

The development of an entrepreneurial business framework in Gauteng province



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Background: Entrepreneurs in Gauteng, South Africa's economic hub, face growing pressure to integrate sustainability into their business models. As responsible operations become essential, the need for supportive frameworks has intensified. Developing a robust framework for sustainable entrepreneurial businesses in Gauteng province can maximise business opportunities and sustainable operations.

Aim: This paper presents a developed framework for sustainable entrepreneurial businesses in Gauteng, with an objective of identifying key factors for the success and resilience of SMMEs.

Setting: The setting for the study was across the central, eastern, western, northern, and southern regions of Gauteng province, South Africa.

Methods: The study applied quantitative approach based on exploratory and descriptive research design. Using stratified random sampling, the study sampled 450 SMMEs in Gauteng and 445 (98.88%) responses were received.

Results: The study revealed that most businesses were initiated either through the purchase of existing businesses (27.19%) or through entrepreneurs' own initiatives (25.62%), with family-owned businesses playing a notable role (24.27%). Factors identified with a significant relationship to organisational capabilities were: business performance, entrepreneurial skills and competence, competitive scope, considering factors contributing to success and profitability and challenges faced by SMMEs ($p < 0.0001$).

Conclusion: The findings suggest that SMMEs in Gauteng province benefit from a multidimensional approach that integrates factors, such as entrepreneurial skills and competence, competitive scope, considering factors contributing to success and profitability with organisational capabilities to ensure long-term business sustainability.

Contribution: This framework provides essential knowledge for policymakers, entrepreneurs and researchers aiming to foster a thriving and resilient entrepreneurial ecosystem in Gauteng and similar emerging markets.

Keywords: sustainable entrepreneurship; small, medium and micro enterprises; business performance; entrepreneurial competence; organisational capabilities; Gauteng; small business framework.

Introduction

The concept of sustainable entrepreneurship has garnered increasing attention from both academic and policy circles, particularly in economically strategic regions such as Gauteng province, South Africa. As the economic engine of the country, Gauteng hosts a substantial concentration of small, medium and micro-sized enterprises (SMMEs), which play a vital role in driving inclusive economic growth and job creation. Despite their significance, SMMEs in the region face persistent challenges in achieving long-term sustainability. Recent studies have highlighted several factors contributing to these challenges. Studies (Mhlongo & Daya 2023) identified deficiencies in managerial and leadership skills, leading to poor management and competitiveness, which pose significant obstacles to the growth and survival of SMMEs in Gauteng. In addition, Chimucheka and Mandipaka (2015) emphasised the lack of entrepreneurial orientation, innovative ideas and experience among SMME operators as critical issues affecting sustainability. Access to finance remains a major hurdle. Olawale and Garwe (2010) argued that inadequate access to financing is a significant challenge to the growth and sustainability of SMMEs in South Africa. Many small business owners struggle to secure funding because of a lack

of appropriate collateral, insufficient credit history and inadequate business plans, often stemming from limited education and skills. Furthermore, the entrepreneurship ecosystem in Gauteng presents its own set of challenges. Findings in Majaja (2019) revealed that entrepreneurs in the City of Johannesburg face difficulties such as access to markets, equipment and suppliers. The study also highlights the need for investors, suppliers and entrepreneurship education to address these challenges effectively. Studies by Mhlongo and Daya (2023) found that limited entrepreneurial competencies, inadequate access to effective business practices and weak organisational capabilities are some of the challenges facing entrepreneurs in Gauteng. Authors further identify the absence of relevant performance indicators and poorly defined competitive strategies as additional barriers to sustainable growth in this sector (Akpo et al. 2021).

The sustainability of SMMEs in Gauteng province, South Africa, is intricately influenced by the interplay of entrepreneurial skills, organisational capabilities and external challenges. Recent studies provide insights into how these factors interact to affect the long-term viability of SMMEs in the region. Entrepreneurial competencies, including innovation, leadership and strategic planning, are vital for the success of SMMEs. Kankisingi and Dhliwayo (2022) highlight that innovation performance in manufacturing small and medium enterprises (SMEs) is significantly influenced by reward systems, suggesting that entrepreneurial skills are crucial for fostering innovation and, consequently, sustainability. Furthermore, Kalitanyi (2019) emphasises the role of enterprise propellers (EP) in shaping the identity of SMMEs, indicating that entrepreneurial skills are essential for navigating the business landscape in Gauteng. Organisational capabilities, such as effective management practices and adaptability, are critical for SMMEs to thrive. Sogaxa, Smallwood and Simpeh (2023) discuss the economic value of business incubators in fostering SMEs, noting that these incubators enhance organisational capabilities by providing support structures that promote growth and sustainability. In addition, Omoruyi and Dhurup (2016) studied the influence of supply chain networks and integration on SME performance, underscoring the importance of robust organisational structures in achieving sustainability. Small, medium and micro enterprises in Gauteng face several external challenges, including infrastructural deficits and policy constraints. Omoruyi and Dhurup (2016) further analysed the impact of electricity blackouts and poor infrastructure on the local economy of Johannesburg, revealing that such challenges significantly hinder the operations and sustainability of SMMEs. Moreover, Sithole and Ruhode (2021) identify barriers to cloud computing adoption among SMMEs, such as limited government support and regulatory hurdles, which impede technological advancement and competitiveness. The interaction between entrepreneurial skills, organisational capabilities and external challenges creates a complex environment for SMMEs. For instance, while entrepreneurial

skills can drive innovation, external challenges like infrastructural issues may limit the implementation of innovative ideas. Similarly, strong organisational capabilities can help SMMEs adapt to external pressures, but without supportive policies and infrastructure, their efforts may be constrained.

These findings underscore the need for a comprehensive and integrated framework to guide the development and sustainability of entrepreneurial ventures in Gauteng. As Bugwandin and Bayat (2022) argue, such a framework must holistically incorporate economic, environmental and social dimensions to ensure that entrepreneurship not only thrives in the present but also contributes meaningfully to long-term development goals. Bingwa (2024) emphasises that the framework must be context-sensitive and carefully aligned with Gauteng's distinct socio-economic characteristics, industrial dynamics, regulatory conditions and demographic diversity.

Developing this kind of framework would equip entrepreneurs with a structured, strategic approach to navigating the province's complex business environment. In turn, this would support sustainable economic growth, job creation and environmental stewardship. As Weillbach (2025) notes, businesses are increasingly under pressure to operate responsibly and inclusively. A well-crafted, locally relevant framework is therefore essential to enable SMMEs in Gauteng to meet both market expectations and sustainability objectives.

The aim of this paper is to present a developed framework for operating sustainable entrepreneurial businesses in Gauteng province, South Africa. The objective of the study was to identify the critical factors that contribute to the long-term success and resilience of SMMEs. Specifically, the study sought to define the essential components of a conceptual framework that supports sustainable entrepreneurship in the province. Key areas of investigation included demographic factors, business characteristics, organisational capabilities, common challenges faced by enterprises, and the determinants of profitability and business longevity. In addition, the study examined the required level of entrepreneurial competence, the specific skills necessary for entrepreneurial success and the broader role of SMMEs in fostering economic development.

Literature review

This study draws on the conceptual model by Man, Lau and Chan (2002), which views entrepreneurial performance as the result of dynamic interactions among individual characteristics, environmental conditions and resource availability. Rather than attributing success solely to personal traits, the model emphasises the interplay between internal capacities and external support systems.

Entrepreneurial traits such as resilience, innovation, leadership and management skills significantly shape business outcomes.

Asah, Fatoki and Rungani (2015) link motivation and personal values to SME performance in South Africa, while Bruwer, Smith and Le Roux (2019) highlight the importance of innovation skills in driving profitability, particularly among sole traders.

External factors such as market dynamics, economic policy and regulatory frameworks play a crucial role in enabling or constraining entrepreneurship. Ayandibu and Houghton (2017) and Sithole and Ruhode (2021) point to regulatory barriers and limited institutional support as key obstacles for South African SMMs, particularly in adopting technologies like cloud computing.

Effective access to and use of financial, human and technological resources is critical for growth. Business support services enhance these capabilities (Mathibe & Van Zyl 2011), yet challenges such as low information and communication technology (ICT) literacy and regulatory limitations continue to hinder technology adoption (Sithole & Ruhode 2021).

The model also considers both financial outcomes (e.g. revenue growth, profitability) and non-financial goals (e.g. sustainability, social impact). Olarewaju and Msomi (2021) emphasise the role of financial literacy in SME resilience during the coronavirus disease 2019 (COVID-19) pandemic, while Aliamutu (2022) connects environmental practices to long-term financial viability.

Recent research has expanded the model's relevance in light of digitalisation and sustainability trends. Sithole and Ruhode (2021) explore digital transformation among SMMs, and Lukose and Agbeyangi (2024) underscore the importance of integrating ICT literacy with sustainable practices in the hospitality sector.

Demographical influences and characteristics of the business

A complex interplay of personal attributes such as gender and education, family context, workforce size and motivational drivers shapes entrepreneurship. These factors influence business strategies, resource access and long-term performance outcomes. Research consistently shows that gender, age and education significantly affect entrepreneurial success, often mediated by strategic behaviour and orientation (Hendrawijaya 2019; Nguyen 2018).

Gender plays a central role in shaping entrepreneurial experiences and outcomes, particularly in relation to resource access, market perception and revenue growth (Aguma 2025; Mustafa & Treanor 2022). Female entrepreneurs often face barriers such as limited access to funding, mentorship and networks (Eddleston et al. 2016; Koziol et al. 2024). These challenges can constrain revenue growth but have also driven women to adopt innovative, resourceful strategies like bootstrapping and leveraging social capital (Khupe 2022).

Despite these challenges, studies suggest that women-owned businesses may achieve growth through customer-focused strategies, innovation and sustainability (Aljadani 2025). However, gender discrimination and cultural expectations, particularly around family responsibilities, still hinder equal participation and leadership opportunities (Liu & Zhang 2024; Petrescu & Suci 2024). Importantly, gender alone is not deterministic; it intersects with education, experience and industry type in shaping business outcomes (Adomako, Gyensare & Ahsan 2024).

Higher education equips entrepreneurs with business acumen, financial literacy and strategic thinking skills that enhance performance (Wong & Chan 2022). Educated entrepreneurs are more likely to adopt effective practices, secure funding and navigate complex markets. However, in sectors such as manufacturing or agriculture, hands-on experience may outweigh formal qualifications (Liu & Zhang 2024). Women, in particular, often face educational disparities, which can limit their entrepreneurial potential despite having the capabilities.

Family-run businesses benefit from trust, commitment and shared goals, but excessive involvement can limit innovation and external input (Nguyen 2018). Studies suggest an inverted U-shaped relationship between family involvement and performance, where moderate involvement is beneficial, but too much hinders growth. Gender also affects dynamics in family firms, with women sometimes struggling to assert authority in male-dominated environments (Liu & Zhang 2024).

Workforce expansion is a strong indicator of business growth and increased operational capacity. A growing employee base reflects market demand and supports specialisation in key business functions (Sharma et al. 2024). However, it also requires strong leadership and training systems to ensure productivity. In South Africa, digital tools have been shown to enhance employee growth and business efficiency, although challenges such as low ICT literacy persist (Sithole & Ruhode 2021).

Motivations significantly influence entrepreneurial strategies and outcomes. While some entrepreneurs pursue financial gain, others are driven by flexibility, social impact or personal fulfilment (Liu & Zhang 2024). Women are more likely to be motivated by social goals and family flexibility, which shapes their strategic focus and revenue models (Aljadani 2025). For many, entrepreneurship becomes a response to exclusion from formal employment systems (Petrescu & Suci 2024).

The method of business formation whether through start-up, acquisition or franchising impacts revenue potential. Women often face restricted access to venture capital, steering them toward lower-cost start-ups and personal financing (Sharma et al. 2024). Despite these constraints, many succeed by leveraging networks and adopting lean growth models. Structural inequities in financial support

and mentorship remain, highlighting the need for inclusive policies and institutional reforms (Petrescu & Suciuc 2024).

Factors contributing to the framework

This study explores critical determinants of SMMEs performance in South Africa, focusing on organisational capabilities, revenue growth, entrepreneurial competence and business challenges. These elements shape the sustainability and scalability of SMMEs.

Organisational capabilities encompassing strategic planning, innovation and operational efficiency are pivotal for revenue growth and resilience. Shafik (2025) emphasises the role of organisational capacity in project delivery and performance, while Sithole and Ruhode (2021) underscore the benefits of digital technologies like cloud computing, despite challenges in ICT literacy and policy.

Revenue growth reflects a firm's ability to scale and remain competitive. Leadership, resource management and customer orientation are essential enablers. Liu and Zhang (2024), Sharma et al. (2024) and Aljadani (2025) add that technological adaptation is key to revenue sustainability.

South African SMMEs face obstacles including limited funding, high operational costs and intense competition (Makhanya & Thulani 2024). Strong organisational structures improve resilience, especially during crises like COVID-19 (Adomako et al. 2024).

Entrepreneurial competence covering technical, cognitive and interpersonal skills drives business performance. Man et al. (2002) and Urban and Naidoo (2012) highlighted decision-making, opportunity recognition and resilience as critical. Kraa et al. (2025) confirm a strong link between competence and financial outcomes.

Modern success also requires digital literacy and sustainability awareness (Aljadani 2025). Entrepreneurs must balance leadership and regulatory navigation to remain competitive (Adomako et al. 2024).

Competitive scope, whether broad or focused, affects resource allocation and strategy (Shumba & Ebewo Jr 2024). Focused businesses often achieve better outcomes because of clearer market positioning (Sharma et al. 2024). Strategic competitiveness and business intelligence tools are crucial for South African SMMEs (Chiloane-Tsoka & Boya 2014).

Finally, entrepreneurial skills such as innovation, problem-solving and adaptability underpin organisational success (Wong & Chan 2022). Cultivating these abilities strengthens business agility and long-term viability.

Theoretical framework

This study is underpinned by the Resource-Based Theory (RBT), Dynamic Capabilities Theory (DCT) and

Entrepreneurial Competency Theory, supported by strategic management and innovation perspectives. The Resource-Based Theory, as posited by Barney (1991), asserts that firm performance is largely influenced by the strategic resources it possesses, particularly those that are valuable, rare, inimitable and non-substitutable (VRIN). In the context of this study, organisational capabilities such as strategic planning, operational efficiency and innovation are regarded as critical internal resources that contribute to sustainable competitive advantage. This aligns with literature that highlights the role of organisational capacity and digital transformation in enhancing business resilience and performance (Shafik 2025; Sithole & Ruhode 2021).

The Dynamic Capabilities Theory, introduced by Teece, Pisano and Shuen (1997), extends RBT by emphasising a firm's ability to adapt and reconfigure internal and external competencies in response to environmental changes. This is particularly relevant in the South African context, where SMMEs must continually adapt to evolving market conditions, regulatory changes and technological disruptions. Studies such as those by Aljadani (2025) and Adomako et al. (2024) underscore the importance of adaptability, digital literacy and resilience as core elements of dynamic capabilities.

In addition, the Entrepreneurial Competency Theory forms a central part of the framework by emphasising the influence of individual-level skills such as technical, cognitive and interpersonal on business success. As noted by Mitchelmore and Rowley (2010), these competencies significantly impact entrepreneurial decision-making, opportunity recognition and financial performance. Empirical evidence from sources such as Man et al. (2002), Urban and Naidoo (2012) and Kraa et al. (2025) supports the assertion that entrepreneurial competence is a strong determinant of SMME outcomes.

The theoretical foundation is further enriched by strategic management literature, particularly concerning leadership, market orientation and competitive strategy. The role of competitive scope whether broad or focused, affects resource allocation and market positioning, with studies such as those by Liu and Zhang (2024) and Sharma et al. (2024) indicating that focused strategies often yield superior outcomes. Furthermore, the integration of innovation and technology adoption theories is evident in the emphasis on digital transformation and the use of tools such as cloud computing (Aljadani 2025). These innovations are seen as enablers of efficiency and scalability, albeit with challenges related to ICT literacy and policy constraints (Sithole & Ruhode 2021).

Research methods and design

Population

The study population consists of entrepreneurs and owners/managers of SMEs operating within the Gauteng province of South Africa. The study population consists of 783 410 SMMEs.

Data collection

The data were collected using a survey questionnaire (Zake, Jonck & Pelser 2024) through Google Form and manual from Gauteng east, west, north and south. A structured questionnaire was used as the primary data collection instrument for this study. The questionnaire was designed to assess participants' responses with regard to organisational capabilities and entrepreneurial competence in relation to business sustainability. To measure responses, the questionnaire employed a 5-point Likert scale, ranging from: 1 – Strongly Disagree, 2 – Disagree, 3 – Neutral, 4 – Agree to 5 – Strongly Agree. This scale allowed for the quantification of participants' responses. The questionnaire was piloted with 15 entrepreneurs and pretested with a group of five participants to ensure clarity, eliminate errors and identify any ambiguous questions that could potentially affect the accuracy of the responses. Data were collected from SMMEs operating across the central, eastern, western, northern and southern regions of Gauteng province. A structured questionnaire was distributed both physically and electronically to ensure broader reach and inclusivity. In-person distribution was facilitated through local business forums, municipal enterprise offices and entrepreneurship hubs in areas such as Johannesburg (central), Ekurhuleni (east), West Rand, Pretoria/Tshwane (north) and Sedibeng (south). To accommodate participants who could not be reached in person, an online version of the questionnaire was disseminated via email and shared through WhatsApp business groups and SME networks. Participants were given a clear explanation of the study's purpose and assured of the confidentiality and anonymity of their responses. This multimodal approach ensured that data collection captured a diverse and representative sample of entrepreneurs across the entire province.

Research design

The research design was exploratory and descriptive. This research design was appropriate for this study because of the nature and objectives of the research. The exploratory aspect of the design is appropriate because there is limited empirical research that specifically investigates the combined influence of organisational capabilities and entrepreneurial competence in the context of business sustainability in emerging economies, particularly in Gauteng. This design allows the researcher to explore new relationships and patterns that have not been fully studied before (Surbhi 2016). The descriptive component is essential to provide a comprehensive overview of current entrepreneurial practices, competencies and organisational strengths across the province (Surbhi 2016). It helps to identify trends, characteristics and relationships among variables systematically, thus offering a foundational understanding of how these variables influence sustainability outcomes. Together, this design supports the generation of reliable statistical data, offers understanding and provides a basis for developing effective interventions and policy recommendations to support entrepreneurs in the region.

Sampling technique

To select eligible SMMEs from the population, stratified random sampling (Alvi 2016) was employed. The stratification was based on the geographical zones of Gauteng province, which included the central, east, west, north and south areas. This method was deemed appropriate for the study as it utilised probability sampling (Alvi 2016), ensuring that all participants had an equal chance of being selected. However, only the total sample was considered for the study to address the objectives of the study.

Sample size

The data were collected from 450 SMMEs in Gauteng province. The margin of error was set at 0.05 and 95% confidence interval to estimate the sample size of the study. Responses received were 445 at a rate of 98.88%.

All data were aggregated during analysis to ensure that individual responses could not be traced back to any specific participant. The findings were reported in such a way that no participant or business could be identified, thereby safeguarding their privacy and maintaining the integrity and trust of the research process.

Data analysis

In this study, data were analysed using a combination of descriptive statistics (Surbhi 2016), multinomial logistic regression (Statistics 2018) and multiple regression analysis (Sun et al. 2023) to effectively address the research objectives and explore the relationships among key variables relevant to South African SMMEs. Descriptive statistics (frequencies and percentages) were used to summarise respondent demographics, business profiles, and the distribution of organisational capabilities and entrepreneurial competencies, providing a clear overview of key patterns. Multinomial logistic regression was applied to examine how organisational capabilities (e.g. innovation, leadership, strategic planning) relate to categorical levels of entrepreneurial competence (low, medium, high), allowing for analysis of how internal factors shape entrepreneurial profiles. Multiple regression was used to assess the linear relationship between organisational capabilities and business performance outcomes (e.g. revenue growth, profitability), accommodating multiple predictors and continuous dependent variables. A 0.05 significance level was used, and data were analysed using SPSS version 29.0, ensuring a robust and comprehensive analytical approach.

Reliability

Reliability was checked using Cronbach's alpha. There were internal consistencies as follows: Challenges faced by business enterprises of 89.94%; Factors contributing to success and profitability of 87.78%; Level of entrepreneurial competence of 89.81%; Competitive scope of 86.50%; Entrepreneurial competence required of 87.36%; Entrepreneurial skills of 83.52% and Organisational capabilities of 85.55%.

To ensure the validity of the content, a pilot study was conducted before actual data collection. All questions in the questionnaire were designed to meet the aims and objectives of the study, ensuring that no unnecessary questions were included.

Ethical considerations

Ethical clearance to conduct this study was obtained from the Tshwane University of Technology Human Research Ethics Committee; the approval letter is attached (No. HREC2024=08=001(MS)). To uphold ethical research standards, both confidentiality and anonymity of participants were strictly maintained throughout the data collection and analysis process. Participants were informed that their involvement was voluntary and that they could withdraw at any stage without any consequences. No personally identifiable information, such as names, business names or contact details, was collected in the questionnaire. Each completed questionnaire was assigned a unique code for data analysis purposes, with no link to the respondent's identity. For electronic responses, secure online survey tools with password protection were used, and access to the data was restricted to the primary researcher. For paper-based questionnaires, completed forms were stored in a locked cabinet, accessible only to the research team (Arellano, Alcubilla & Leguizamo 2023).

Results

The results of this study provide an in-depth analysis of the factors influencing the operation and sustainability of entrepreneurial businesses in Gauteng province. Highlighted in this result are the demographic characteristics, motivations for starting businesses, business ownership structures and the challenges faced by entrepreneurs. This section presents a detailed breakdown of the data collected from a sample of 445 entrepreneurs, offering insights into the relationships between these factors and their impact on business performance and organisational capabilities. The results are categorised into several key areas: the demographic profile of entrepreneurs, reasons for starting a business, methods of business initiation and factors contributing to business sustainability, which will contribute to the development of a framework for operating a sustainable business.

Table 1 shows a relatively balanced gender distribution: 27.64% male, 24.94% female, 24.94% undisclosed and 22.47% identifying as 'Other', reflecting inclusivity or privacy concerns. Educational backgrounds vary, with 15.73% holding a Master's degree, followed by Grade 12 matric (13.93%), vocational qualifications (N6 Certificate 13.03%, National Diploma 10.34%), and Honours/postgraduate diplomas (13.03%), indicating many entrepreneurs have intermediate to advanced education. Business sizes are diverse: 22.47% have 151–200 employees, 20.45% have 50 or fewer, 20.45% have 101–150, 17.98% have 51–100, and 18.65% have 201 or more employees, showing a spread from small to medium-large businesses.

Family involvement is notable, with 51.46% employing family members, while 48.54% do not, suggesting varied business structures. Employee growth over 2 years is mixed: 34.38% of businesses grew, 32.13% shrank and 33.48% remained stable, indicating a fluctuating but balanced entrepreneurial environment.

A notable 11.24% of respondents started businesses to be their own boss, valuing independence and control. Flexibility was a key reason for 13.71%, appealing to those seeking work-life balance. Only a small share (0.22%) cited dissatisfaction with job options combined with a need for flexibility or a lifelong dream to run a business. Unemployment is a significant driver: 13.03% began businesses because of a lack of work, and 9.89% started after previous employment ended, reflecting job loss or labour market shifts. The most common reason (24.04%) was dissatisfaction with available work, indicating entrepreneurship as an alternative for those seeking more fulfilling careers. Additionally, 12.13% became entrepreneurs because of lacking skills for other jobs, suggesting a skills-job mismatch (Figure 1).

TABLE 1: General information of the participants and the business.

Variable	Description	Frequency	%
Gender	Male	123	27.64
	Female	111	24.94
	Other	100	22.47
	Do not want to indicate	111	24.94
Total	-	445	100
What is the highest level of formal education you have completed?	High school	56	12.58
	Grade 12 matric	62	13.93
	N6 Certificate	58	13.03
	National diploma	46	10.34
	Bachelor's degree or Advanced diploma or BTech	49	11.01
	Honours degree or Post graduate diploma	58	13.03
	Masters degree	70	15.73
	Doctoral degree	46	10.34
Total	-	445	100
How many employees does your business have?	50 or fewer	91	20.45
	51–100	80	17.98
	101–150	91	20.45
	151–200	100	22.47
	201 or more	83	18.65
Total	-	445	100
Are family members involved as employees in your business?	Yes	229	51.46
	No	216	48.54
Total	-	445	100
Number of your employees increased over the last 2 years	Increased	153	34.38
	Decreased	143	32.13
	Stayed the same	149	33.48
Total	-	445	100

N, National.

TABLE 2a: Overall multinomial logistic regression between business performance and factors contributing to organisational capabilities.

Model	Model fitting criteria	Likelihood ratio tests			Pseudo R-Square	
	-2 Log Likelihood	Chi-Square	df	Sig.	Cox and Snell	0.193
Intercept only	580.147	-	-	-	Nagelkerke	0.265
Final	484.529	95.618	86	0.224	McFadden	0.165

df, degree of freedom; Sig., significance.

TABLE 2b: Overall multinomial logistic regression between business performance and factors contributing to organisational capabilities.

Variables	B	SE	Wald	df	Sig.	OR(B)	Lower bound - 95%CI of Exp(B)	Upper bound - 95% CI of Exp(B)
Intercept	-1.056	2.222	0.226	1	0.635	-	-	-
Organisational capabilities	-0.198	0.218	0.82	1	0.365	0.821	0.535	1.259
Gender = Male	0.811	0.362	5.018	1	0.025	2.25	1.107	4.575
Level of formal education = Less than Grade 12 or Matric level	0.987	0.499	3.912	1	0.048	2.684	1.009	7.137
Number of employees = 51–100	0.829	0.415	3.989	1	0.046	2.291	1.016	5.17
How did you start your business = As a family-owned business	0.93	0.387	5.793	1	0.016	2.535	1.189	5.408
How did you start your business = On my own initiative	0.898	0.37	5.89	1	0.015	2.454	1.189	5.068
How did you start your business = It was bought as a running business	1.202	0.368	10.639	1	0.001	3.326	1.615	6.846
Family members' involvement in the business = Yes	0.642	0.249	6.63	1	0.01	1.899	1.166	3.095
Increase in the number of employees in the past 2 years = Increased	0.594	0.295	4.059	1	0.044	1.811	1.016	3.228

SE, standard error; *df*, degree of freedom; Sig., significance; OR(B), odds ratio; CI, confidence interval.

TABLE 3a: Factors influencing organisational capabilities.

Model	R	R-Square	Adjusted R-Square	SE of the estimate
ANOVA	0.653	0.4264471	0.4172597	0.4336984

SE, standard error.

TABLE 3b: Factors influencing organisational capabilities.

Model	Sum of squares	df	Mean square	F	Sig.
Regression	61.115134	7	8.7307334	46.416779	< 0.001
Residual	82.197226	437	0.1880943	-	-
Total	143.31236	444	-	-	-

df, degree of freedom; Sig., significance.

A significant 24.27% of businesses began as family-owned, highlighting the important role of family legacy, trust and continuity in this entrepreneurial group. Only 0.22% started a family business initiated by the entrepreneur, possibly through purchasing an existing family-run business, reflecting a blend of tradition and new vision. Similarly, 0.22% took over a running family business. Meanwhile, 25.62% of entrepreneurs started businesses on their own initiative, driven by personal vision and independence. The largest group (27.19%) bought an existing business, likely valuing the lower risk and established operations of acquisitions. Lastly, 22.47% cited other reasons, indicating diverse entrepreneurial paths such as partnerships, franchises or unique approaches (Figure 2).

Business performance and general business characteristics

The logistic regression analysis assessed factors influencing business performance, specifically revenue growth. Although the overall model yielded a *p*-value of 0.224, indicating that it is not statistically significant at the conventional 0.05 level. It still provides valuable results into which individual variables significantly affect business performance (Table 2a and Table 2b).

Several predictors were found to be statistically significant:

Gender (Male): $B = 0.811$, $p = 0.025$. Being male increases the odds of revenue growth by a factor of 2.25 compared to being female, suggesting a gender-based disparity in business outcomes.

TABLE 3c: Factors influencing organisational capabilities.

Coefficients	Unstandardised coefficients		Standardised coefficients		<i>t</i>	Sig.
	B	SE	Beta			
(Constant)	1.3100262	0.1898013	-		6.9020916	< 0.0001
Challenges faced by SMMEs	-0.2588248	0.0439539	-0.2956743		-5.8885509	< 0.0001
Factors contributing to success and profitability	0.4696986	0.0498287	0.537458		9.4262701	< 0.0001
Entrepreneurial competence level	0.0551597	0.0470461	0.0642401		1.1724625	< 0.0001
Competitive scope	-0.0748860	0.0371896	-0.1034527		-2.0136265	< 0.0001
Entrepreneurial competence required	0.0763478	0.0397094	0.0976851		1.9226638	< 0.0001
Entrepreneurial skills	0.4163724	0.0468074	0.4011801		8.8954338	< 0.0001
Business performance	0.0063688	0.0430001	0.0053779		0.1481103	< 0.0001

SE, standard error; SMMEs, small, medium and micro enterprises; Sig., significance.

Education (less than Grade 12 or Matric): $B = 0.987$, $p = 0.048$. Individuals with less than a Grade 12 education were 2.68 times more likely to report revenue growth than those with higher education, highlighting the role of informal or practical business knowledge.

Number of Employees (51–100): $B = 0.829$, $p = 0.046$. Businesses with 51 to 100 employees had 2.29 times higher odds of revenue growth, suggesting a positive link between workforce size and performance.

Business Origin:

Family-owned: $B = 0.930$, $p = 0.016$. Starting as a family-owned business increases the odds of revenue growth by a factor of 2.54.

Own initiative: $B = 0.898$, $p = 0.015$. Businesses that started independently had 2.45 times higher odds of growth.

Bought as a running business: $B = 1.202$, $p = 0.001$. This had the strongest effect, with odds of revenue growth increasing by 3.33 times, suggesting that acquiring an operational business provides a performance advantage.

Family Involvement: $B = 0.642$, $p = 0.010$. Family participation increases the odds of revenue growth by 1.90 times, underlining the value of family support in business operations.

Employee Growth (Past 2 Years): $B = 0.594$, $p = 0.044$. Businesses that increased their workforce had 1.81 times higher odds of revenue growth, pointing to expansion as a key performance indicator.

Results indicating factors contributing to the framework

The regression analysis was conducted to examine the relationship between organisational capabilities (dependent variable) and a range of independent variables, including challenges faced by SMMEs, factors contributing to success and profitability, entrepreneurial competence level, competitive scope, required entrepreneurial competence, entrepreneurial skills and business performance.

The model summary reveals a moderate positive relationship ($R = 0.653$) between organisational capabilities and the independent variables. The R^2 value of 0.4264 indicates that approximately 42.64% of the variance in organisational capabilities can be explained by the model. The adjusted R^2 of 0.4173, which accounts for the number of predictors, confirms a reasonably good model fit with minimal overfitting. The standard error of estimate (0.4337) further supports this, suggesting acceptable predictive accuracy (Table 3a).

The overall regression model is statistically significant, as indicated by an F-statistic of 46.42 and a p -value of less than 0.001. This means the independent variables collectively have a meaningful impact on organisational capabilities. The sum of squares analysis further breaks down the explained variance (regression SS = 61.12) and the unexplained variance (residual SS = 82.20) (Table 3b).

The coefficients table offers insight into the specific relationships between each independent variable and organisational capabilities (Table 3c):

Challenges faced have a significant negative effect ($\beta = -0.2588$, $p < 0.0001$), implying that more challenges correlate with weaker organisational capabilities.

Factors contributing to success and profitability show a strong positive impact ($\beta = 0.4697$, $p < 0.0001$), suggesting favourable business conditions enhance organisational performance.

Entrepreneurial competence level is positively related ($\beta = 0.0552$, $p < 0.0001$), but the effect is relatively weak, indicating that while important, it is not a dominant driver.

Competitive scope has a slight negative effect ($\beta = -0.0749$, $p < 0.0001$), possibly because of broader market competition placing strain on internal capabilities.

Required entrepreneurial competence contributes positively ($\beta = 0.0763$, $p < 0.0001$), suggesting that businesses demanding higher competence tend to develop stronger organisational structures.

Entrepreneurial skills exhibit a strong positive influence ($\beta = 0.4164$, $p < 0.0001$), highlighting the importance of practical entrepreneurial abilities in building effective organisations.

Business performance, while statistically significant ($\beta = 0.0064$, $p < 0.0001$), has a negligible practical effect on organisational capabilities, indicating that performance alone is not a strong predictor.

Overall, the analysis confirms that organisational capabilities in SMMEs are significantly shaped by entrepreneurial skills, supportive business factors and the level of challenges faced. While some predictors have a stronger influence than others, their collective contribution forms a moderately robust explanatory model.

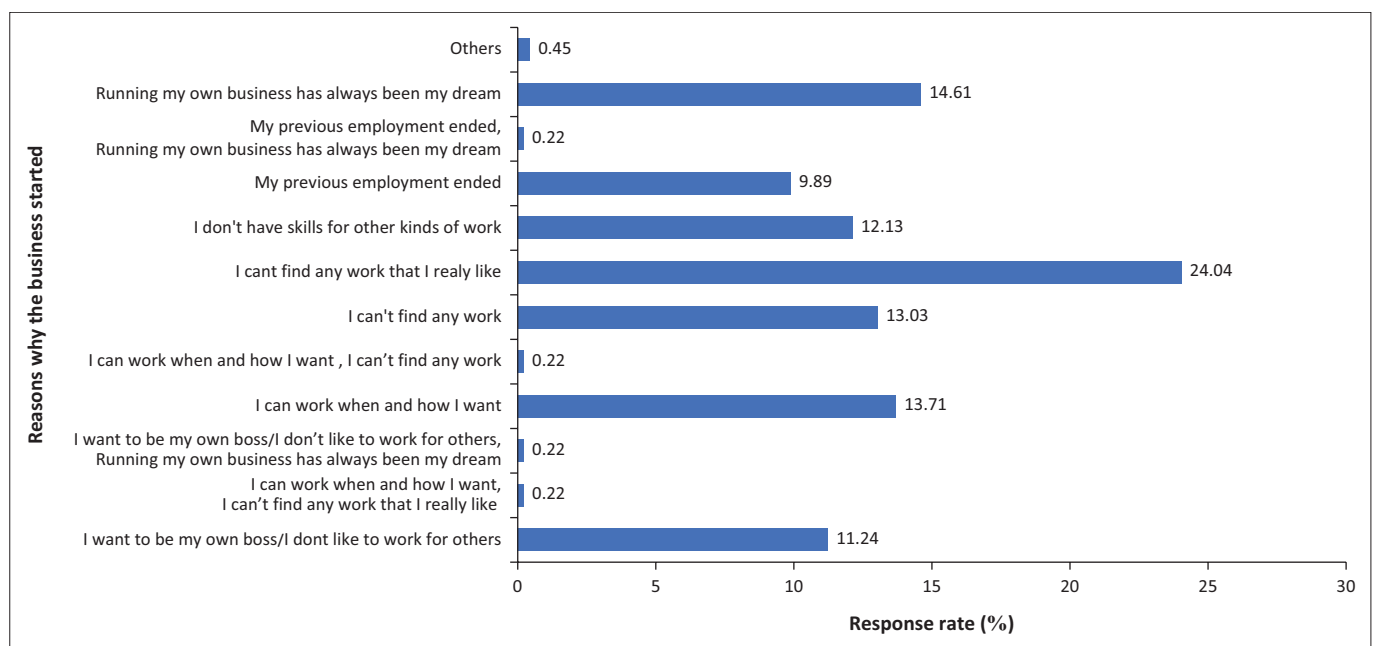


FIGURE 1: Participants' reason for starting the business.

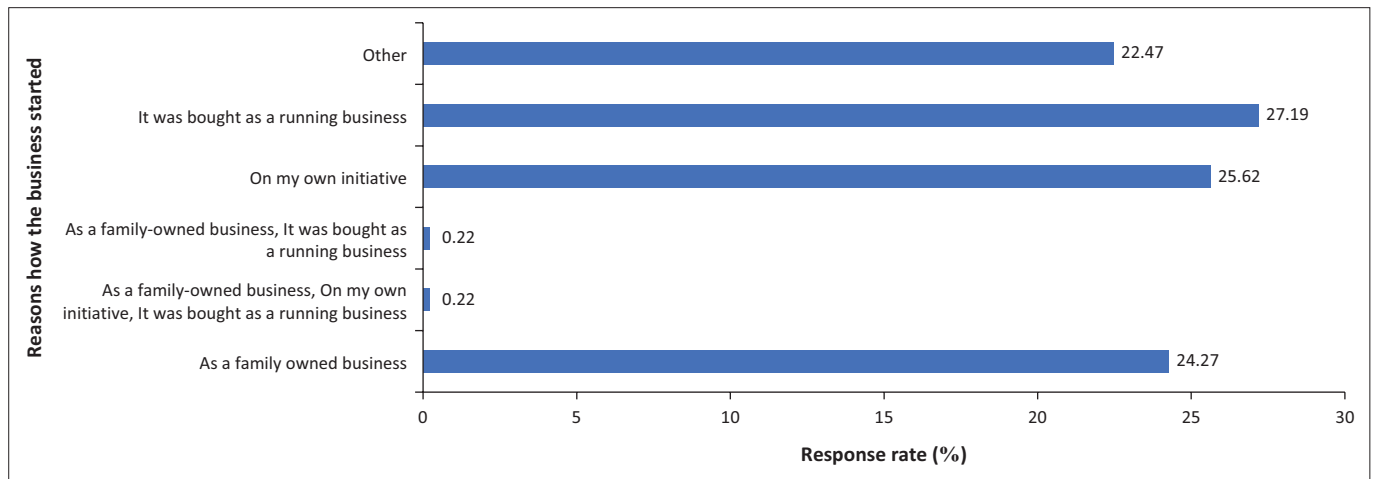


FIGURE 2: How the business started.

The developed framework and contributing factors to a sustainable operational entrepreneurial business

The framework for operating a sustainable SMME in Gauteng is built on several interconnected dimensions that collectively influence business success. Based on the study's findings, business performance over the past 3 years was associated with specific characteristics, including gender (male), lower levels of formal education (less than Grade 12) and a medium-sized workforce (51–100 employees). Additional contributing factors included the nature of business initiation whether it was family-owned, self-initiated or acquired as an existing operation as well as active family involvement in the business, workforce growth over the past 2 years, and prior employment in government, which often served as a motivator for starting the business (Figure 3).

The SMMEs in Gauteng also face a variety of challenges that influence their sustainability. These include limited entrepreneurial competence, underdeveloped entrepreneurial skills and constrained organisational capabilities. These challenges directly affect success and profitability, underscoring the need for targeted interventions in skills development and business support.

Key contributors to business success and profitability include the level of entrepreneurial competence, the breadth of competitive scope and organisational capabilities. These factors are mutually reinforcing and are themselves shaped by the challenges that SMMEs face, as well as by the entrepreneurial skills and competencies entrepreneurs possess.

Entrepreneurial competence is critical for sustaining operations, which is informed by various inputs, including the nature of business challenges, skill levels and the competitive environment in which the business operates. Similarly, the entrepreneurial competence required for successful business operation is determined by the

entrepreneur's current level of competence, their skills, and the competitive pressures they face.

Competitive scope is another vital element, reflecting the range and depth of markets served by the business. It is shaped by factors such as entrepreneurial competence, skills, organisational capabilities and other success-related variables. Entrepreneurial skills are influenced by a similar mix of inputs, including challenges faced, business success factors and the strategic demands of competition.

Organisational capabilities such as leadership, planning and operational systems also play a significant role in business performance. These capabilities are informed by nearly all other elements of the framework, including entrepreneurial competence, competitive scope and the practical skills required for managing a growing enterprise.

Thus, the study proposes a comprehensive and interconnected framework for sustainable SMME operation in Gauteng. This model recognises the dynamic relationships between personal attributes, business characteristics, external challenges and internal capabilities, emphasising the need for an integrated approach to entrepreneurship development.

Discussion

The findings from the sample highlight a diverse and dynamic entrepreneurial landscape, showcasing varied business sizes, educational backgrounds, gender identities and business models. The diversity of the entrepreneurial environment reflects a complex and multifactorial context in which businesses operate, with distinct factors influencing performance outcomes, particularly revenue growth.

Based on the theoretical framework underpinning the study, the findings presented in Table 1 and the subsequent regression analyses align closely with the study's theoretical framework, particularly the RBT and the theory of entrepreneurial competencies and capabilities (Figure 3).

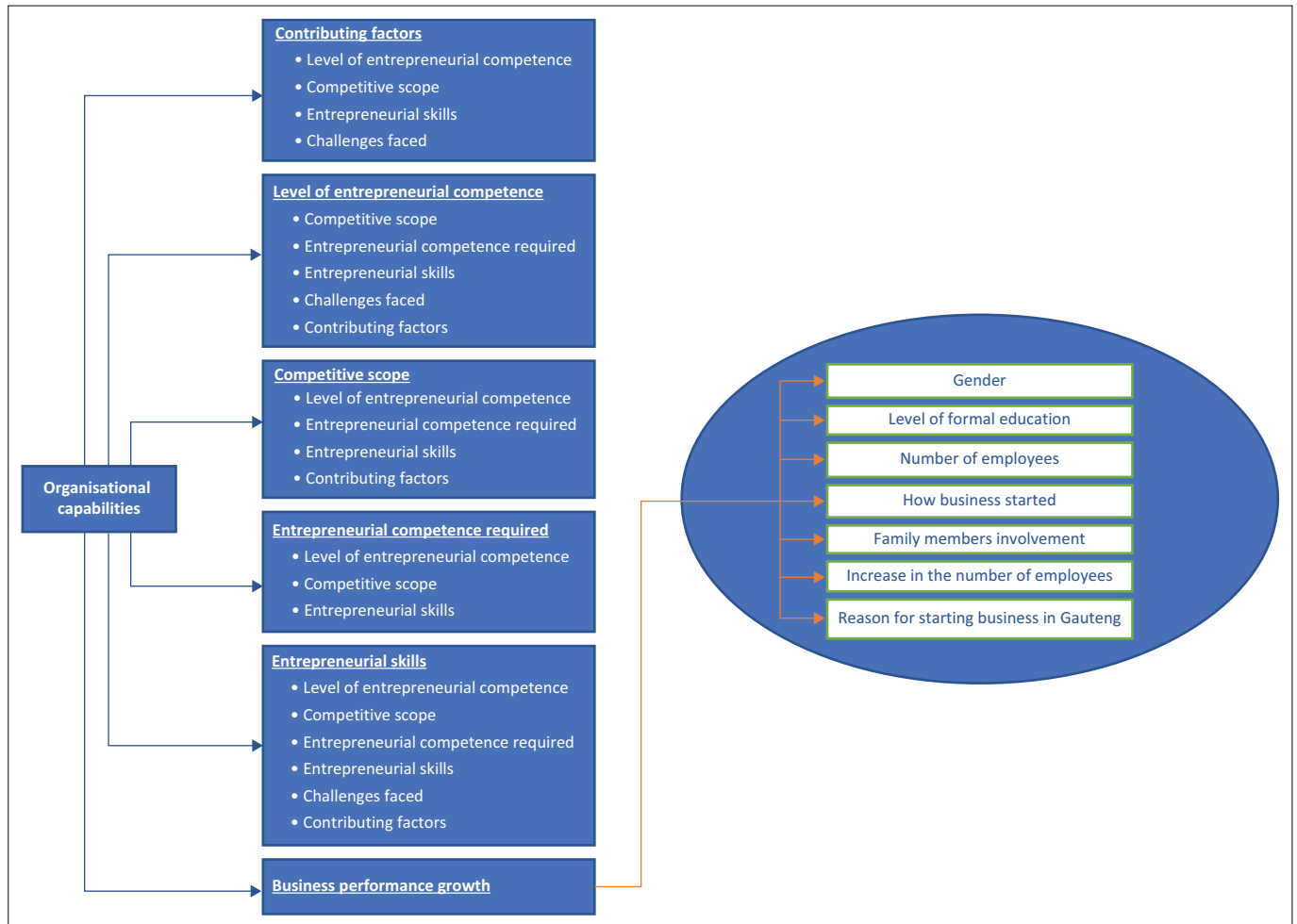


FIGURE 3: The framework for operating a sustainable entrepreneurial business in Gauteng province, South Africa.

The demographic data indicate a relatively balanced gender distribution and a high level of educational attainment among respondents, with a significant proportion holding advanced or vocational qualifications. This diversity in education supports the human capital theory, which posits that education enhances an individual's skills and entrepreneurial ability. The logistic regression results further complicate this view: while higher education is prevalent, those with less than Grade 12 were more likely to report revenue growth ($B = 0.987, p = 0.048$) (Table 2a; Table 2b). This suggests that informal learning, practical experience or street-level business acumen often underestimated in formal education models can be equally or more effective in some entrepreneurial contexts, especially in rural or developing regions.

While gender representation appears inclusive, the regression analysis reveals that male entrepreneurs are significantly more likely to achieve revenue growth ($B = 0.811, p = 0.025$). This outcome aligns with literature highlighting persistent gender disparities in access to resources, networks and capital factors central to the resource-based view of firm performance. It suggests that despite balanced participation, structural barriers may influence outcomes differently across genders.

The prevalence of family-owned businesses (24.27%) and family employment (51.46%) emphasises the role of social capital in entrepreneurial ventures. The strong positive effect of family ownership ($B = 0.930, p = 0.016$) and involvement ($B = 0.642, p = 0.010$) on revenue growth supports the notion that familial networks provide trust, labour stability and resource pooling, consistent with both social capital theory and Resource-Based Theory. The sample businesses range from small (50 or fewer employees) to medium-sized enterprises, with a notable portion of businesses (51.46%) involving family members. This finding suggests that family-run businesses are a common phenomenon in this entrepreneurial ecosystem. The involvement of family members could provide stability, shared responsibility and long-term commitment to the business's success. Previous research supports the importance of family businesses in the entrepreneurial landscape, with family involvement positively influencing business continuity and resilience (Harrafetal.2021). In addition, the model reveals that family-owned businesses, as well as businesses that experienced an increase in employees, are more likely to report business performance success. These findings align with research indicating that family businesses often have a more long-term focus and are better equipped to weather economic downturns (Nwuke, Nwoye & Onoyima 2020).

Motivations for starting a business reflect a mix of opportunity-driven (e.g. autonomy, flexibility, independence) and necessity-driven (e.g. unemployment, dissatisfaction with job market) entrepreneurship. Notably, 24.04% were driven by dissatisfaction with available work and 13.03% cited unemployment. These findings correspond with the entrepreneurial competencies' framework, where motivation and resilience in constrained environments are core competencies (Mitchelmore & Rowley 2010). The diversity of motivations aligns with the idea that entrepreneurship is not monolithic and is shaped by individual, contextual and structural factors (Mitchelmore & Rowley 2010). The findings also emphasise different entrepreneurial pathways: 24.27% of businesses were family-owned from the start, 25.62% were initiated on personal vision and 27.19% were acquired businesses (Figure 2). These statistics suggest a variety of entrepreneurial motivations and strategies. The preference for purchasing existing businesses indicates a practical approach to entrepreneurship, where the benefits of an established customer base, operational processes and brand recognition outweigh the challenges of starting from scratch (Williams et al. 2021). Moreover, businesses that reported an increase in the number of employees in the past 2 years had a higher likelihood of experiencing business performance growth. This result supports the importance of workforce expansion as a driver of success, aligning with research indicating that business growth, often measured by employee numbers, is a key determinant of entrepreneurial success (Madsen 2020).

This study builds on the conceptual framework by Man et al. (2002), updating the determinants that contribute to the operation of a sustainable entrepreneurial business. The framework emphasises the critical components necessary for maximising the potential of SMMEs and preventing early-stage insolvency. The framework suggests a multidimensional approach, focusing on various business inputs such as business performance, challenges, factors contributing to success, entrepreneurial competence, competitive scope and organisational capabilities.

Business performance is influenced by multiple factors, such as gender, educational background, business size, method of business initiation, family involvement, employee growth and prior government employment. Studies show that male entrepreneurs tend to perform better, potentially because of greater access to resources and networks (Njeri & Kepha 2021). Interestingly, entrepreneurs with less than Grade 12 education also tend to report positive business performance, suggesting that practical business experience and entrepreneurial drive may outweigh formal education in some contexts (Van der Sluis, Van Praag & Vijverberg 2008). Furthermore, businesses started as family-owned ventures, on personal initiative or acquired as existing businesses often see better performance because of existing operational structures (Laforet 2013; Mbele 2020). Employee growth, particularly in businesses with 51–100 employees, is another key determinant of success, as expanding the workforce is

often associated with increased capacity and scalability (Goyal & Khatri 2022).

The regression findings highlight that business origin strongly predicts performance. Entrepreneurs who bought existing businesses ($B = 1.202$, $p = 0.001$) or started independently ($B = 0.898$, $p = 0.015$) (Table 2b) experienced higher revenue growth. This aligns with RBT, which posits that existing resources like customer base, market access and established processes – can provide a competitive advantage. Similarly, organisational capability theory is supported by the finding that workforce expansion ($B = 0.594$, $p = 0.044$) correlates with better performance, indicating that growing internal capabilities contribute directly to business success.

The multiple regression analysis reveals that approximately 42.64% of the variance in organisational capabilities is explained by the included variables ($R^2 = 0.4264$), indicating a moderately strong model. Key insights include (Table 3a):

Entrepreneurial skills ($\beta = 0.4164$, $p < 0.0001$) and factors contributing to success and profitability ($\beta = 0.4697$) are the most influential positive predictors of organisational capabilities. This supports theories emphasising the importance of practical knowledge, adaptability and external enabling conditions in building resilient enterprises. Entrepreneurial skills, such as financial management, marketing and strategic thinking, are integral to the success of SMMEs. These skills are influenced by the challenges businesses face, the factors contributing to their success and profitability, and the level of entrepreneurial competence (Loi et al. 2022). Businesses that possess strong entrepreneurial skills are better equipped to manage challenges, improve performance and sustain growth. This highlights the importance of continual skill development for entrepreneurs looking to ensure long-term success (Noone, Lin & Sharma 2024).

Challenges faced ($\beta = -0.2588$, $p < 0.0001$) (Table 3c) negatively impact capabilities, underscoring the importance of institutional support, infrastructure and policy stability as critical aspects in rural economic development. Small, medium and micro enterprises in Gauteng face several challenges, often stemming from limited entrepreneurial competence, insufficient skills and organisational shortcomings. These challenges can impede the ability of small businesses to thrive and grow. For instance, the lack of entrepreneurial skills, such as resource management and adaptability, can significantly hinder the operations of SMMEs (Sibiya et al. 2023). In addition, weak organisational capabilities such as poor leadership, limited innovation and inadequate strategic planning exacerbate these difficulties, making it harder for businesses to sustain growth (Acs et al. 2021).

Required entrepreneurial competence ($\beta = 0.0763$, $p < 0.0001$) and entrepreneurial competence level ($\beta = 0.0552$) show that competence demand and development enhance capability formation, albeit with varying strengths. Small, medium and micro enterprises require a particular set of entrepreneurial

competencies to succeed. The level of competence needed varies depending on the competitive environment and the specific challenges a business faces. Businesses with higher levels of required competence tend to perform better, as they are able to effectively leverage their skills and adapt to changing market conditions (Noone et al. 2024). Moreover, entrepreneurs must continually develop and refine these competencies to remain competitive in an ever-evolving business landscape (Loi et al. 2022). The level of entrepreneurial competence is informed by the specific challenges faced by SMMEs, the factors that contribute to business success and the skills required to effectively manage a business. Entrepreneurs who possess higher levels of competence are better equipped to overcome obstacles, adapt to market changes and seize new opportunities, ultimately leading to business growth (Loi et al. 2022). Entrepreneurial competence is also linked to the competitive scope of a business, with more skilled entrepreneurs better able to navigate competitive pressures (Babb, Leslie & Van Slyke 1966).

Competitive scope has a slightly negative effect ($\beta = -0.0749$) (Table 3c), perhaps reflecting that overextension into wider markets without adequate internal capacity can strain organisational effectiveness. Competitive scope is a critical factor for SMMEs, as it determines how well a business can adapt to market conditions and outperform competitors. Entrepreneurial competence directly influences competitive scope, as highly skilled entrepreneurs are more adept at identifying opportunities and developing strategies to compete in crowded markets (Babb et al. 1966). Businesses that invest in innovation and continually refine their business models often outperform those that fail to adjust to market shifts (Acs et al. 2021).

Organisational capabilities refer to the internal strengths of a business such as leadership, innovation, and resource management that are essential for overcoming challenges, driving success, and enhancing performance (Acs et al. 2021; Sarasvathy 2021). SMMEs with strong organisational structures and effective leadership are better positioned to adapt to change and achieve long-term profitability (Babb et al. 1966; Sibiya et al. 2023). However, regression analysis results from this study suggest that organisational capabilities alone may not directly correlate with SMME performance in this context. Rather, their impact is amplified when combined with factors like family involvement, start-up methods, and workforce growth. This underscores the multifaceted nature of business success, where social capital, entrepreneurial networks, and organisational culture also play a critical role (Howorth & Robinson 2020; Järvelä et al. 2020).

Factors Contributing to Success and Profitability – Business success and profitability are largely determined by how well SMMEs navigate the challenges they face. Entrepreneurial competence, including the ability to effectively address these challenges, plays a crucial role in determining profitability (Acs et al. 2021). Studies also suggest that organisational capabilities such as innovation, resource management and leadership directly impact business profitability

(Loi et al. 2022). Moreover, competitive scope, or the extent to which a business can adapt and innovate in response to market pressures, is crucial for long-term success (Babb et al. 1966).

Overall, the results affirm the central beliefs of the resource-based view, entrepreneurial competencies theory and organisational capabilities theory. Business performance and capability development in this context are shaped by a dynamic interaction of individual-level traits (skills, motivations, gender, education), social and familial networks (family business legacy and involvement), strategic decisions (buying vs. starting a business) and external conditions (market dissatisfaction, unemployment, structural challenges).

These findings emphasise the need for context-sensitive entrepreneurship support models, especially in rural or semi-urban settings like the one studied, where non-traditional skills, social capital and alternative entry points into business ownership play critical roles in entrepreneurial sustainability.

Study implications

The findings of this study provide important insights into the multifaceted dynamics influencing business performance among SMMEs in Gauteng. The results highlight the complex relationship between demographic characteristics, business structures and entrepreneurial strategies in shaping revenue growth and overall success. The sample revealed a highly diverse entrepreneurial landscape, with variations in business size, gender, educational attainment and modes of establishment. This diversity underscores that no single factor determines success; rather, business performance results from a complex interaction of personal, structural and strategic elements.

Gender emerged as a significant variable, with male entrepreneurs demonstrating comparatively better business performance. This finding aligns with existing research indicating that male entrepreneurs often benefit from greater access to resources and business networks, reflecting persistent structural inequalities. Education levels also revealed notable trends. Although a considerable proportion of entrepreneurs hold higher education qualifications, such as Master's degrees (15.73%), those with education below Grade 12 were more likely to report revenue growth. This suggests that practical experience, adaptability and real-world business acumen may, in some instances, be more critical than formal academic credentials.

The data also show that business scale plays a key role in performance. Firms employing between 51 and 100 individuals consistently performed better, highlighting the importance of operational capacity and workforce development. Moreover, businesses that reported employee growth in the past 2 years were more likely to experience revenue increases, reinforcing staff expansion as a key

performance driver. In terms of business formation, enterprises acquired as running operations, those established as family ventures, or those founded through personal vision exhibited stronger revenue outcomes. These findings point to the advantages of entering the market with an existing infrastructure, family support systems or a clear entrepreneurial mission.

Family involvement emerged as a statistically significant factor in business success, with 51.46% of enterprises involving family members. This supports literature emphasising the strengths of family-run businesses in offering continuity, resilience and aligned strategic goals. While organisational capabilities such as leadership and innovation remain critical, the study suggests these are most effective when combined with supportive conditions such as family participation, strategic market entry and deliberate workforce expansion. This integrated model of performance highlights the need for multifactorial support mechanisms.

Despite the positive findings, SMMEs continue to face challenges such as limited skills, weak leadership and innovation deficits. The study underscores the role of entrepreneurial competence in overcoming these barriers, showing that capable entrepreneurs are more likely to demonstrate strategic foresight, adaptability and resilience. Competitive scope also plays a defining role, with businesses that innovate, respond to market shifts and diversify their operations proving more likely to achieve sustained success.

Ultimately, entrepreneurial success does not stem from a single variable but from the convergence of multiple competencies and contextual influences. Financial management, strategic planning, marketing and organisational structure collectively shape profitability and sustainability. These findings affirm and expand on the conceptual framework proposed by Man et al. (2002), which advocates a multidimensional approach to understanding business sustainability. The study reaffirms the interconnected roles of business performance, entrepreneurial competence, competitive scope and organisational capabilities in driving the long-term success of SMMEs.

Recommendations

Based on the study findings, this study recommends:

To support sustainable growth and inclusivity among South African SMMEs, several key interventions are recommended. Firstly, gender-inclusive support mechanisms must be promoted by addressing structural barriers through targeted financing, mentorship and networking opportunities specifically tailored for women and non-binary entrepreneurs. Secondly, training programmes should prioritise practical skills over formal education by focusing on sales, operations and resource management. Peer learning and experience-sharing platforms should be encouraged to enhance hands-on business competence.

Strategic workforce expansion should be supported by providing growth funding, Human Resource management training and job creation incentives to help SMMEs scale responsibly. Given the strong performance of family-owned and acquired enterprises, development agencies should tailor support for these business types by offering succession planning assistance, governance training and acquisition advisory services. To build organisational capabilities, investments should be directed towards strategic leadership, innovation management and systems development through incubators and accelerators.

Efforts to enhance start-up and acquisition support are also critical. This includes facilitating access to funding, business matching services and customised training for both new entrepreneurs and those acquiring existing businesses. In line with this, customised business development services (BDS) should be segmented by business type, size and maturity providing basic financial literacy to micro-enterprises and more advanced strategy support to growing firms.

Further, lifelong entrepreneurial learning should be fostered by promoting continuous skill development in key areas such as strategic thinking, marketing, digital transformation and financial planning. Business success can also be enhanced by expanding access to networks and mentorship, especially for underserved groups, through platforms that support collaboration and knowledge exchange. Finally, there is a need to align government support across departments by coordinating SMME policies and programmes through a unified national strategy. This will prevent duplication, improve service delivery and ensure more impactful support to entrepreneurs across the country.

Conclusion

This study provides a comprehensive analysis of the key determinants influencing the sustainability and success of SMMEs in Gauteng, South Africa. By updating the conceptual framework inspired by Man et al. (2002), the research highlights the critical factors that contribute to the performance, profitability and challenges faced by these enterprises. The study emphasises that while traditional operational capabilities remain important, non-financial and non-operational factors, such as entrepreneurial competence, skills, business start-up methods and family involvement, play a significant role in determining the success of SMMEs. The findings show that business performance is strongly influenced by variables such as gender, education level, the number of employees and the method of business initiation. Male entrepreneurs, those with less formal education, businesses initiated as family-owned or on personal initiative, and businesses that have experienced employee growth are more likely to report positive performance outcomes. Family involvement and an increase in employee numbers also contribute positively to business success. Moreover, the study underscores the complex relationship between entrepreneurial competence, organisational capabilities and the competitive scope of SMMEs. Entrepreneurs with higher levels of

competence and those who possess the necessary skills are better equipped to navigate the challenges that arise in the competitive business environment. In addition, businesses that leverage strong organisational capabilities are more resilient and better positioned to overcome obstacles, sustain growth and remain competitive. While the study identifies several critical success factors for SMMEs, it also suggests that challenges such as insufficient entrepreneurial competence and organisational weaknesses continue to impede many businesses. The findings advocate for a more holistic approach to supporting SMMEs, one that goes beyond improving operational capabilities and also focuses on strengthening entrepreneurial skills, enhancing family involvement and addressing the specific needs of businesses in the early stages of growth. The study's proposed framework (Figure 3) for operating a sustainable entrepreneurial business in Gauteng offers valuable insights for policymakers, business owners and support institutions. It provides a roadmap for identifying key areas that need improvement to prevent early-stage insolvency and maximise the long-term sustainability of SMMEs in the region. Overall, this research contributes to the growing body of knowledge on entrepreneurial ecosystems, offering actionable recommendations for enhancing the competitiveness and sustainability of SMMEs in emerging markets such as Gauteng. Future studies should explore how these determinants play out in other regions or sectors and further investigate the interaction between organisational capabilities and entrepreneurial factors in shaping business success.

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Competing interests

The authors declare that they have no financial or personal relationships that may have inappropriately influenced them in writing this article.

Authors' contributions

Z.W. and M.M. ensured that the suitability of methods and materials that are used for conducting the study was reviewed and that documents such as research proposal and documents that are required for research ethics approval were submitted and approval was obtained. The papers were reviewed by Z.W. and M.M., who provided feedback to L.M.N. to finalise the manuscript.

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Data availability

The data that support the findings of this study are available from the corresponding author, L.M.N., upon reasonable request.

Disclaimer

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