

# Financial management skills as enabling factor in project performance of small business in the construction industry in Gauteng Province: theoretical and practical implications

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## ABSTRACT

*The study significantly enhances the current literature by highlighting the importance of financial management skills in the success of MSMEs, especially in the context of small construction firms functioning under unstable and uncertain economic conditions. It offers insights on how effective financial management can alleviate the negative impacts of economic uncertainty, including variable interest rates and regulatory modifications, which were intensified by the COVID-19 pandemic. This study concentrates on BCO Construction in Johannesburg, examining the distinct financial issues encountered by small construction firms and the potential solutions through improved financial management strategies. The research delineates numerous vital financial management competencies needed for project accomplishment. This encompasses the capacity to manage liquidity efficiently, sustain profitability, and utilize financial instruments such as Net Present Value (NPV) and Earned Value (EV) management. It emphasizes the significance of abilities in managing financial leverage, which can facilitate the attainment of project objectives within budgetary and temporal limitations. The findings indicate that the absence of trained financial personnel, ineffective payment systems, and liquidity issues are substantial obstacles for BCO Construction. Consequently, it is advisable to tackle these difficulties through specialized financial literacy and management training to enhance overall project performance. The study employs a quantitative methodology, including standardized questionnaires administered to eighty (80) participants to gather data regarding the problems and competencies required for financial management in building projects. The analysis conducted with SPSS version 29 indicates that enhancing communication channels, integrating strategic financial planning, and implementing thorough training programs are essential for aligning financial objectives with overarching corporate goals. This alignment is essential for optimizing resource allocation, guaranteeing financial stability, and improving competitiveness in the construction sector.*

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## Introduction

It has long been known that small and medium enterprises (SMEs) play an important role in economic growth and income distribution in the world's major economies. It is widely recognized that SMEs not only play a role in the business environment but are also important for the country's economic stability (Afthanorhan et al., 2019). Afthanorhan et al. (2018) show that SMEs also create employment opportunities for people, leading to income generation and distribution. In many countries, small and medium-sized enterprises account for more than 90% of business enterprises; for example, 99.7% of entrepreneurial organizations in the United States are small or medium-sized businesses (Shams et al., 2018). According to the Small Business Development Agency (SEDA) (2018), SMEs are also recognized globally as a key source of innovation and flexibility, thus playing an important role in creating sustainable jobs. However, the failure rate of SMEs in South Africa is about 75% (Fatoki & Odeyemi, 2010).

Due to globalisation, the fourth industrial revolution and increased competition from multinationals, South African SMEs face new challenges in measuring their performance. The result can also be called business success. To respond to these challenges, SMEs

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must adopt efficient and effective performance measurement models. SME performance measures have been widely debated by scholars and practitioners for the past three decades. There is little agreement among researchers on the purpose of entrepreneurship, which leads to variations in definition and measurement from country to country. Traditionally, small and medium businesses in the South Durban area prioritized financial indicators for business success and subjective or non-financial indicators such as market share, customer satisfaction, sales volume, cash flow or new product development are not used. With limited knowledge of how to measure company success, SMEs in the South Durban region of South Africa called for this study, a comprehensive approach to measuring the performance of small and medium enterprises (SMEs).

To compete in a constantly changing environment and maintain a competitive advantage, it is important for small businesses to understand and monitor their company's operations. An effective performance management system (PMS) is essential to help organizations improve operational efficiency. Interestingly, research conducted by Neneh and Van Zyl (2012) in South Africa shows that, among other business practices, proper performance measurement increases the competitive advantage of SMEs (Neneh & Van Zyl, 2012). There is a real need for SMEs in SA to use modern performance measurement systems, which will increase the success rate of SMEs and thus lead to increased business performance. To do this, a practical PMS design and implementation framework for SMEs in South Africa is needed. However, currently, according to the researchers, there is no such performance measurement framework. This study aims, among others, to close this gap in the literature.

Looking at the various literature related to small business performance, it may be reasonable to assume that small business performance is synonymous with success and growth. Therefore, business performance, success, and growth are considered synonymous because they are measured by similar indicators, such as survival, profitability, return on investment, sales growth, headcount, employee happiness and reputation. Consequently, the terms productivity, success and growth can be used interchangeably in the small business context.

The purpose of this research is to provide an alternative, multidimensional model of measuring the performance of SMEs. This is based on different aspects of SMEs that are different from companies. This performance measurement model is a complete model that has not been extensively researched in SMEs. This research is expected to be in line with the size of the performance measures used before, especially non-financial indicators, and will be the agenda for future research. The objectives of this research were to explore the various financial and non-financial dimensions employed by SMEs in measuring performance; to ascertain the association between the business age and performance of SMEs; to determine the link between business size and the performance of SMEs, and to provide recommendations that may improve the performance measurement of SMEs.

This paper is organized as follows: following the introduction part, a second part is a literature review with theoretical and empirical studies that shed a light on linkage between theory and practice. The third part introduces the background information on research and methodology. After analysis and findings of the study, authors provide discussions and implications. Finally, this paper concludes with key points, recommendations, future research directions and limitations.

## **Literature Review**

### **Theoretical and Conceptual Background**

The relationship between financial management skills and project performance in the construction industry can be effectively analyzed through the lens of the Resource-Based View (RBV) theory. The RBV theory posits that firms can achieve a sustainable competitive advantage by strategically managing and utilizing their internal resources and capabilities (Barney, 1991; Purnomo, 2024). In the context of BCO Construction, financial management skills represent a critical internal resource that can significantly influence project performance.

#### **Resource-Based View (RBV) Theory**

The RBV theory highlights the importance of resources that possess the qualities of being valuable, rare, inimitable, and non-substitutable (VRIN) in order to gain a competitive advantage (Barney, 1991). Financial management skills within this framework encompass the capacity to produce precise financial statements, create thorough budgets, efficiently handle cash flows, maintain meticulous record-keeping, and improve financial literacy (Amankwah-Amoah, Danso, & Adomako, 2019; Boso, Story, & Cadogan, 2019). These abilities empower companies to make well-informed financial choices, therefore enhancing project results and overall business effectiveness.

Efficient financial management enables the most efficient use of resources, guaranteeing that projects are finished within the allocated budget and schedule (Fatoki, 2020; Abor & Quartey, 2010). The efficiency in allocating resources has a direct impact on project performance by lowering costs and preventing delays. Effective financial management procedures aid in the identification and reduction of financial risks, guaranteeing consistent cash flows throughout the duration of the project (Amankwah-Amoah, Danso, & Adomako, 2019; Polisetty et al, 2021). Ensuring stability is essential for preserving connections with subcontractors and suppliers, so averting any interruptions in project implementation. Managers that possess financial literacy and management abilities are able to make strategic decisions that improve the competitive position of the organisation (Boso, Story, & Cadogan, 2019; Fatoki, 2020).

Developing effective payment systems helps optimise processes and enhance stakeholder confidence, resulting in enhanced project performance.

Although the RBV theory offers a strong foundation for comprehending the influence of financial management abilities on project performance, there are several gaps that require additional investigation. The majority of research has concentrated on developed economies, resulting in a lack of comprehension regarding the impact of financial management skills on project performance in developing contexts such as South Africa (Abor & Quartey, 2010; Polisetty et al, 2021). Further investigation is needed in the realm of financial technologies (FinTech) and their incorporation into financial management practices. The precise impact of these technologies on financial management abilities and project performance is not yet comprehensively known (Amankwah-Amoah, Danso, & Adomako, 2019). Financial management skills are essential, but the importance of implementing comprehensive training and development programmes for both managers and personnel is often disregarded. Comprehensive plans that combine financial management with broader organisational growth are necessary (Fatoki, 2020; Boso, Story, & Cadogan, 2019).

The Resource-Based View (RBV) hypothesis offers a beneficial framework for assessing the influence of financial management skills on project performance within the construction sector. By utilising these skills as strategic assets, companies such as BCO Construction may enhance project results, efficiently handle risks, and attain a competitive edge. Nevertheless, it is crucial to address the identified gaps by conducting research that is specific to the context, integrating technology, and implementing comprehensive financial literacy programmes. This is necessary in order to fully capitalise on the potential advantages of financial management skills (Abor & Quartey, 2010; Amankwah-Amoah, Danso, & Adomako, 2019; Boso, Story, & Cadogan, 2019; Fatoki, 2020; Polisetty et al, 2021).

## **Empirical Review and Hypothesis Development**

### **Linkage Between Financial Management Skills and Project Performance in Small Business**

Empirical research has extensively examined the correlation between financial management abilities and project performance in small enterprises operating in the construction industry. Financial management skills include practices such as budgeting, cash flow management, financial reporting, and strategic financial decision-making. These skills are important for improving project outcomes. Empirical studies consistently show a positive relationship between effective financial management skills and project performance (Fatoki, 2020; Polisetty et al., 2021). Abor and Quartey (2020) conducted research that shown a positive correlation between effective financial management techniques in small and medium-sized enterprises (SMEs) and greater project success rates. These successful projects were characterised by strict adherence to budgetary restrictions and timely completion. Boso, Story, and Cadogan (2019) emphasise that companies with improved financial literacy and managerial abilities generally encounter fewer instances of cost overruns and demonstrate greater efficiency in allocating resources throughout project implementation.

Insufficient proficiency in financial management frequently results in unfavourable project results. Amankwah-Amoah, Danso, and Adomako (2019) found that small and medium-sized enterprises (SMEs) who lack financial expertise face difficulties with cash flow, which impede their ability to acquire essential resources and make timely payments to subcontractors. These factors lead to delays in the project and unhappiness among those involved, which has a detrimental impact on the overall performance of the project. Additionally, Fatoki's (2020) study highlights the importance of financial resilience in reducing project risks and improving performance. Small and medium-sized enterprises (SMEs) who possess strong financial management abilities are better able to negotiate economic uncertainties and unexpected hurdles, so assuring the ongoing success and profitability of their projects.

Tinarwo and Sibanda (2020) elaborate on the correlation between effective financial management methods and the enhancement of stakeholder relationships and trust. Prompt payments to subcontractors and suppliers promote favourable relationships, resulting in more efficient project workflows and improved performance indicators. The empirical research clearly emphasises the crucial significance of finance management abilities in influencing project outcomes in the construction industry. By incorporating these abilities into their day-to-day activities, small enterprises can enhance the allocation of resources, reduce financial risks, and attain sustainable growth in the face of competitive pressures (Boso, Story, & Cadogan, 2019; Amankwah-Amoah, Danso, & Adomako, 2019).

The empirical research analysed consistently demonstrate a positive correlation between proficient financial management skills and improved project performance in small business construction businesses. Efficient allocation of funds, careful monitoring of cash inflows and outflows, and thoughtful financial planning are crucial for meeting project deadlines, staying within budget limits, and satisfying stakeholder demands. On the other hand, a lack of proficiency in financial management abilities results in delays in projects, exceeding the budget, and unhappiness among stakeholders. Hence, it is crucial to promote financial literacy and incorporate effective financial management strategies in order to maximise project results and maintain a competitive edge in the construction sector (Abor & Quartey, 2010; Fatoki, 2020).

*Null Hypothesis (H<sub>0</sub>): There is no significant relationship between financial management skills and project performance in small businesses within the construction industry*

## **Project Performance and Operational Challenges**

Project performance in the construction industry involves several aspects, such as meeting budgetary limitations, completing the project on time, ensuring high-quality work, satisfying stakeholders, and complying with regulatory standards (Osamudiamen et al., 2022; Kumar et al., 2023; Osei-Kyei & Chan, 2015). It signifies the effective attainment of project goals while handling limitations like as resources, time, and scope.

The operational issues encountered by project management teams in the construction industry are varied and have a significant influence. Managing cash flow is a substantial obstacle, as it involves dealing with problems such as late payments, uncertain funding, and exceeding budgeted costs (Osamudiamen et al., 2022; Kumar et al., 2023). These issues have an impact on the acquisition of materials and the payment of subcontractors, which in turn affects the smooth progress and effectiveness of the project. Effectively managing project scope and stakeholder expectations is a crucial challenge, as inadequate management of scope changes can result in cost overruns and delays (Osei-Kyei & Chan, 2015; Osamudiamen et al., 2022). Project management is made more complex by regulatory compliance and safety standards, which necessitate meticulous planning and strict adherence to legal obligations (Kumar et al., 2023; Osei-Kyei & Chan, 2015).

Workforce management constraints, such as a lack of skilled workers, low labour productivity, and safety concerns, have a direct impact on project performance (Osei-Kyei & Chan, 2015; Osamudiamen et al., 2022). These elements have an impact on productivity levels and raise the risks associated with projects, which requires the implementation of strategic management and allocation of human resources. Efficient project management entails tackling these operational difficulties by employing methodical planning, risk management tactics, engaging stakeholders, and consistently monitoring and evaluating the project's progress (Kumar et al., 2023; Osei-Kyei & Chan, 2015). Construction firms can achieve sustainable growth in competitive markets by addressing operational difficulties and improving project performance measures.

*H<sub>0</sub>: Operational challenges in project management do not significantly affect project performance in the construction industry.*

## **Research and Methodology**

In order to successfully plan and carry out a research study on the impact of financial management abilities on project performance at BCO Construction, a strong research design is crucial. Bell et al. (2022) define research design as a methodical framework for conducting research, which encompasses the collection and analysis of data that is pertinent to the study subject. Due to the study's quantitative character, various design choices were taken into consideration. The selected methodology employed a descriptive study design, which, according to Clark et al. (2021), seeks to systematically observe, quantify, and analyse variables in order to comprehend a particular occurrence or circumstance. The choice to use a descriptive design was highly appropriate for this study as it facilitated a thorough assessment of the influence of financial management abilities on project performance within BCO Construction. This methodology allowed for the gathering of data that enabled accurate measurement and analysis of factors relevant to the research goals.

The research philosophy adopted in this work was guided by positivism, as described by Ryan (2018). Positivist philosophy maintains that the social world may be comprehended objectively by means of empirical observation and analysis. The researcher's function is highlighted as an impartial analyst, separating personal biases to guarantee impartiality and rigour in study findings. It was necessary to adopt a positivist strategy for this study in order to assess, investigate, and suggest measures that promote the progress and advancement of BCO Construction. The survey method was executed to collect firsthand data from personnel inside the operational department of BCO Construction in Johannesburg, South Africa. Surveys, as described by Ratten (2023), entail the methodical gathering of data through the use of structured questions posed to respondents, followed by the analysis of the obtained results. The research employed this methodological approach to directly obtain insights from the target audience, enabling a thorough comprehension of the correlation between financial management abilities and project performance. Turner (2020) recommended use simple random sample for this investigation in relation to sampling. This approach ensured that each employee within the operational department had an equitable opportunity of being chosen, so reducing prejudice and guaranteeing the representativeness of the sample. The survey had a participation rate of 80 respondents, resulting in a substantial dataset for analysis.

The main method used for data collecting was the administration of structured questionnaires. These questionnaires were specifically prepared to be in line with the research aims and to guarantee that the replies obtained were objective. Data analysis was conducted using the Statistical Package for the Social Sciences (SPSS), version 29. Descriptive statistics were employed to summarise and explain the findings (Stratton, 2021). In order to assess the reliability of the research tool, the Cronbach's Alpha coefficient was calculated, resulting in a score of 0.755. This value indicates a high level of internal consistency among all the items in the questionnaire (Brosch et al., 2020). This measure of reliability highlights the strength and consistency of the data collected and the responses given by respondents. The study placed great importance on ethical considerations, as specified by Brosch et al. (2020).

The study properly followed measures such as anonymity, confidentiality, voluntary participation, and informed permission to protect respondents' rights and promote research integrity. Approval was secured by BCO Construction, providing additional confirmation of ethical compliance and institutional endorsement for the project. The research employed a methodological framework that ensured thorough exploration of the influence of financial management abilities on project performance at BCO Construction. The study

utilised a descriptive research design, adhered to a positivist philosophy, employed a survey strategy, implemented simple random sampling, utilised structured questionnaires, and applied robust data analysis techniques. As a result, the study generated valuable insights and practical recommendations for improving organisational effectiveness and project outcomes.

## Findings and Discussions

### Sample Characteristics

The demographic data collected from the study respondents provides a comprehensive overview of the sample population's age, gender, population group, period of employment, and educational qualifications. The analysis begins with the age distribution of the respondents. The majority of respondents fall within the 36-45 years age group, representing 39.2% of the sample. This is followed by those aged 26-35 years, constituting 28.4%. Respondents aged 46-55 years account for 21.6%, while those in the 56-65 years bracket make up 9.5%. Only 1.4% of the respondents are 25 years and below.

**Table 1:** Demographic factors

<b>1</b>	<b>Age</b>	<b>Frequency</b>	<b>Percentage (%)</b>
	25 years and below	1	1,4
	26-35 years	21	28,4
	36-45 years	29	39,2
	46-55 years	16	21,6
	56-65 years	7	9,5
<b>2</b>	<b>Gender</b>	<b>Frequency</b>	<b>Percentage (%)</b>
	Male	47	63,5
	Female	27	36,5
<b>3</b>	<b>Population group</b>	<b>Frequency</b>	<b>Percentage (%)</b>
	African	39	52,7
	White	31	41,9
	Indian	2	2,7
	Asian	2	2,7
<b>4</b>	<b>Period of employment</b>	<b>Frequency</b>	<b>Percentage (%)</b>
	Less than 5 years	21	28,4
	5-10 years	28	37,8
	11-15 years	19	25,7
	16-20 years	4	5,4
	Over 20 years	2	2,7
<b>5</b>	<b>Educational qualification</b>	<b>Frequency</b>	<b>Percentage (%)</b>
	Up to Grade 12/ Std 10	3	4,1
	Diploma/Degree	23	31,1
	B-Tech/ Honours	30	40,5
	M-Tech/Masters/MBA	17	23,0
	D-Tech/Doctorate	1	1,4

**Source:** Author's Construction

The gender distribution reveals a predominance of male respondents, who constitute 63.5% of the sample, whereas female respondents make up 36.5%. This gender disparity reflects the demographic characteristics of the construction industry, where male workers are typically more prevalent.

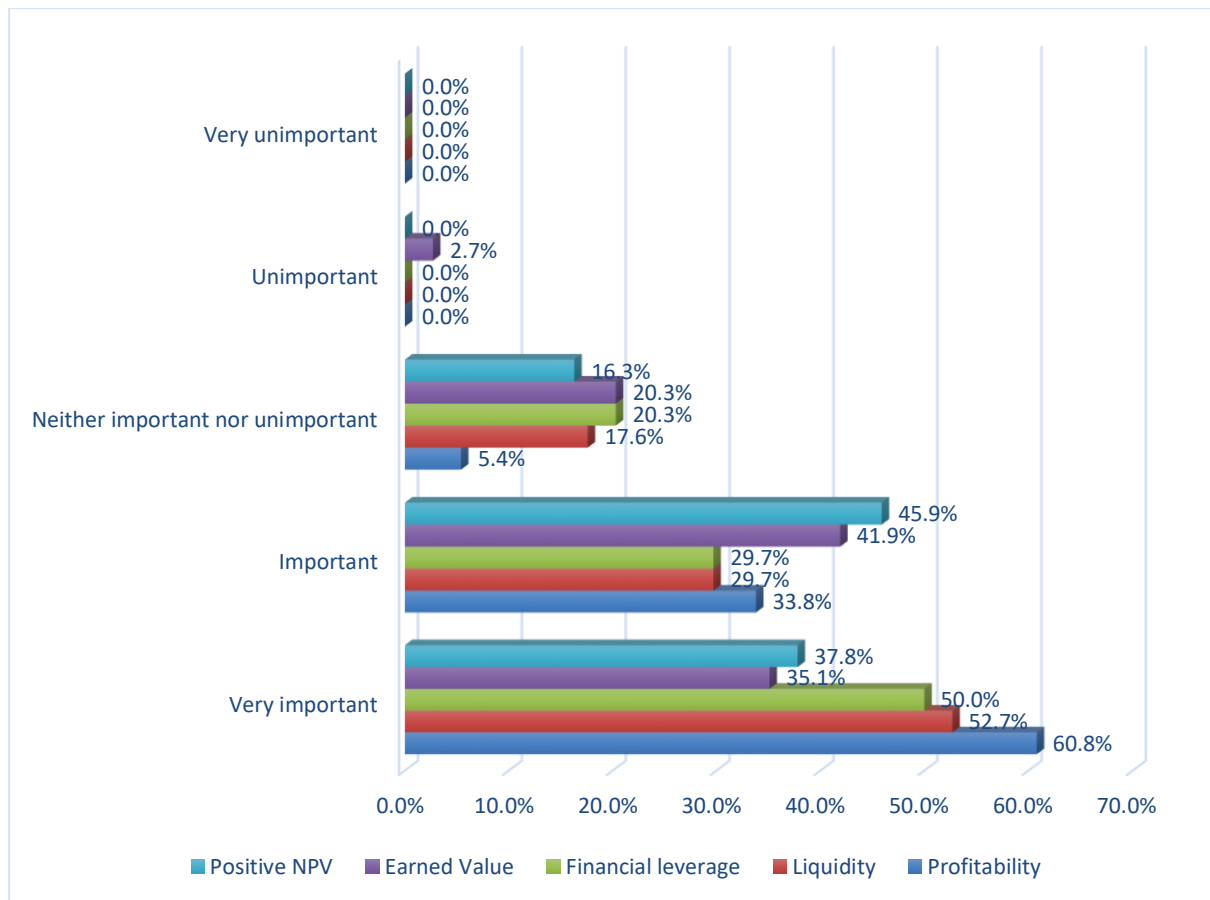
In terms of population group, the data shows that African respondents are the largest group, accounting for 52.7% of the sample. White respondents follow at 41.9%, while Indian and Asian respondents each represent 2.7% of the sample. This distribution highlights the racial diversity within the workforce at BCO Construction.

The analysis of the period of employment indicates that the largest segment of respondents has been employed for 5-10 years, comprising 37.8% of the sample. Those with less than 5 years of employment constitute 28.4%, while respondents with 11-15 years of employment account for 25.7%. Employees with 16-20 years of service make up 5.4%, and those with over 20 years represent 2.7%. This range of employment periods demonstrates a mix of relatively new and experienced employees within the company.

Regarding educational qualifications, the majority of respondents hold a B-Tech or Honours degree, which accounts for 40.5% of the sample. This is followed by those with a Diploma or Degree, comprising 31.1%, and those with an M-Tech, Masters, or MBA, making up 23.0%. Respondents with up to Grade 12 or Std 10 represent 4.1%, and only 1.4% have a D-Tech or Doctorate. This educational distribution indicates a well-qualified workforce, with a significant proportion holding advanced degrees.

**Descriptive analysis**

The examination of the financial indicators depicted in Figure 1 offers a comprehensive comprehension of the importance of financial management expertise in improving project performance within small enterprises in the construction sector. The relevance of important financial performance metrics, such as Net Present Value (NPV), Earned Value (EV), Financial Leverage (FL), Liquidity, and Profitability, in the effective execution and management of construction projects is emphasised by the respondents' perceptions.



**Figure 1:** Project Performance Measures; *Source:* Author's Construction

The respondents greatly value the Net Present Value (NPV), with 94.6% expressing its significance. Specifically, 60.8% consider it extremely significant, while 33.8% consider it important. The widespread agreement on this matter demonstrates the crucial significance of NPV in the assessment of projects and the process of making decisions. NPV, as defined by Shou (2022), quantifies the present worth of forthcoming cash flows and serves as an indicator of project profitability when it is positive. The evidence indicates that a positive net present value (NPV) is crucial for guaranteeing dependable and steady cash flows, which are necessary for sustaining project performance and financial stability (Shou, 2022; Aramali et al., 2024; Tretiak et al., 2022; Kerzner, 2022).

EV management is a vital indicator, regarded as important by a substantial majority (77%) of respondents. Earned Value (EV) management combines cost, schedule, technical scope, and risk factors to offer a thorough evaluation of project advancement in comparison to a baseline (Aramali et al., 2024). According to the statistics, EV management is seen as a useful instrument for accurately assessing financial situation and quantifying schedule progress. Nevertheless, the fact that 20.9% of respondents expressed neutrality and 2.7% regarded it unimportant reveals a potential deficiency in skills and expertise within project teams at BCO Construction (Aramali et al., 2024; Shou, 2022; Tretiak et al., 2021; Kerzner, 2022).

Financial Leverage (FL) is considered crucial, as 79.7% of respondents acknowledge its significance. Financial leverage entails utilising borrowed funds to buy assets, specifically in the context of construction, this refers to the acquisition of materials, equipment, and other resources. Although leveraging can boost project capacity, it also amplifies the risk of financial failure if not effectively managed. The 20.3% of respondents who expressed neutrality towards FL demonstrate a lack of comprehension of its impact on project performance. This highlights the necessity for enhancing financial literacy among project teams (Aramali et al., 2024; Shou, 2022; Tretiak et al., 2021; Kerzner, 2022).

Fifty two percent (52% )of respondents consider liquidity, which refers to a company's capacity to fulfil immediate financial obligations, to be highly significant, while 29.7% regard it as important. Swift cash generation is essential to prevent operational setbacks caused by financial deficiencies (Tretiak et al., 2021). The 17.6% of respondents who expressed a neutral opinion may not have a complete understanding of the importance of liquidity management. This indicates a need for potential training and improvement in financial management skills. (Shou, 2022; Aramali et al., 2024; Tretiak et al., 2021; Kerzner, 2022).

The significance of profitability as a performance measure is acknowledged, with 83.7% of respondents considering it to be either highly significant (37.8%) or significant (45.9%). Profitability is a metric that assesses the financial success or failure of a project. It offers valuable information about the project's overall financial well-being and helps in making decisions regarding project selection and continuance (Davila et al., 2020). The emphasis on profitability highlights the importance of implementing strong financial management procedures to guarantee that projects make a positive contribution to the company's overall financial performance (Shou, 2022; Aramali et al., 2024; Tretiak et al., 2021; Kerzner, 2022).

The study emphasises the crucial significance of financial management skills in improving project performance within small construction enterprises. The respondents' acknowledgment of the significance of NPV, EV management, FL, liquidity, and profitability highlights the requirement for thorough financial literacy and management training to equip project teams with the essential abilities to effectively handle these crucial performance indicators.

**Table 2:** The operational challenges faced in project management

Statements	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree	Total
Scope creep	40,5%	32,4%	18,9%	8,2%	0,0%	100,0%
Budget restrictions and changes	73,0%	14,9%	9,5%	2,6%	0,0%	100,0%
Lack of communication	43,2%	35,1%	14,9%	6,8%	0,0%	100,0%
Team conflict	43,2%	24,3%	24,3%	8,2%	0,0%	100,0%
Poor risk management	37,8%	43,2%	17,6%	1,4%	0,0%	100,0%

Source: Authors' Construction

The analysis of Table 2 reveals significant insights into the operational challenges faced by small businesses in the construction industry, with a particular focus on financial management skills and their impact on project performance. One of the critical challenges identified is scope creep, which 72.9% of respondents acknowledged as a significant issue. Scope creep, as defined by Ajmal et al. (2020), occurs when stakeholders continually add new deliverables or extend deadlines, leading to project delays and disruptions. The majority agreement on this challenge underscores the importance of stringent project management practices to mitigate the adverse effects of scope creep on project timelines and budgets (Martins, 2022; Turner, 2020; Bell et al., 2022).

Budget restrictions and changes are also highlighted as substantial operational challenges, with 73% of respondents strongly agreeing and 14.9% agreeing. This consensus points to the inflexibility that budget constraints impose on decision-making processes, especially when material prices fluctuate. The inability to adjust budgets in response to changing circumstances can lead to stalled projects and increased operational difficulties. Effective financial management skills are thus crucial in navigating these changes and ensuring project continuity (Clark et al., 2021; Ryan, 2018; Ratten, 2022).

Communication issues within project teams are another critical area of concern, with 43.2% strongly agreeing and 35.1% agreeing that lack of communication poses operational challenges. Effective communication channels are essential for the timely exchange of information among project members, stakeholders, and managers. Miscommunications or delays in information dissemination can significantly hinder project progress and lead to operational inefficiencies. This finding highlights the need for robust communication strategies to enhance project performance (; Kumar et al., 2023).

Team conflicts are recognized as operational challenges by 67.5% of respondents, who either strongly agreed or agreed. Conflicts within teams can arise from various factors, including miscommunication, misunderstandings, and interpersonal issues. These conflicts can disrupt workflow, reduce productivity, and compromise the quality of project outcomes. Addressing team conflicts through effective conflict resolution strategies and fostering a collaborative work environment are essential for maintaining operational efficiency (Osei-Kyei & Chan, 2015; Davila et al., 2020; Aramali et al., 2024).

Finally, poor risk management is seen as a significant operational challenge, with 81% of respondents acknowledging its impact. Kolisi (2015) emphasizes that risk management is a key discipline in project management, enabling managers to identify, assess, and mitigate risks effectively. Poor risk management can lead to unforeseen issues that disrupt project timelines and budgets, resulting in operational challenges. The data suggests that enhancing risk management practices is vital for improving project performance and achieving successful project outcomes (Tretiak et al., 2021; Kerzner, 2022; Shou, 2022).

The study underscores the pivotal role of financial management skills in addressing operational challenges and enhancing project performance in small construction businesses. The recognition of scope creep, budget restrictions, communication issues, team conflicts, and poor risk management as significant challenges highlights the need for comprehensive financial literacy and management training.

**Table 3:** The link between financial management skills and project performance

Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total
Financial management skills enhance project performance by ensuring effective budgeting and resource allocation, reducing the risk of cost overruns.	38,7%	26,4%	15,0%	16,0%	4,0%	100%
These skills help manage financial risks, preventing losses and project failures, thereby improving project outcomes.	39,2%	28,7%	9,0%	17,3%	5,8%	100,0%
Proficient financial management ensures consistent cash flow, avoiding delays and disruptions that can negatively impact project timelines and success.	40,2%	30,5%	6,2%	18,4%	4,7%	100,0%
Financial management utilizes metrics like EVM and NPV for accurate financial health assessments, guiding informed decision-making to enhance project performance.	46,4%	39,7%	8,9%	5,0%	0,0%	100,0%
Strong financial management supports strategic planning and decision-making, aligning project objectives with financial goals for better performance and profitability.	47,6%	32,4%	0,0%	15,0%	5,0%	100,0%

**Source:** Author's Construction

The significance of financial management skills in improving project performance within small construction enterprises is crucial. Proficiency in financial management guarantees efficient budgeting and distribution of resources, so substantially mitigating the likelihood of exceeding costs. The study found that 65.1% of respondents strongly agree or agree that these abilities improve project performance by reducing cost overruns. This indicates a widespread agreement on the significance of financial competence in preserving budget discipline (Ajmal et al., 2020; Kolisi, 2015). Efficient budgeting allows project managers to distribute resources in the most effective way, ensuring that all components of a project receive sufficient funding and any financial shortages are minimised.

Moreover, proficiency in financial management is crucial for effectively handling financial risks, so eliminating any potential losses and project failures. A total of 67.9% of the respondents strongly support or agree with this statement, highlighting the crucial importance of financial risk management in achieving project success (Shou, 2022; Aramali et al., 2024). Efficient financial risk management entails promptly recognising potential financial hazards and formulating solutions to alleviate these risks. By adopting a proactive approach, projects are protected from unforeseen financial setbacks, leading to improved project outcomes.



Effective financial management also guarantees a steady flow of funds, which is essential for preventing delays and interruptions that can have a detrimental effect on project schedules and outcomes. Based on the study, 70.7% of respondents strongly support or agree that sustaining a steady flow of funds is crucial for the success of a project (Tretiak et al., 2021; Kerzner, 2022). Regular cash flow evaluations enable project managers to verify the availability of adequate funds to cover ongoing project expenses, thus avoiding work interruptions caused by financial limitations.

In addition, financial management employs measures such as Earned Value Management (EVM) and Net Present Value (NPV) to conduct precise evaluations of financial well-being. These metrics provide valuable information for making informed decisions in order to improve project success. A significant majority of respondents, specifically 86.1%, express strong agreement or agreement about the significance of these indicators (Aramali et al., 2024; Davila et al., 2020). The Earned Value Management (EVM) technique offers a holistic assessment of project advancement by incorporating measurements of cost, schedule, and scope. On the other hand, Net Present Value (NPV) aids in assessing the profitability of projects by taking into account the present value of future cash flows.

Effective financial management is crucial for supporting strategic planning and decision-making. It ensures that project objectives are aligned with financial goals, leading to improved performance and profitability. According to the poll, 80% of respondents expressed strong agreement or agreement with this statement, emphasising the crucial significance of financial management in project planning (Kerzner, 2022; Shou, 2022). Strategic financial planning include the establishment of financial objectives, the prediction of forthcoming financial circumstances, and the formulation of strategies to accomplish these objectives. This alignment guarantees that project initiatives are economically feasible and make a positive contribution to the organization's financial performance

## **Conclusions**

The results of this study highlight the critical role of financial management skills in enhancing project performance within small construction enterprises. The descriptive analysis reveals that respondents place high importance on key financial performance metrics such as Net Present Value (NPV), Earned Value (EV) management, Financial Leverage (FL), liquidity, and profitability. These indicators are crucial for effective project execution and financial stability. For instance, 94.6% of respondents emphasized the significance of NPV in decision-making processes, underscoring its role in ensuring dependable and steady cash flows necessary for project success. Similarly, EV management was deemed important by 77% of respondents, indicating its utility in assessing financial status and progress against project baselines.

The analysis of operational challenges faced by small businesses in the construction sector further underscores the necessity of strong financial management skills. Issues such as scope creep, budget restrictions, lack of communication, team conflicts, and poor risk management were identified as significant obstacles to project performance. For example, 73% of respondents cited budget restrictions as a substantial challenge, highlighting the inflexibility and operational difficulties caused by financial constraints. Effective financial management can mitigate these challenges by ensuring proper budget allocation, improving communication channels, and fostering team collaboration.

The link between financial management skills and project performance is reinforced by the survey results. A significant proportion of respondents agreed that proficient financial management enhances project performance through effective budgeting, resource allocation, and risk management. For example, 65.1% of respondents agreed that financial management skills reduce the risk of cost overruns, while 70.7% emphasized the importance of maintaining consistent cash flow to prevent project delays. Additionally, metrics like EVM and NPV were recognized by 86.1% of respondents as essential for accurate financial assessments and informed decision-making.

Based on these findings, we reject the null hypothesis ( $H_0$ ) that states there is no statistically significant correlation between financial management abilities and project performance in small enterprises operating in the construction industry. The evidence clearly demonstrates that financial management skills are vital for the successful performance of small business projects in the construction industry. The key financial indicators such as NPV, EV, FL, liquidity, and profitability play a crucial role in project execution and financial stability.

Furthermore, the null hypothesis ( $H_0$ ) that operational issues in project management have no substantial impact on project performance in the construction industry is also rejected. The significant operational challenges identified, including scope creep and budget restrictions, can be effectively managed through enhanced financial literacy and management practices. The findings indicate that addressing these operational issues through strong financial management can lead to improved project performance and successful outcomes.

Suggested measures consist of establishing comprehensive financial management training initiatives, enhancing channels of communication, including strategic financial planning into project goals, and consistently refining financial management procedures. Effective financial management is crucial for the success of construction projects, and improving financial management practices can greatly enhance project performance at BCO Construction. First and foremost, it is essential to undertake comprehensive financial management training programmes. The primary objective of these programmes should be to provide project teams with comprehensive knowledge and skills in budgeting, cost control, financial analysis, and risk management. By providing team members

with these abilities, BCO Construction may guarantee more precise budgeting, improved resource allocation, and proactive risk management, therefore minimising the chances of exceeding costs and encountering financial instability during projects.

Furthermore, it is crucial to enhance the communication channels within project teams. Effective communication procedures, frequent project meetings, and the incorporation of technology for immediate updates can improve collaboration, decision-making, and problem-solving. Efficient communication guarantees that all parties involved have accurate information and are in agreement with the goals of the project, thereby avoiding any confusion that may result in project delays or mistakes. This enhancement in communication cultivates a cooperative atmosphere where problems are swiftly dealt with, hence improving the overall effectiveness of the project.

Finally, incorporating strategic financial planning into project objectives is crucial for aligning financial objectives with organisational plans. This entails the process of making predictions about the company's financial situation in the long run, analysing several possible scenarios, and making sure that the financial decisions made for projects align with the company's overall growth goals. Through the implementation of strategic financial planning, BCO Construction may enhance the allocation of resources, reduce financial risks, and enhance financial transparency and accountability across various projects. Adaptability and continual improvement in financial management techniques are ensured by continuously refining processes through performance monitoring, feedback mechanisms, and benchmarking against industry best practices.

Although the study offers significant insights, it recognises limitations such as the dependence on self-reported data and the requirement for more longitudinal research to evaluate the long-term effects of enhanced financial management practices. Potential areas for future research might investigate the incorporation of cutting-edge technologies in financial management specifically within the construction industry. Additionally, comparison studies across various industries could be conducted to pinpoint transferable best practices.

The sample of 80 respondents may not fully capture the diversity of financial management practices and project performance at BCO Construction, limiting the generalizability of the findings. The study's single-point-in-time data collection may not reflect the dynamic nature of financial management practices, missing long-term trends and changes. Longitudinal studies would offer a more comprehensive understanding.

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**Ethical approval:** The study was approved by the Faculty Research Ethics Committee (FREC) under ethical level one, that does not need ethical clearance from the institution. Informed written consent was sent to all respondents of the interviews and questionnaires, and additional verbal consent was obtained at the start of the interviews. Data was treated confidentially. The respondents were assured that they could withdraw from the study at any time without needing to give any explanation. All data was properly stored according to Durban University of Technology research policies. The study design, procedures, and participant interactions adhered to the principles outlined in the Declaration of Helsinki and were approved by the FREC before initiation.

**Informed consent:** All respondents provided their informed consent before participating in the study. They had a clear understanding of the study's purpose, procedures, potential risks, and benefits, and they knew that they had the freedom to withdraw from the study at any time.

**Author contributions** As the only author, everything was done by me. I contributed to the study conception, design, data collection and analysis. Furthermore, I wrote the first draft of the manuscript, and read and approved the final manuscript.

**Availability of data and materials** The datasets generated and/or analysed during the current study are available from me, Tinaye Mahohoma, as the main author, on reasonable request.

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