its role in facilitating essential transportation underscored its importance. The interviewed businesses called for formalization, tax compliance, and government support so that there are avenues for improvement and engagement with the private sector.

The responses regarding whether private businesses **could identify undiscovered business opportunities through partnering with the South African taxi industry** varied, with
several respondents indicating that they don't see immediate opportunities for their businesses. One respondent from the farming sector highlighted potential opportunities such as selling produce directly to taxi users at different pickup/drop off points, benefiting multiple households. Another respondent, while acknowledging the industry's potential, expressed challenges due to existing dynamics within the industry that hinder exploration of new opportunities. One respondent mentioned their already on-going current partnership with courier services and another using taxis mainly for staff transportation as their business expands.

Overall, while some see potential avenues for collaboration and growth, others perceive challenges or limitations that may hinder the exploration of new opportunities within the South African taxi industry if it does not organise itself appropriately.

In summary, it was evident that the industry possesses strengths such as affordability, convenience, and reliability, but faces weaknesses such as disorderliness, safety concerns,

and violence. The respondents described it as a quasi-monopoly, offering accessible transport but lacks customer-centricity. Although the industry being a crucial service supplier, it's plagued by operational and policy issues affecting its attractiveness to private sector business opportunities.

Business Venture Proposal

8.1 Strategic review and plan

Vision

To provide a specialized minibus taxi service tailored to the standards and requirements of the urban middle class and to generate interest from the private business sector to engage in business with it.

Mission

To achieve a secure, environmentally friendly, and dependable transportation option for the urban middle class in Johannesburg through collaborative efforts and unity among taxi associations and their stakeholders.

Organizational objectives

The following objectives outline the main priorities of the business venture:

• Encourage taxi owners from DORLJOTA and FARADAY taxi associations to become shareholder members of the proposed cooperative by contributing vehicles in good to excellent working condition.

• Identify high-traffic routes in the Metro and establish an independent transport network with direct pick-up and drop-off points from and to suburbs, malls & restaurants, Gautrain stations, airports, and office parks.

• Govern and manage the cooperative business with strict adherence to corporate governance guidelines and policies to ensure operational excellence.

• Provide business support and skills development programs to members and taxi drivers to meet the standards required for servicing the urban middle class.

• Enhance the economic earning potential of members while addressing the social needs of the urban middle class (shared value).

• Employ collective bargaining to secure favourable deals from industry suppliers and partners for cooperative members, such as Toyota and Dunlop.

• Annually acknowledge and incentivize exceptional performance within the business, for instance, through annual awards.

• Organize seminars/congresses fostering continuous industry engagement and development by inviting stakeholders from government, business, and social group

Business Model Canvas

Below is a detailed business model canvas outlining the proposed taxi cooperative collaboration between DORLJOTA and FARADAY Taxi Associations, designed to cater to the urban middle class in the Johannesburg Metro.

Purpose:	**Key Processes:**	**Member value proposition:**	**Governance:**	**Share structure:**
To realise a safe, clean, and reliable transportation alternative for the urban middle class in the city of Johannesburg through co-operative effort and unity amongst taxi associations and their stakeholders.	- Expose Co-op members to new market segments. -Create new business opportunities with private sector for co-op members. -Offer middle class new public transport alternative. -Promote/market usage amongst middle class.	-Diversified revenue streams for members. -Economies of scale for vehicles. -Opportunity to benefit from government subsidies. -Access to negotiated deals with industry	Chairman ⇓ Executive committee(limited) ⇓ Members	-Share linked to patronage. -one member, one vote. -Share transferable.

	-Maintain working relationships amongst associations/owners from different associations. -Independent route development and management. -Collective bargaining with industry suppliers for deals.	suppliers and stakeholders in the value chain. -Access to capital -Training and skills development for members and their drivers.		
	Key Resources: Vehicles in good/new working condition. Good leadership and management expertise. Strict operational policies and constitution. Trained drivers. Competent staff and ground teams. Digital assets e.g. Comprehensive website Active middle class commuters. designated pick-up & drop off points. Brand presence.		**Membership & Community:** -Open Membership. -Equal share ownership. -One member, one vote. **Strategic partners & stakeholders** -Department of transport. -Traffic department -Private business sector -Media -Vehicle Manufacturers	

		-Fuelling stations -Suppliers of vehicle parts. -TETA -Suburban community/groups -Airports and Malls	

Economic & Social benefits: -Job creation. -Taxable income for Government. -Increased revenue for owners/associations = our members -Reduced violence in the taxi industry due to jostling for routes and reduced profits -Improved working conditions for drivers and marshals. -Formalized training & skills development of previously disadvantaged groups working in the industry e.g., drivers and marshals.	**Profit Formula:** Product/service offered: -Transport services to the middle class. -Co-operative business administration and management services to the taxi industry. Pricing strategy for members: -Monthly membership fee. Dividend policy: -Paid as you work= Paid as your vehicle works the route.

Customer analysis

By using the 6W Model of customer analysis, it is possible to examine potential customers for the envisioned Taxi Cooperative business venture. Given that cooperatives address the requirements of both their members and customers, this analysis regards both stakeholders as customers of the business. Therefore, a 6W model has been assessed for both the cooperative members and the middle-class customers they cater to.

Who- are the customers?	**Urban middle class**, private vehicle owners & non car owners, Caucasian and black middle class, age range 18 – 55, living in suburban JHB, income range R5000 – R30000 per month.
What- do customers use the service for?	**Transportation** in the metropolitan city of Johannesburg.
When-do customers purchase the service?	**Daily** to travel to work, airports, malls, restaurants, parks, home etc on 24-hour /7 days a week basis.
Why-do customers purchase the service?	Affordability, convenience, reliability, safety, cleanliness, operational excellence & **independent operational model from traditional taxi operations** (better standards)
Why- do customers NOT purchase the service?	**Fear**, scepticism surrounding the history of minibus taxi industry, private vehicle usage still might be more convenient.
Where-do customers purchase the service?	Via loading cash on tags at partnering ticketing partners and paying via the tag at **designated pick up/drop off spots** within the metropolitan area.

6W Model for customer 1: The Urban middle class

Who- are the customers?	**Registered Taxi owners** belonging to registered taxi associations with vehicles in good-excellent working conditions.
What- do customers use the service for?	**Diversify revenue stream,** gain exposure to new business opportunities with private sector & government, leverage collective bargaining deals with suppliers, skills development.
When-do customers purchase the service?	Members use the service **monthly** by paying a monthly membership admin fee.
Why-do customers purchase the service?	To **meet their businesses economical needs** by increasing revenue streams through meeting **social transport need**s of both the urban poor and middle
Why- do customers NOT purchase the service?	Potential customers may be **misinformed**, sceptical about organisation and its objectives, do not possess vehicles that meet standard of co-operative.
Where-do customers purchase the service?	Online with the organisation by **registering to become a membe**r of the co-operative.

6W Model for Customer 2: Taxi owners and associations

A customer value proposition map was used to develop the alignment between the transportation services (value proposition 1) provided by a taxi cooperative and the target market it aims to engage, namely the urban middle class (customer profile 1).

Value Proposition	
Products or Services	Minibus taxi service operating independently from traditional taxi operations e.g., own policies, governance structures and network. Pick up and drop off points strategically located in suburbs, malls, restaurants, office parks and other hotspots that meet needs of urban middle class. Low-Cost group transportation service

Gain Creators	Cheaper than e-hailing services due to economies of scale and group transportation. Strict co-op policies set in place that ensure cleanliness and safety of all vehicles. Group transportation = reduced traffic congestion and impact on environment. 24/7 public transport service. Readily available at specific hotspots, no need to request ride. All drivers undergo continuing professional development. Driver rating systems. All drivers and vehicles undergo strict spot checks regularly during the day. Disciplinary processes in place for non-compliant drivers and owners.
Pain Relievers	Cost effective, clean, and safe public transport service. Cashless service Available 24/7 Convenient.



FIT

Customer Profile	
Customer jobs	Travelling in the metropolitan area. Travelling after hours. Feeling safe & comfortable to travel e.g., safety. Want to access public transport easily e.g., convenience.

Customer Gains	Avoid expensive e-hailing costs. No need to drive oneself to work, airport, malls or bars and restaurants (convenience) 24/7 readily available public transport service. No car instalments, reduced fuel costs. Reduced insurance and car maintenance costs. Increased disposable income.
Customer Pains	Having to drive to work on congested roads with Potholes. Having to own costly private vehicles for transportation. Opting for expensive e-hailing services. Expensive fuel and car maintenance costs associated with private vehicle ownership.

Customer proposition map for customer profile 1: Urban middle class

Additionally, another customer value proposition map was developed to assess the alignment between the business services provided by the cooperative (value proposition 2) and its shareholder members (Customer profile 2).

Value Proposition	
Products or Services	Policies and governance systems favorable for penetrating new market segments. Managerial expertise and strong leadership at top level. Strict Codes of conduct for members and drivers. Continuous professional development trainings for members and drivers. Financial services for all members and their drivers.

Gain Creators	Better access to capital/finance. Increased customer satisfaction with taxi services. Diversification of revenue streams through accessing new market segments e.g., urban middle class Exploit business opportunities in the industries value chain e.g., manufacturing, fuel etc. Job security for workers in the industry e.g., drivers, marshals etc. Can take part in commercial opportunities with private sector and government. Increased promotion and awareness of the industry and the services. Increased access to technology. Financial management skills/training
Pain Relievers	Reduced conflict and violence due to jostling for declining demand/ridership in one market. Reduction in customer complaints about drivers. Easier access to economic support from government. Negotiated prices for purchasing of supplies for members e.g., new vehicles, tyres, parts etc.



FIT

Customer Profile	
Customer jobs	Increase profit margins and diversify income to grow their businesses.

Customer Gains	New market segment opportunities. Training and development for themselves and their drivers. Financial advice and services. Leverage government opportunities in transport sector & secure economic support from government e.g., subsidies. Leverage business opportunities in the private sector.
Customer Pains	Reduced profitability in the industry. Expensive taxi repayment rates. Overcrowding on routes (too many taxis working same route). Uneducated drivers. Expensive taxi maintenance costs. Difficulty accessing capital.

Customer value proposition map for customer profile 2: Taxi owners and associations

Customer analysis summary:

For the urban middle class (Customer 1), the analysis emphasizes convenience, safety, and cost-effectiveness in transportation services. The proposed co-operative business offers a minibus taxi service with strategic pickup points throughout the metro and 24/7 availability, aiming to alleviate the pains of congested roads and expensive e-hailing services. Similarly, for taxi owners and associations (Customer 2), the co-operative promises managerial expertise, access to finance, and opportunities for revenue diversification, addressing concerns such as declining profitability and high maintenance costs. The value propositions for both customer profiles highlight the importance of efficient governance structures, professional development, and financial support to create sustainable benefits and address current industry challenges.

Industry analysis

Establishing a taxi cooperative involving two prominent taxi associations within the Johannesburg metropolitan area will face stiff competition from competitors reacting. it will face competition from existing services operating within this market segment and possible new entrants. The following is an industry analysis of the public transport sector in the Johannesburg metro, employing Porter's Five Forces model.



Industry analysis Summary:

An analysis of the South African public transport industry reveals several key dynamics. The threats of new entrants are relatively low due to high capital requirements of having to purchase minibus taxis or buses. Additionally, economies of scale are not highly advantageous, and industry profitability remains low especially for minibus taxis that are not subsidised by government as compared to Bus services such as PUTCO. The bargaining power of commuters, particularly urban middle-class commuters, is high, driven by their desire for convenience, safety and reliability and the availability of substitute alternatives such as using private vehicles. Suppliers in the industry, such as Toyota and parts manufacturers, hold significant power due to low numbers, high barriers to entry, and the value proposition they provide owners. The threat of substitutes is relatively low, with limited options and moderate switching costs, but alternative transport mediums offer competitive price performance e.g. Metrorail. Rivalry among existing competitors is low in terms of numbers and diversity, with medium industry growth and high loyalty to specific transport mediums. These factors collectively shape the landscape of the South African public transport industry, highlighting challenges and opportunities for stakeholders.

Competitor analysis

A threat indicator analysis assessed the potential threat posed by existing transport businesses innovating to compete or new competitors entering the market.

Competitor analysis				
	Uber	**Gautrain**	**Metro Bus**	**Metro Rail**
Company profile	E-hailing service specializing in connecting commuters with affordable rides all over Gauteng	Private train service spanning the Johannesburg CBD, North and Pretoria CBD geographic region.	Designated bus service of the City of Johannesburg.	Public train services in the Gauteng region.

	and other provinces.			
Key competitive advantage	Technology, convenience, reliability, geographic presence, available after hours.	Avoids road traffic, speed, safety, reliability, punctuality,	Affordability, mass group transportation.	Affordability, mass group transportation.
Target market	Middle-upper class.	Middle-upper class.	Poor-middle class.	Poor.
Geographical footprint.	Global footprint and all major cities in SA.	Gauteng Province	Johannesburg metro.	Johannesburg Metro.
Marketing strategy	Aim to provide Comfortable, safe, 24/7 on request rides.	Aim to provide safe, Fast, reliable and on schedule transport for working/middle class wishing to avoid traffic and driving.	Aim to provide safe, affordable punctual, on schedule public transport across the Metro for those who can't afford private vehicles.	Aim to provide cheap on schedule public transport.
Products & services	Transport and delivery services.	Transport services.	Transport services.	Transport services.
Pricing	Average price per km R9,49	Trips range from R 27 – R234 during off peak hours.	10 trips weekly range from R112 - R279 depending on stages.	Pretoria to Johannesburg avg price R 11.50

Strengths	Unlimited working hours, large geographical footprint, reliable, convenient.	Safe, fast, avoids road traffic, reliable, also have a bus network.	Affordable, safe,	Affordable, avoids road traffic, large geographical footprint.
Weaknesses	Expensive,	Limited geographical footprint, limited working hours, expensive	Limited working hours,	Unsafe, limited working hours.
Opportunities	Growing smartphone usage, remote locations in rural areas.	Untapped geographic locations across Gauteng into eastern, western, and Southern suburbs.	Rising fuel and vehicle ownership costs for middle class = looking for alternatives	
Threats	Minibus taxi industry innovation efforts e.g., Co-operatives and own e-hailing services.	Failure to increase geographic footprint across Gauteng.	Minibus taxi industry innovation and formalization efforts.	Minibus taxi industry innovation and formalization efforts.

Competitor analysis summary

The competitor analysis highlights four key players in the transportation sector in Gauteng, Uber, Gautrain, Metro Bus, and Metro Rail. Uber is an e-hailing service offering affordable rides with a global presence, targeting the middle-upper class with its technology-driven convenience and reliability. Gautrain, a private train service, appeals to

the same demographic, emphasizing speed, safety, and punctuality while avoiding road traffic.

Metro Bus and Metro Rail cater to the poor to middle-class market with affordable mass transportation within Johannesburg, focusing on safety, affordability, and punctuality. While Uber boasts unlimited hours and a vast footprint, its pricing remains a concern. Gautrain faces limitations in its geographic coverage and operating hours. Metro Bus and Metro Rail, while affordable, also confront safety and operational hour constraints. The industry faces threats from innovative initiatives within the minibus taxi sector provided the sector can organise itself to meet the needs of commuters where its competitors are lacking.

The proposed business cooperative aims to leverage the following opportunities, which many competitors fail to fully address:

- Offering convenience and reliability
- Ensuring punctuality and safety
- Contributing to the reduction of road traffic
- Providing affordable mass transportation
- Operating without time limitations
- Establishing a broad geographic presence.

8.2 Market Analysis

Market Size and Trends

Many middle-class individuals may opt for public transport for their daily commutes, citing traffic congestion and the convenience of avoiding parking hassles. However, private vehicle ownership is increasing in South Africa. A significant portion of the middle class, comprising most workers, relies on private transport for commuting to work. According to Statistics (2020) , only 30.5% use public transport, while 20% walk to work. Despite a global benchmark recommending that individuals spend no more than 10% of

their income on transport, in South Africa's metropolitan areas, the figure stands at 50.4%, highlighting the significant disparity resulting from an ineffective public transport system and the limited spending power available for an attractive public transport solution (Gedye, 2020). The popularity of ride-sharing services like Uber and Bolt has surged in urban areas, offering a convenient and flexible alternative to traditional taxis. Additionally, there is a growing interest in cycling and walking as modes of transport, especially for short distances, often driven by a desire for a healthier lifestyle and environmental awareness.

Marketing Strategy

Given the cooperative's intention to introduce transportation services to a previously untapped market, its marketing strategy will align with a **Market Development** approach to introduce the most suitable product to this market segment. The initiative to provide transportation services to the urban middle class through collaborations within the industry positions it as a novel venture, despite the existing provision of such services by minibus taxis. This strategic shift has the potential to disrupt the transportation sector, as even minor adjustments in the cooperative's operations, management, and leadership could open avenues for new revenue streams. These adjustments could involve addressing new customer needs or enhancing product performance significantly (Gurcaylilar-Yenidogan, 2018).

MARKET

PRODUCT

	EXISTING	NEW
EXISTING	*Market Penetration (Poor)* Offer lower prices. Offer safer, cleaner, and reliable taxi services. Be more customer centric.	*Market development (Urban middle class)* Offer safer, cleaner, reliable taxi services independent from traditional taxi operators (niche) Customer centricity Enforce strict organization policy/constitution and code of conduct for all operators and drivers to adhere to. Locate services close to urban traffic hot spots e.g., office parks, suburbs, malls, airports, restuarants and bars for convenience. Speed points & tags as forms of payment (Cashless) 24/7 Service. Reward usage of service (loyalty program)
NEW	*Product Development* Offer 24/7 taxi services in the municipality. Incorporate technology e.g., geolocation to notify Taxi drives where passengers are.	*Diversification* Vertical integration Launch a Taxi Co-operative bank. Launch own fueling stations. Manufacture own Taxi vehicles. Manufacture own parts and parts stores.

Targeting and segmentation

To facilitate market segmentation and categorize potential customers for the proposed business operation, various factors including demographic, behavioural, geographic, and psychographic considerations were considered.

	Primary Customer	**Secondary Customer**	**Tertiary Customer**
Demographic	-25 – 55-year-old South African working class. -Middle income to entry level upper income earners earning above R15 000 per month. - With diploma or degree education, entrepreneur. - Middle – upper class.	-13 – 25-year-old South African student. -Born into middle – upper class family. -Grade 7 – varsity student (studying towards diploma/degree)	-21 – 55-year-old foreign internationals tourists. -Earning income in foreign currencies. -With degrees or diplomas, entrepreneurs. -Middle to Upper class in their respective countries of origin.
Behavioural	-Target currently uses private vehicle for transportation in the metro/city. -Has or has not used minibus Taxi prior owning a private vehicle. -Looking for a public transport alternative that is scheduled and meets his needs in 24/7 availability comfort, reliability, convenience, and safety. -Travels to workplace and	-Target may or not own a private vehicle. -Uses E-hailing services. Has or has not used minibus Taxi prior. -Looking for a public transport service that is scheduled and is safe, 24/7, reliable, comfortable, and more cost effective than e-hailing services. -Travels to campus (Studies) during the week	-Target is here on travel or business and needs to get around the metro/city. -Is familiar with E-hailing services and utilizes them. -Never used a minibus taxi. -Looking for a public transport alternative that is scheduled, safe, reliable, convenient. -Travels for sightseeing or business during

	airports during the week (work), restaurants, bars, and malls on weekends (pleasure)	and restaurants, bars, markets, and mall on weekends (pleasure)	the week (Travel & business) and restaurants, bars, markets, and malls on weekends (pleasure)
Geographic	-South Africa -Gauteng -Johannesburg Metro. -English speaking regions	South Africa -Gauteng -Johannesburg Metro. -English speaking regions	South Africa -Gauteng -Johannesburg Metro. -English speaking regions
Psychographic	LSM 8-10	LSM 8-10	LSM 8-10

Product Positioning

The transport service provided under the cooperative business aims to offer Johannesburg's urban and suburban middle class a 24/7 scheduled, safe, readily accessible public transport option that caters to their requirements and preferences. The service will enable the urban and suburban middle class to travel to various destinations within Johannesburg without relying on e-hailing services or private vehicles. The specialized minibus transport service will operate autonomously from existing taxi operations but will engage taxi owners as cooperative members to enhance their fleet's revenue streams by sourcing vehicles from them.

Marketing Mix

Product/Service

The service will be delivered through the collective resources (vehicles) and participation of taxi owners in the envisioned cooperative business. Operating on a scheduled route and time basis, the transport service will serve the Johannesburg metro area, forming an extensive transport network tailored to commuter demand.

Price

To enter the market initially, a fixed low-cost penetrative pricing strategy will be implemented. By temporarily offering prices below the market rate (AA prices). The business aims to attract commuters seeking a cost-effective alternative. This strategy is commonly employed to achieve rapid market entry into new markets or introduce new products/services into existing markets (Sammut-Bonnici, 2015).

This approach will enable the service to rival major competitors like Uber, which holds a significant market share in urban middle-class transportation. Presently, Uber employs a dynamic pricing strategy, including surge pricing to align with real-time demand, varied pricing based on service levels, and promotional incentives to allure and retain customers (Cuofano, 2024).

The approach may be feasible because the business will utilize its group transportation feature to distribute trip costs among 6-9 commuters in a single minibus, unlike Uber where costs are borne by 1 or 2 customers. By sharing trip costs, the business can offer lower prices during the initial stages of operation.

Place

The service will function based on a "pay as you go" system, allowing commuters to load tags with funds from ticketpro in-store partners such as BP, SPAR, Fresh Stop, and Sasol Delight. These partners have been carefully selected to ensure convenience for commuters. Pay as you go payments are typically well-suited for startups and transportation businesses as they offer flexibility, cost efficiency, accessibility, and customer-centricity (Freeman, 2023).

A thorough website will also be established to provide daily updates and information to commuters until sufficient funds are obtained to develop an app. Additionally, the website will serve as the main platform for commuters to encounter advertisements related to the service

Services will be available at key landmarks in the Johannesburg metro and transport commuters between these landmarks. Landmarks include:

1. Malls & Shopping complexes
2. Airports
3. Designated suburban pick-up and drop off points.
4. Schools and campuses
5. Restaurants and bars
6. Petrol stations etc.

Promotion

As the business grows over the long term, service promotion will occur across various platforms. However, in the short term, cost-effective alternatives are essential. Promotion channels will include radio, TV, print media, social media, activations, and high-visibility events at landmark locations. These channels will effectively reach all three previously identified target segments (primary, secondary, and tertiary customers). Additionally, discounts and loyalty programs will be implemented to enhance customer retention strategies and maintain competitiveness in the market.

Operational Plan

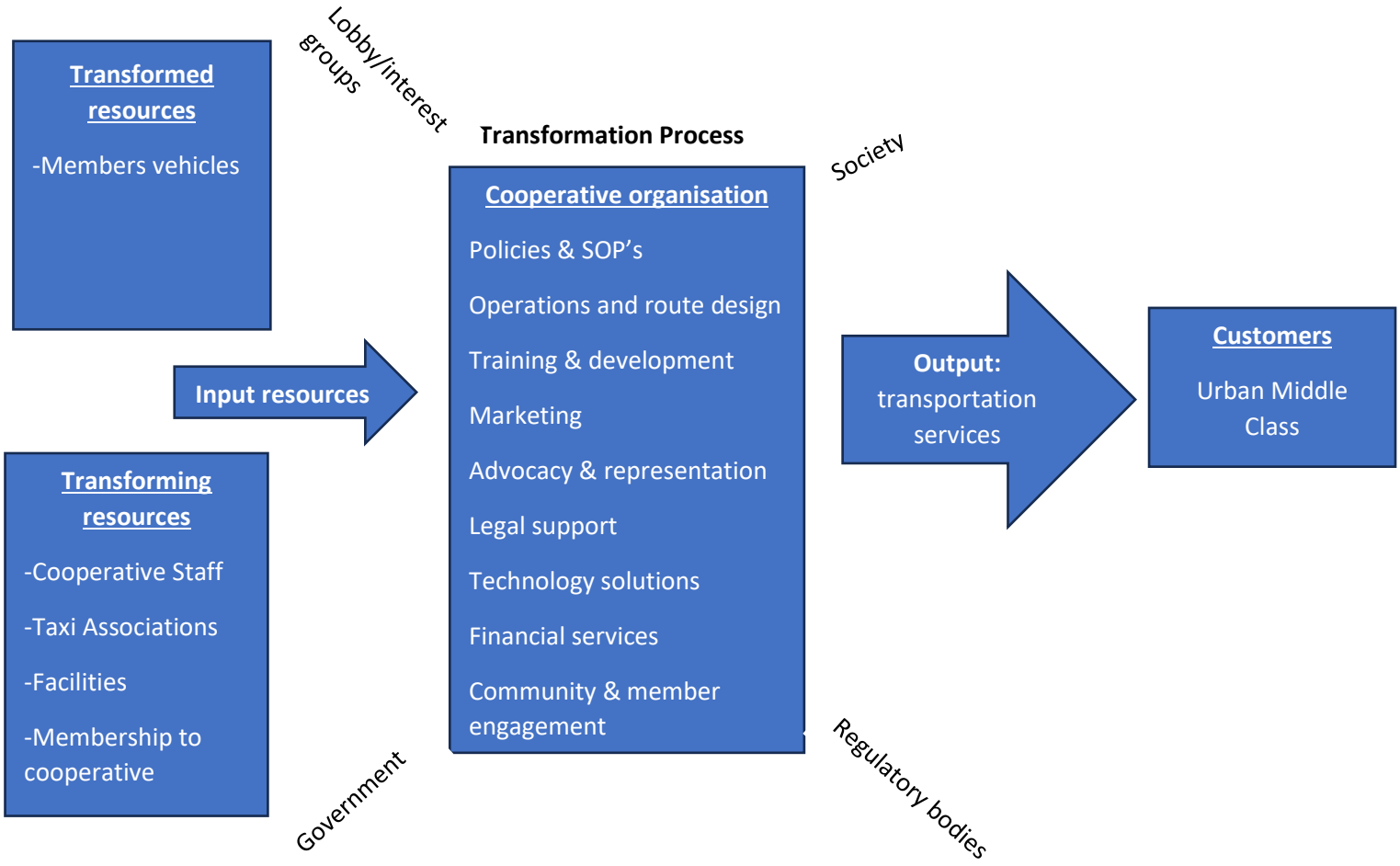
Geographical location analysis

The business will be based in Johannesburg, where the transportation services will be offered, specifically targeting the Johannesburg West and North areas where the two identified taxi associations are active. Johannesburg serves as an advantageous location, granting the business access to its members, customers, and the resources essential for its operations. Furthermore, a base in Johannesburg enables easy engagement with key stakeholders e.g. suppliers & partners interested in collaborating with the cooperative and

facilitates active promotion and awareness-building of the service among the local population.

Operations summary and stakeholder perspective

Below is an illustration outlining the operational procedures, emphasizing the transformation process, and identifying key stakeholders crucial for successful implementation of the proposed cooperative.



Operating equipment

The necessary equipment for the efficient operation of the business will include:

Equipment	Function
Vehicles: Toyota Quantum's	Transportation
Road + Pick up/drop off zone signs around urban areas.	Indicate services for use
Workwear (Branded and unbranded)	Attire for infield workers
Ipads	Integrate with other systems within the access control infrastructure & remote work and communications amongst workers.
Access control system equipment	Commuters to access the service.
Shipping containers	Information stalls at pick up/drop off zones
Computer infrastructure	Data storage and management, automation & efficiency, CRM, Remote work & mobility etc.
Two-way Radios and infrastructure.	Communication among infield workers
Private vehicles	Monitoring and road safety security/

Regulatory & legal issues

The absence of a regulatory framework- Regulatory oversight of the taxi industry has always been fragmented among different government departments and levels of government, leading to inconsistencies and difficulties in enforcement. Each province, except for the Western Cape, has often designed its own set of regulations to oversee the industry, confusion regarding the most suitable laws, applicable on a national scale rather than just provincially, persists.

Illegal operators- The lack of regulation and laws leaves the industry vulnerable to numerous illegal operators who exploit the resulting chaos. Estimates suggest that the total number of illegal taxi vehicles operating without licenses ranges from 63,000 to 100,000.

Furthermore, the industry lacks frameworks to guide planning and determine the surplus or oversupply of minibus taxis, leading to inefficiencies in route allocation and potential route duplications.

The above mentioned presents a challenge, as the cooperative's efforts to enlist taxi owners as members and have them contribute their vehicles to the business could potentially exacerbate the prevalence of shoddy practices among illegal operators looking to join the cooperative. Consequently, the business must establish strict membership criteria and policies to regulate the admission of members, permitting only those in good standing with their respective taxi associations to join. This will be done through continuous engagement and partnership with leaders of both taxi associations.

Permits and Licenses-Obtaining operating licenses and permits for taxi operations in Gauteng can also be complex and time-consuming, leading to a significant number of operators running without proper paperwork. The extended turnaround time may prolong the recruitment process for acquiring new members and could potentially lead existing members to resort to questionable practices to speed up procedures, thus bypassing standard protocols.

Funding and Financial projections.

	Pre-start (2024)	**2025**	**2026**	**2027**	**Totals**
Receipts					
Loans/funding received	15,000,000	-	-	-	**15, 000,000**
Income		3,000,000	5,000,000	7,000,000	**6,000,00 0**
Membership fee collection (R999 p/m x 100 members)		1,198,800	1,198,800	1,198,800	
Total receipts	**15,000,00**	**4,198,800**	**6,198,800**	**8,198,800**	**21,000, 000**
Payments					
Business registration costs	1,000				1,000
Rent- Office space		150,000	150,000	150,000	450,000
Website development & maintenance	10 000	3,000	3,000	3,000	28,000
Marketing material content development (Ad agency)	5,000		5,000		10,000
Marketing material printing (A5 Drop cards)	15,000	15,000	15,000	15,000	60,000

Media advertisements (Radio, tv and print media)	200,000	200,000	200,000	200,000	800,000
Squad vehicles	5,000,000				5,000,000
Fuel for Travel	15,000	15,000	15,000	15,000	60,000
Phone and internet	11,000	11,000	11,000	11,000	44,000
Office supplies	3,000	2,000	2,000	2,000	9,000
Payroll systems (salary, taxes & benefits)	2,000,000	2,000,000	3,000,000	3,000,000	10,000
Road Signage costs and maintenance	1,000,000	50,000	50,000	50,000	1,150,000
High Viz and corporate activation events.	1,000,000	1,000,000	1,000,000	1,000,000	4,000,000
Insurance – Office & motor vehicles	400,000	400,000	400,000	400,000	1,600,000
Training and Development	500,000	75,000	75,000	75,000	725,000
Security	120,000	120,000	120,000	120,000	480,000
Total payments	**10,280,000**	**4,041,000**	**5,046,000**	**5,041,000**	
Cash flow surplus/deficit (-)	**4,720,000**	**8,918,800 14,229,400**	**11,076,600**		
Opening cash balance	**-**	**4,720,000 6,030,600**	**4,877,800**		**9,188,400**
Closing cash balance	**4,720,000**	**4,877,800 9,188,400**	**6,030,600**		

Risk Analysis

These identified risks represent a broad spectrum of factors that could impact the operational efficiency, financial stability, and market competitiveness of the cooperative. Mitigation strategies and contingency plans should and will be developed to address each of these risks effectively, ensuring resilience and sustainability of the business.

Key:

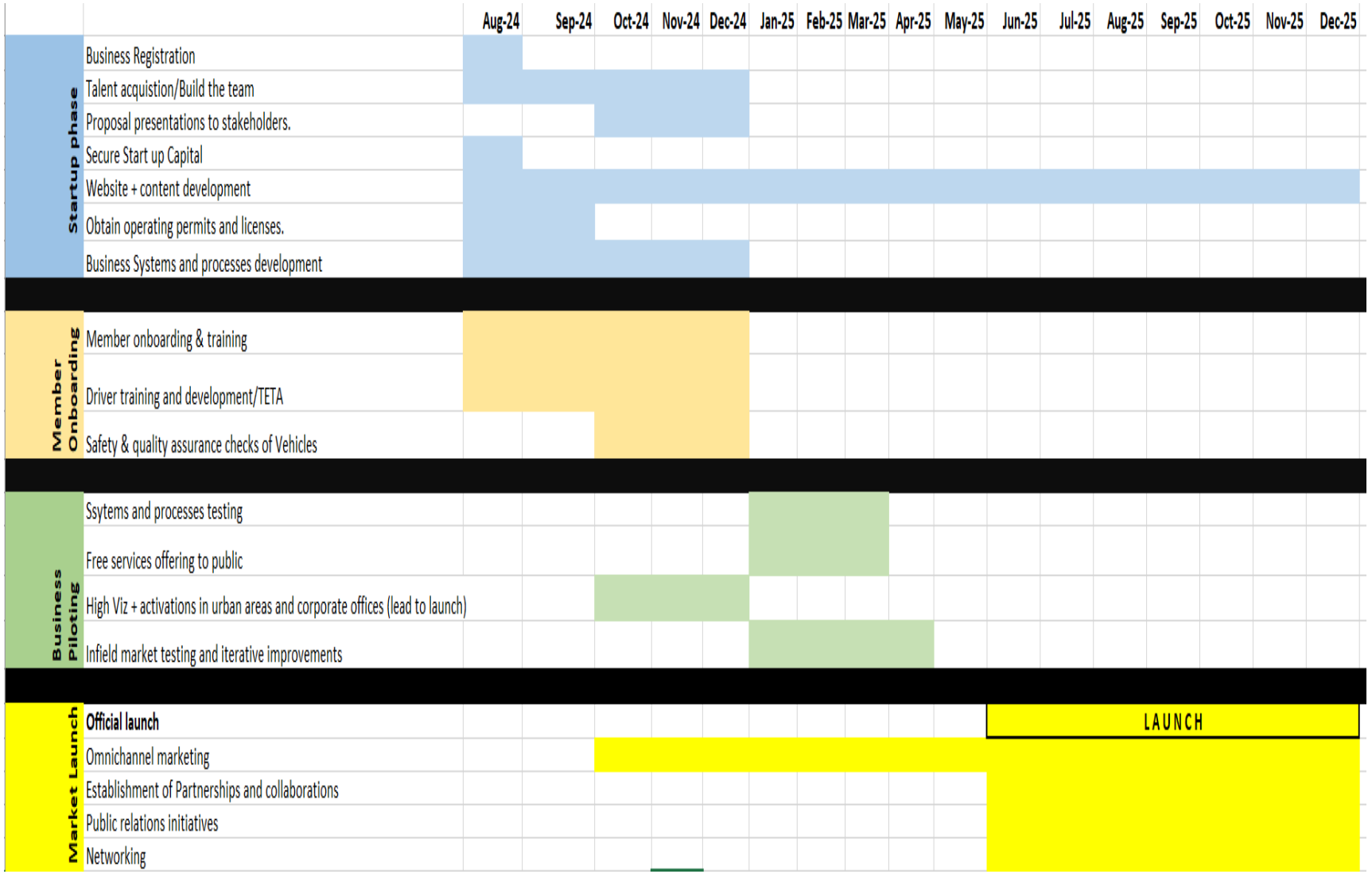
High risk	Medium risk	Low risk

Risk Matrix	Impact	Probability		Impact	Probability		Impact	Probability
Operational Risks			**Financial Risks**			**Market Risk**		
Driver & vehicle shortages			Fluctuating fuel prices.			Change in consumer preferences.		
Breakdown of transportation management systems e.g. payment methods			Interest rate risk of minibus purchases.			Economic downturns for consumers.		
Poor customer service & complaints.			Vehicle insurance risks.			Technology disruptions e.g. battery-operated minibuses.		
Security threats e.g theft & vandalism.			Capital expenditure risk.			Government/provincial regulatory changes.		
Competition & pricing pressures from competitors.			Investment risk.			Environmental concerns. e.g. move to greener energy and vehicles.		

Noncompliance to Regulatory frameworks e.g. permits.				Labour market dynamics e.g. demand and supply of drivers		
Route disruptions e.g. traffic congestion				Commodity price fluctuations e.g. oil and fuel.		
Human error.				Innovation rate of established competitors.		

The risk assessment indicates that the primary concern, which carries the most significant impact, stems from operational mishaps. Considering the taxi industry's past experiences, any instances of lawlessness, operational hiccups, or security issues will amplify commuters' existing anxieties, potentially deterring them, particularly if they are first-time users of the service. Consequently, from a business standpoint, it will be a point of focus as it is imperative that we guarantee flawless execution in all operational facets of the service from the outset, leaving no margin for error.

Implementation Plan



The implementation plan consists of four phases: the startup phase, onboarding, piloting, and launch phase. The startup phase focuses on acquiring resources to establish the business. The onboarding phase involves recruiting cooperative members from two identified taxi associations, who will pool vehicle resources to offer the transport service to the middle class. During this phase, extensive training and development programs will be conducted for owners and drivers to ensure they meet the business standards. Following the completion of training and development, the business piloting phase will commence, involving small-scale tests in specific areas, offering free trials to commuters, and analysing their feedback to enhance the transport service. The launch phase will involve the full-scale introduction of the service to the market through aggressive marketing campaigns in collaboration with government and the private sector.

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Appendix



Appendix A: Map depicting JHB West and North regions where research will take place & where Taxi cooperative will operate.