

Assessing the Influence of Technical Skills on the Growth of Small, Medium, and Micro Enterprises in Masvingo City, Zimbabwe

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Abstract – This study examines the role of technical skills in driving the growth and sustainability of Small, Medium, and Micro Enterprises (SMMEs) in Masvingo Province, Zimbabwe. Technical skills are recognized as crucial for enhancing business performance, fostering competitive advantage, and supporting long-term development. Using a quantitative approach, the research surveyed **233 participants** across diverse sectors within the SMME landscape in the region. The findings reveal a polarized perspective: 50.21% of participants agree that technical skills significantly contribute to business growth, while 49.79% disagree, suggesting varied experiences and perceptions among stakeholders. This study underscores the importance of targeted skill development as a strategic priority to bolster the resilience and success of SMMEs. It provides actionable recommendations for policymakers, business owners, and educators to address this critical gap by investing in technical skills training, aligning educational programs with market demands, and fostering a supportive ecosystem for enterprise development. By prioritizing technical skills, stakeholders can enhance the capacity of SMMEs to navigate challenges, seize growth opportunities, and contribute to the broader economic development of Zimbabwe.

Keywords – Business Growth, Economic Growth, Entrepreneurship, Human Capital, Skills Development, Workforce Training

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1 Introduction

The importance of Small, Medium, and Micro Enterprises (SMMEs) cannot be ignored. SMMEs are vital mechanisms that form the mainstay of many economies (Chen, 2024). Some developed countries, for example Ireland (Morgenroth & O'Malley, 2017; Robbins & O'Gorman, 2016), South Korea (Park et al., 2018; Wang et al., 2023), and Taiwan (Chiang, 2018; Hsiao & Hsiao, 2017), emerged to become where they are due to their sensible involvement of their SMMEs, as they were initially classified as poor. Their SMMEs were supported and given an opportunity to improve these countries' economies. Among other economic benefits, SMMEs contribute to job creation, poverty alleviation, and economic diversification (Ragolane, 2024). SMMEs therefore, can benefit poor countries immensely. The African continent can benefit immensely from SMMEs. When they involve SMMEs in developing their economies, these countries should be profoundly supportive of the SMMEs. Desperate nations such as Zimbabwe (and other South African neighbours such as Lesotho, Mozambique and Swaziland), can benefit immensely from SMMEs. Zimbabwe whose economy has collapsed, success of SMME businesses can be impactful in supporting the local economy, especially in regions like Masvingo. In this region, however, there are plentiful numbers of SMMEs with potential to lift the region's economy (Gunhidzirai, 2024). Despite their potential, many SMMEs face barriers to growth, with limited access to resources, inadequate technical skills, and poor managerial expertise. An earlier study by Jongwe et al. (2024) explored issues of managerial skills in role players of SMMEs in Masvingo and found that there were deficiencies in management skills that needed to be developed for many of them. This paper focuses on technical skills. These are the specialized knowledge and abilities required for performing specific tasks (Kadorova, 2024). Mavimbela et al. (2024) concur that technical skills are essential for the survival and success of businesses.

There is a gap in understanding the specific influence of technical skills on SMME growth in Zimbabwe's Masvingo province (Chipuriro, 2024; Mabuto, 2019). This study aims to assess the extent to which technical skills impact the growth of SMMEs in Masvingo. Understanding this relationship, it is hoped that recommendations can be made to enhance technical skill acquisition and application within the local SMME sector. This study aims to bridge that gap by providing empirical data on the role of technical skills in the local SMME sector.

2 Literature Review

2.1 The role of technical skills in SMME growth

Just like business failure can be caused by an infinite number of factors, the growth of SMMEs is influenced by a variety of internal and external factors (Zulfa et al., 2024). One of the critical internal factors is human capital, particularly technical skills. According to previous studies, entrepreneurs with strong

technical competencies are more likely to successfully manage operations, improve productivity, and innovate within their businesses (Kantor, 2020). These skills contribute to enhancing the quality of products and services, enabling SMMEs to compete in both local and international markets.

In the context of SMMEs in developing economies, technical skills can influence operational efficiency, customer satisfaction, and the ability to access markets. However, many SMMEs in Zimbabwe face challenges such as inadequate technical training, which limits their capacity to grow. Previous research on SMMEs in Zimbabwe has shown that businesses with greater access to technical training tend to have better growth outcomes (Chitaka, 2024). The contribution of Zimbabwean SMMEs is insignificant, and this is the reason that they cross borders to operate in foreign countries (Mugano & Dorasamy, 2024). That is, they generally fail to make a significant contribution to the country's economy. Moreover, Nyathi and Chikwala (2024) indicate that the failure rate of SMMEs in Zimbabwe is very high.

2.2 Essential requirements for SMMEs success

Among the essential skills SMMEs need to remain competitive in the modern market, technical skills play a critical role. Technical skills encompass a range of specialized competencies that are crucial for producing, innovating, and adopting new technologies, which are all key to business success (Manafe et al., 2024). In the context of SMMEs, technical skills go beyond simple expertise in the use of machinery or software. They encompass knowledge in areas such as engineering, data analysis, digital marketing, and process management. As SMMEs traverse the swiftly advancing business environment, especially with the rise of digital transformation, the acquisition and enhancement of technical skills can be the differentiating factor between success and failure (Rakib et al., 2024).

2.3 Technical skills in SMMEs: A conceptual framework

Technical skills are generally defined as the abilities and knowledge needed to perform specific tasks, often involving the use of machinery, software, or technical processes (Ajiga et al., 2024). In SMMEs, these skills are essential for daily operations and for long-term growth and sustainability. There are different types of technical skills that SMMEs can benefit from, including industry-specific skills and more generalized skills, such as IT literacy and digital marketing capabilities (Khurana et al., 2022). In many instances, SMMEs depend more on the specialized expertise of their employees than large corporations, as they often lack the resources to hire a diverse range of specialists. Therefore, cultivating technical expertise within their workforce can have far-reaching effects on operational efficiency and market adaptability (Ajayi & Udeh, 2024).

2.4 Technical skills and business productivity

There is ample documentation regarding the relationship between technical skills and productivity in SMMEs. Kadoma et al. (2023) explain that by involving technical competencies, employees can use different instruments and technologies more effectively, streamline processes, and reduce errors, and that these can directly enhance productivity. For instance, SMMEs that invest in staff training about the use of advanced software or automated systems often experience improvements in their operational speed and accuracy. Jones et al. (2024) explain that this allows SMMEs to serve more customers or scale their operations with fewer resources. According to Zirar et al. (2023), SMMEs that upskill their workforce with technical training programs can significantly improve their product quality. This leads to an improvement in customer satisfaction and repeat business. Consequently, technical skills directly affect the capacity of a company to increase productivity, improve their offerings, and remain competitive.

2.5 Technical skills and innovation

Florek-Paszowska et al. (2021) believe that innovation is often considered to be a critical driver of long-term business success. SMMEs can stay innovative by constantly adapting to changes in technology and market demands, a process to which technical skills are central. Employees with strong technical knowledge are better equipped to contribute to product development, implement new technologies, and improve existing systems (Trávníčková et al., 2024). SMMEs that are inadequate in technical skills may struggle to innovate. These can cause a failure to maintain competitiveness in an increasingly technology-driven marketplace. In contrast, highly skilled SMME teams are often lead the adoption of new practices such as automation, which enhances new product development and better customer experiences (Agustian et al., 2024). Consider an SMME that specializes in manufacturing. If this SMME adopts 3D printing technologies, it will require a high level of technical skill to operate. Argade and Mazumdar (2023) point out that such a firm can then reduce production costs while experimenting with innovative designs and cater to niche markets. This can further solidify the SMME competitive edge.

3 Methods and Data

3.1 Research Paradigm

A research paradigm refers to the primary framework or worldview that guides researchers in their approach to inquiry (Mohamed & Hao, 2024). According to Ali (2024), the research paradigm identifies the basic assumptions about the nature of knowledge (epistemology), reality (ontology), and the methods used to collect and analyze data. Abdullah et al. (2024) explain that paradigms influence the research questions, how they conduct the interpretations, and how they view the relationship between the researcher and the

subject of study. Bellato et al. (2024) inform that there are many paradigms, but the two most discussed ones are positivism and interpretivism. Therefore, these paradigms shape the ways research is conducted and are fundamental to designing research methods, whether qualitative or quantitative. This paper benefited from positivism, a research paradigm grounded in the belief that knowledge should be derived from observable phenomena and empirical evidence, emphasizing objectivity, measurable data, and scientific methods (Hasan et al., 2024; Wati, 2024). According to Mayrl and Wilson (2024), positivists are of the view that reality exists independently of human perception. Therefore, positivism permits investigating through quantitative methods such as experiments, surveys, and statistical analysis. The main features of positivism include its ontological stance of realism, epistemological approach of empiricism, and methodological focus (Braun & Clarke, 2024; Drakopoulos, 2024; Wells & Giacco, 2024). The ontological stance of realism posits that reality is objective and external. The epistemological approach of empiricism maintains that knowledge arises from sensory experience and observation. The methodological focus on quantitative techniques that produce replicable and generalizable results. In the positivist's framework, the researcher is expected to be a detached, neutral observer with no influence on the research process. In the end, positivist research aims to uncover general laws or universal truths about the world. Its research aligns closely with the natural sciences where experiments and observations can be replicated to draw broadly applicable conclusions. This study was based on data and analysis that were not influenced by the researcher.

3.2 Research Design

As highlighted in the discussion of research paradigm, the choice was positivism, which focuses on quantitative research. This study, therefore, employed a descriptive survey research design, using quantitative methods to assess the influence of technical skills on the growth of SMMEs in Masvingo City. The research design was chosen because it allows for the collection of data from many respondents and provides a clear picture of the relationships between technical skills and business growth. Several researchers (Luoma & Hietanen, 2024; Pilcher & Cortazzi, 2024; Tanjung et al., 2024) regard quantitative research methods as valuable because they provide objective, reliable, and precise data, allow for the analysis of large samples, and facilitate generalizable and replicable results. This makes them highly effective for testing hypotheses, identifying trends, and informing decision-making processes.

3.3 Population and Sample

The population of interest in this study consisted of SMME owners and employees operating in Masvingo. A sample of 233 participants was selected using simple random sampling based on SMME population, though different sectors (manufacturing, retail, agriculture, and so on.) were represented. Participants were asked to complete a structured questionnaire that included questions about their SMMEs' technical skills, manager qualifications,

competencies of staff, training on technical aspects, and standards for reviewing work.

3.4 Data Collection

Primary data were collected through self-administered questionnaires, which were distributed to SMME owners and key employees. The questionnaires included Likert-scale questions designed to assess the participants' views on how technical skills influence business growth.

3.5 Data Analysis

Data were analyzed using descriptive statistics, including frequency counts and percentages. Statistical analysis was performed to determine the correlation between technical skills and business growth, and the results were presented in tables and figures. The responses regarding the influence of technical skills on SMME growth were categorized into two groups: "Influence" and "No Influence."

4 Results

4.1 Technical aspects

Responses to the research questions were 'strongly agree (Str Agr), 'Agree', Neutral, 'Disagree' and 'Str Dis'. The first item seeking answers was, "The company hires people with certificates showing qualifications" (Cert). It was followed by "The company conducts competency-based assessments of its staff" (CBA). The third item was "The company conducts training on technical aspects such as machinery" (CT). the last item was "The company has standards upon which to review work" (Standard). The following frequencies were observed:

Table 1: Observed influence ('o') of technical skills on growth of SMMEs

	Cert	CBA	CT	Standard
Str Agree	15	20	18	17
Agree	30	25	28	30
Neutral	10	8	12	9
Disagree	5	10	4	7
Str Dis	2	3	2	3

On all the items there were less of 'Agree/Strongly agree', showing clearly in the figure. Now we test the null hypothesis (H_0) and the alternative hypothesis (H_1) for a chi-square test of independence are as follows:

- H_0 : There is no association between the two categorical variables.

The distribution of responses (in this case, the level of agreement) is independent of the certification type (Cert, CBA, CT, Standard).

- H_1 : There is an association between the two categorical variables. The distribution of responses depends on the certification type.

While Table 1 above presents the observed frequencies, the expected frequencies are shown below:

Table 2: Expected influence ('e') of technical skills on growth of SMMEs

	Cert	CBA	CT	Standard
Str Agr	16.89	17.93	17.38	17.98
Agree	28.74	28.78	28.11	28.78
Neutral	9.2	9.91	9.69	9.91
Disagree	6.16	6.63	6.48	6.63
Str Dis	2.41	2.56	2.48	2.156

We perform the chi-square test with Yates' correction for continuity, which is used when the expected frequency is small (typically less than 5) to adjust for the continuity of the distribution (Martín Andrés et al., 2024; Preacher, 2001). Let 'o' represent the observed frequencies in the table, and 'e' the expected frequency according to the null hypothesis. The modified formula for the chi-square statistic is:

$$\chi^2 = \sum \frac{(|o-e|-0.5)^2}{e} = 0.114.$$

The degrees of freedom (df) are calculated as $df = (Rows - 1)(Columns - 1) = (5 - 1)(4 - 1) = 12$. Using the 5% level of significance, the critical value is $\chi^2_{12;0.05} = 28.3$. Since the chi-square statistic does not exceed the critical value, we do not reject the null hypothesis (i.e., the variables are independent).

4.2 Influence of Technical Skills on Growth

The important question addressed in the study was the perceived influence of technical skills on the growth of SMMEs in Masvingo. The question required 'Yes' or 'No' whether the respondents perceived technical skills as influencing growth of SMMEs. The responses are visually displayed as Figure 1 below:

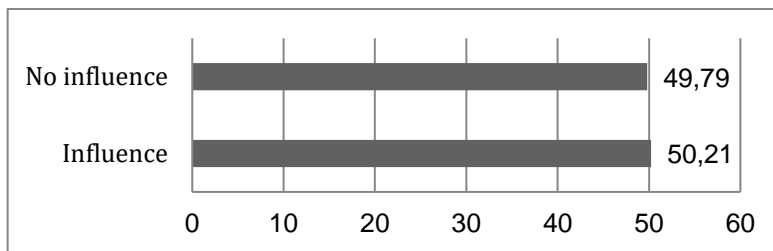


Figure 1: Perceived influence of technical skills on growth of SMMEs

According to the survey results in the above visual display, 117 (50.21%) of participants indicated that technical skills have a significant influence on the growth of their business and 116 (49.79%) reported that technical skills have no influence on their business growth. This suggests that there is a near-even

split in perceptions about the role of technical skills in business growth. While half of the participants believe technical skills are crucial for growth, the other half perceives these skills as having limited impact.

5 Discussion

The findings from this study offer valuable insights into the perceived impact of technical skills on SMMEs in Masvingo City. While the majority of respondents believed that technical skills positively contribute to SMME growth, it is noteworthy that nearly half of the participants did not perceive any significant impact. This divergence in perspectives could be attributed to several factors that deserve further exploration.

5.1 Influence of Experience and Resource Constraints

One of the key implications of the study is that the respondents' experiences and exposure to technical skills significantly influence their perceptions, technical orientations and experiences. Respondents who had direct experience with implementing technical skills in their businesses might have a more comprehensive understanding of their impact, while those with limited exposure may not recognise the full potential of these skills. As Sutriani et al. (2024) highlight, experience plays a critical role in shaping perceptions. The study's findings indicate that some SMME owners may face significant resource constraints, such as limited access to training, technology, or infrastructure, which can prevent them from effectively leveraging technical skills. For example, in Masvingo, some businesses may not have the financial resources to invest in training their staff or acquiring the necessary tools and technology to apply technical skills effectively.

Additionally, the economic environment in which SMMEs operate could also affect the perceived relevance of technical skills. SMME owners operating in low-resource settings may find it challenging to implement new technical skills, even if they recognise their importance. This could explain why some participants did not perceive a significant impact of technical skills on growth. Enaifoghe (2024) suggests that the lack of resources, including skilled personnel and financial backing, can undermine the practical application of technical skills, despite their theoretical potential.

5.2 Industry-Specific Gaps in Technical Skills

Another limitation highlighted by the study is the potential mismatch between the technical skills available to SMME owners and those that are required by specific industries. The varying needs across different sectors in Masvingo City could contribute to differing opinions about the effectiveness of technical skills. For instance, a technical skill that may be valuable in one industry might not have the same impact in another. This gap could be particularly evident in industries with rapidly evolving technologies, where skills may quickly become obsolete if not regularly updated.

The research by de Campos et al. (2024) and Jang & Landuyt (2023) emphasises the need for technical skills to be industry-specific to maximise their effectiveness. In Masvingo, it is possible that SMME owners who are involved in agriculture, for instance, may place less importance on high-tech skills than those in the manufacturing or ICT sectors. This sector-specific variation in the perceived importance of technical skills suggests the need for targeted training programmes that address the specific demands of each industry.

5.3 The Complementary Role of Managerial Skills and Capital

The study also underscores the importance of combining technical skills with other factors like managerial skills, strategic vision, and access to capital. This conclusion aligns with the findings of Pacheco-Velazquez et al. (2024), who argue that technical skills alone are insufficient to drive SMME growth. Without complementary managerial skills, such as financial management, human resource management, and strategic planning, the potential of technical skills may be underutilised. Similarly, access to capital plays a critical role in enabling businesses to invest in the infrastructure needed to support technical innovations.

Olutimehin et al. (2024) suggest that SMMEs must balance technical expertise with strong leadership and financial resources to ensure sustainable growth. In the context of this study, some SMME owners may have acquired technical skills but lacked the capital or management expertise to fully harness their potential. As a result, they might have seen limited business growth despite their investment in technical skills.

5.4 Methodological Limitations and Further Research

Despite the valuable insights provided by this study, there are several methodological limitations that should be considered. One limitation is the potential for bias in the self-reported data, as respondents may have been inclined to express positive views about technical skills due to societal expectations or the desire to align with dominant narratives about business success. Additionally, the sample size and geographical focus of the study—limited to Masvingo City—may not fully represent the experiences of SMME owners in other regions, potentially limiting the generalisability of the findings.

Further research could address these limitations by expanding the sample size to include SMME owners from diverse regions and industries. Longitudinal studies could also provide more insights into the long-term impact of technical skills on SMME growth, particularly in relation to other factors such as management practices and access to capital. Additionally, future research could explore the effectiveness of specific technical training programmes and their alignment with industry needs, to better understand how technical skills can be tailored to drive business growth.

In summary, while the study provides valuable insights into the perceived impact of technical skills on SMME growth in Masvingo City, it also reveals several limitations that could influence the findings. The diverse experiences of respondents, resource constraints, industry-specific gaps in technical skills,

and the complementary role of managerial skills and capital all contribute to the varying perceptions of the effectiveness of technical skills. By acknowledging these limitations and pursuing further research, policymakers and business support organisations can better understand how to foster the growth of SMMEs through tailored technical training and support services.

6 Conclusion

This study concludes that technical skills play a critical role in the growth of SMMEs in Masvingo City, Zimbabwe. While half of the participants acknowledge the importance of these skills, the other half perceive limited or no impact. The discrepancy in perceptions suggests that there may be other factors influencing SMME growth, such as financial resources, market access, and managerial expertise.

Practical implications include:

- Enhancing technical training programs for SMME owners and employees, focusing on industry-specific skills.
- Supplement technical skills with other skills such as managerial skills, and further enhance them through strategic vision.

Policy implications include:

- Strengthening access to resources that allow SMMEs to invest in skills development and technical strengthening.
- Promoting linkages for SMMEs to collaborate with educational institutions to ensure that the technical training provided aligns with industry needs.

Further research is needed to:

- Explore the interaction between technical skills and other factors such as business management skills and financial literacy, as well as to
- Investigate how different combinations of entrepreneurial skills contribute to the overall growth of SMMEs in Zimbabwe.

7 Authors

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