



University of Venda

**EVALUATING THE EFFECTIVENESS OF ACTIVITY-BASED COSTING FOR
COST EFFICIENCY in SOUTH AFRICAN RETAILERS**

BY

RASISI MUFUNWA TAKALANI

STUDENT NO: 17023646

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SUPERVISOR: DR A. REYNOLDS

CO-SUPERVISOR: MR C. MUNKULI CA (SA)

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ABSTRACT

In today's highly competitive retail landscape, cost efficiency remains a critical determinant of long-term sustainability. Despite significant advancements in cost accounting techniques, many South African retailers still rely on traditional volume-based costing methods that inadequately reflect the actual resource consumption of products and services. This study evaluates the effectiveness of Activity-Based Costing (ABC) in improving cost efficiency across various retail enterprises in South Africa. Drawing on both quantitative and qualitative data, the research employs a mixed-methods approach to assess how ABC affects cost allocation accuracy, operational performance, and financial decision-making. A purposive sampling technique was used to select a representative sample of registered retail firms identified through the CIPC databases. Structured questionnaires and semi-structured interviews were conducted with financial professionals who are familiar with ABC implementation. Quantitative data was statistically analysed to detect patterns, correlations, and measurable impacts of ABC on cost efficiency, while qualitative insights will enrich understanding of contextual and strategic challenges surrounding adoption. The study is grounded in Cost Behaviour Analysis theory, which underscores the dynamic relationship between operational activity and cost drivers. Preliminary findings from similar international studies have shown positive correlations between ABC and improved cost control, profitability, and resource allocation. However, limited research exists on the localised effectiveness of ABC in the South African retail context. This study fills that gap by offering empirical evidence and practical insights for retail decision-makers, policymakers, and accounting professionals seeking to adopt more accurate and adaptive costing models. The research aims to promote financial resilience and strategic competitiveness in an increasingly volatile economic environment.

Keywords: Activity-based Costing (ABC), Cost Efficiency, Financial Performance, South African Retail Sector

DECLARATION

I, Rasisi Mufunwa Takalani, declare that this dissertation: Evaluating the Effectiveness of Activity-Based Costing For Cost Efficiency in South African Retailers, is my original work, and the information in this study is accurate and relevant. Ethical considerations in the study will be observed, and sources will be clearly stated and acknowledged.

Rasisi Mufunwa Takalani

Date

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TABLE OF CONTENTS

ABSTRACT.....	I
DECLARATION.....	II
ACKNOWLEDGEMENTS.....	III
TABLE OF CONTENTS.....	IV
LIST OF TABLES.....	IX
LIST OF FIGURES.....	X
CHAPTER 1.....	1
INTRODUCTION AND BACKGROUND.....	1
1.1. Introduction of the Study	1
1.2. Background of the Study	2
1.3. Main Goal, Sub-Goals and Research Questions	3
1.3.1. Main Goal.....	3
1.3.2. Sub-Goals.....	3
1.3.3. Research Questions.....	4
1.4. Problem Statement	4
1.5. Significance of the Study	5
1.6. Literature Review	6
1.6.1. Introduction.....	6
1.6.2 The Concept and Application of Activity-Based Costing.....	7
1.6.3 Challenges in Implementing ABC in the Retail Sector.....	9
1.6.4 Theoretical Framework Supporting ABC.....	11
<i>Figure 1: Cost Behaviour Analysis Theory Flow Chart</i>	14
1.6.5 Comparative Analysis: Traditional Costing vs. Activity-Based Costing....	15
1.6.6. Empirical Studies on ABC Implementation in Retail.....	16
1.6.7. Summary.....	18

1.7. Methodology	21
1.7.1 Research Philosophy	21
1.7.2 Research Design.....	23
1.7.3 Data Collection.....	24
1.7.4 Statistical Analysis	26
1.7.5 Target Population	28
1.7.6 Sampling Strategy	28
1.7.7 Ethical Considerations	30
1.7.8 Instrument Reliability and Viability.....	30
1.8. Structure of the Dissertation	31
1.9. Limitations of the Study.....	31
1.10. Chapter Summary.....	32
CHAPTER 2	33
LITERATURE REVIEW.....	33
2.1. Introduction.....	33
2.2. The Concept and Evolution of Activity-Based Costing (ABC).....	33
2.3. Components of ABC.....	35
2.4. Benefits of ABC in Enhancing Cost Efficiency	38
2.4.1. Waste Reduction and Resource Optimisation.....	39
2.4.2. Strategic Pricing and Customer Satisfaction	40
2.4.3 Improved Financial Transparency and Performance.....	40
2.4.4. Cultural and Behavioural Shifts in Cost Management	41
2.4.5 Potential for Continuous Improvement and Competitive Advantage	42
2.5. Challenges in Implementing ABC in the Retail Sector	43
2.5.1 Technological and Data Integration Challenges.....	44
2.5.2 Resistance to Change and Training Needs.....	44
2.5.3 Financial Burden of Implementation for SMEs	45

2.5.4 Scalability Issues in Large Operations	45
2.6. Theoretical Framework Supporting ABC.....	46
2.6.1 Cost Behaviour Analysis (CBA) Theory	46
2.6.2 Theory of Constraints (TOC)	47
2.6.3 Resource-Based View (RBV) Theory.....	48
2.7. Comparative Analysis: Traditional Costing vs. Activity-Based Costing	48
2.8. Empirical Studies on ABC Implementation in Retail	51
2.8.1 Implementation Challenges and Organisational Readiness	52
2.8.2 Cost Efficiency and Performance Outcomes.....	52
2.8.3 Technological and Digital Integration Dimensions.....	53
2.8.4 Contextual Insights and Research Gaps.....	54
2.9. Chapter Summary	54
CHAPTER 3	57
RESEARCH METHODOLOGY	57
3.1. Introduction.....	57
3.2 Research Philosophy	57
3.3 Research Approach and Design.....	58
3.4 Research Population and Sampling.....	59
3.5 Data Collection Methods	61
3.6. Research Instruments	62
3.7 Data Analysis Techniques	63
3.8 Ethical Considerations	64
3.9 Reliability, Validity and Trustworthiness	65
3.10 Limitations and Delimitations.....	67
3.11 Timeline and Resources	67
3.12 Chapter Summary.....	69
CHAPTER 4	70

DATA COLLECTION AND DATA ANALYSIS	70
4.1. Introduction.....	70
4.2 DEMOGRAPHICS OF THE PARTICIPANTS.....	70
4.2.1. Gender Distribution	73
4.2.2 Age Composition of Participants	74
4.2.3. Educational Qualifications	75
4.2.4 Types and Locations of Retail Organisations	76
4.3 MAJOR THEME 1: DISTINCTIONS BETWEEN ACTIVITY-BASED COSTING (ABC) AND TRADITIONAL COSTING METHODS	77
4.3.1 Sub-theme 1.1: Precision and Traceability of Costs.....	77
4.3.2 Sub-theme 1.2: Enhanced Identification of Cost Drivers	78
4.3.3 Sub Theme 1.3: Understanding the Managerial Insight and Decision Logic ABC System Impacted and Changed.....	80
4.3.4 Sub-theme 1.4: Quick and Operational Issues.....	82
4.4 MAJOR THEME 2: BENEFITS AND PRACTICAL CHALLENGES OF IMPLEMENTING ACTIVITY-BASED COSTING (ABC) IN SOUTH AFRICAN RETAILERS	84
4.4.1 Sub-theme 2.1: Cost Transparency and Organisational Accountability ...	84
4.4.2 Sub-theme 2.2 Enhanced Accuracy in Pricing and Strategic Planning ...	85
4.4.3 Sub-theme 2.3- Technical, Financial, and Human Barriers	87
4.4.4 Sub-theme 2.4: Adoption and Mitigation Strategies	88
4.5 MAJOR THEME 3: THE CONTENTS' ABC ON THE COST EFFICIENCY AND FINANCE OUTCOMES	90
4.5.1 Sub theme 3.1: Improved Cost Efficiency and Resource Utilisation.....	90
4.5.2. Financial Outcomes and Profitability Gains.....	91
4.5.3 Sub-theme 3.3: Evidence-Based Decision Making and Performance Evaluation	93
4.6 Analysis of the Findings	95

4.7. QUANTITATIVE ANALYSIS AND DISCUSSION	98
4.7.1. DEMOGRAPHIC CHARACTERISTICS OF PARTICIPANTS	98
4.7.2 DIFFERENCES BETWEEN ACTIVITY-BASED COSTING AND TRADITIONAL COSTING METHODS	103
4.7.3 BENEFITS AND PRACTICAL CHALLENGES OF IMPLEMENTING ABC	110
4.7.4. CONTRIBUTION OF ABC TO COST EFFICIENCY AND FINANCIAL OUTCOMES	116
4.7.5 INTEGRATION OF ABC METRICS INTO STRATEGIC AND FINANCIAL PLANNING.....	120
4.8. Chapter Summary	124
CHAPTER 5	126
CONCLUSION AND RECOMMENDATIONS.....	126
5.1 INTRODUCTION	126
5.2 SUMMARY OF THE FINDINGS	126
5.2.1 Findings from the Literature Review.....	126
5.2.2 Findings from the Empirical Study.....	127
5.3 CONCLUSIONS OF THE STUDY	129
5.4 RECOMMENDATIONS OF THE STUDY	129
5.4.1 Strategic and Policy-Level Recommendations.....	129
5.4.2 Managerial, Operational, and Technological Recommendations	130
5.4.3 Human Capital, Organisational Culture, and Future Research Recommendations	131
5.5 LIMITATIONS OF THE STUDY.....	132
5.6 SUGGESTIONS FOR FUTURE STUDIES	133
5.7 FINAL REMARKS	134
REFERENCES.....	136

LIST OF TABLES

Table 1: Summary of Traditional vs ABC Key Dimensions.....	50
Table 2: Summary of Participants' Demographic Characteristics (n = 10).....	71
Table 3: Accuracy and Reliability—ABC vs Traditional Costing (n = 100).....	103
Table 4: Decision-Support and Cost Driver Identification (n = 100).....	105
Table 5: Alignment of ABC with Modern Retail Operations (n = 100).....	107
Table 6: Reliability Item–Total Correlations and Cronbach's Alpha (RQ1).....	108
Table 7: Perceived Organisational Benefits of ABC.....	110
Table 8: Organisational and Technical Barriers to ABC.....	112
Table 9: Critical Success Factor—Management Support and Training.....	114
Table 10: Reliability Benefits/Challenges Scale.....	115
Table 11: ABC's Contribution to Cost Efficiency and Financial Outcomes.....	117
Table 12: Integration of ABC into Strategic and Financial Planning.....	121

LIST OF FIGURES

Figure 1: Cost Behaviour Analysis Theory Flow Chart.....	14
Figure 2: Activity-Based Costing Framework.....	36
Figure 3: Traditional vs Activity-Based Costing.....	49
Figure 4: Timetable Showing Data Acquisition, Analysis, and Interrogation.....	68
Figure 5: Gender Distribution.....	74
Figure 6: Years of Experience in Retail Sector.....	76
Figure 7: Gender Distribution of Respondents.....	99
Figure 8: Age Distribution of Respondents.....	100
Figure 9: Highest Educational Qualification of Respondents.....	101
Figure 10: Current Positions of Respondents.....	102
Figure 11: Accuracy and Reliability ABC vs Traditional Costing (n = 100).....	104
Figure 12: Cost Drivers and Managerial Decisions.....	106
Figure 13: Reliability—Item—Total Correlations and Cronbach’s Alpha (RQ1).....	109
Figure 14: Perceived Organisational Benefits of ABC.....	111
Figure 15: Organisational and Technical Barriers to ABC.....	113
Figure 16: Reliability Benefits/Challenges Scale.....	116
Figure 17: ABC’s Contribution to Cost Efficiency and Financial Outcomes.....	118
Figure 18: Integration of ABC into Strategic and Financial Planning.....	122

CHAPTER 1

INTRODUCTION AND BACKGROUND

1.1. Introduction of the Study

ABC has become incredibly significant for enhancing the cost-effectiveness of retailing activity in the South African context. This is the reason costs are misallocated when using traditional costing methods (Mungusa, 2021). ABC provides more precise information about resource utilisation because it determines and assigns costs based on specific activities rather than general cost centres. This method enables businesses to use resources effectively, establish prices, and track overhead costs for specific items and services (Quartey, 2023). Adding to this new procedure will be the nature of retail itself, characterised by uncertain customer demand and fluctuating operational costs, which necessitates an efficient and transparent cost management system. This method enhances cost allocation accuracy and reduces waste, thereby giving South African businesses a competitive advantage amid economic uncertainty and stiff competition (Serfontein, 2022).

ABC has been particularly valuable to the retail sector as it highlights where costs originate and what activities do not add value. Traditional costing methods, such as volume-based costing (which uses a single cost driver, such as direct labour hours or machine hours, to assign overheads) and direct labour-based costing (in which overhead costs are allocated using direct labour costs), assign overheads to products based on arbitrary rationales. This often distorts cost behaviour, since these procedures do not properly measure resource usage by product or service. This means that product costs can be set too high or too low, leading to poor pricing, misallocation, and misuse of funds as potential consequences. These interferences can lead to incorrect pricing methods and poor financial plans, resulting in low profits (Mahmoud, Hasan and Hanoon, 2024). ABC provides a more precise way to allocate costs from cost centres to cost objects by basing costs on real consumption. Businesses can identify inefficient or unnecessary activities and eliminate them, resulting in more realistic cost allocation. This level of cost-assignment accuracy helps retailers optimise business operations and increase profitability. In addition, the automation of ABC puts firms in a position to see cost drivers in real time, helping identify which functions are the costliest. Armed with this knowledge, retailers can act,

achieving better terms with suppliers, cutting inventory to the bone, cutting fat all over the organisation in the competitive retail world of South Africa, that kind of cost analysis not only adds to financial clarity but also long-term sustainability through showing the allocation of resources to value-providing activities (Mohamed, 2022). ABC automation is therefore essential for enhancing cost management efficiency and enabling a response to the rapidly changing retail environment.

Weerasekara and Gooneratne (2023) highlight high implementation costs, resistance to change, and difficulties in data collection as barriers to ABC implementation among South African retailers, despite its benefits. If a store has a wide range of products and processes, implementing ABC will take an immense amount of time and resources due to the meticulous tracking required for the activities involved. Employee support will be equally critical, as fear of change could hamper the successful deployment of added cost management systems (Laseinde, 2023). However, with thoughtful training, technology investments, and rollout phases, retailers will overcome these challenges to fully realise the benefits of ABC. ABC provides a solid foundation for cost efficiency, helping South African merchants maximise performance and remain competitive in a changing, complex market (Chinniah, 2021).

1.2. Background of the Study

ABC hopes to promote economic growth (Nair, 2021) as South Africa has a range of retail types, from big-box stores to mom-and-pop stores. Retailers will control their costs to remain profitable amid ongoing challenges such as inflation, supply chain disruptions, and unpredictable consumer demand. In a competitive environment where customers are also price-sensitive, efficient cost control is essential (Nzuza et al., 2024). Outdated costing methods (those that still rely on superficial estimates rather than actual resource consumption) are one of the biggest challenges for many companies. This will lead to errors in pricing, budgeting, and strategic decision-making. This affects the organisation's long-term sustainability and growth (Hove-Sibanda, Muchenje, and Nyoni, 2021).

An alternative approach, according to Pham, Tran and Nguyen (2021), will appear for cost allocation problems in retail. Unlike traditional approaches, ABC will provide a more precise representation of resource consumption because costs will be assigned

to the activities that generate overhead expenses (Alahmari, 2023). ABC helps organisations pinpoint areas of inefficiency and create more targeted plans to cut costs through its approach to pinpointing key cost drivers (Kaplan & Cooper, 2022). They may enhance their profits, expand their profit margin, and adjust their pricing schemes with pinpoint accuracy. Implementing ABC can provide businesses in the South African retail sector with a robust competitive advantage that complements their dynamic nature and the changing variable costs of operations and consumer behaviour (Mohamed, 2021).

Despite ABC providing a clearer picture of the full cost of producing a product or service, it can require significant investment in data gathering, system reconfiguration, and training staff to use ABC. Retailers can weigh change costs against the resistance to change and any potential long-term financial benefits associated with improved cost management (Jama, Moyo and Khumalo, 2023). Insights from Activity-Based Costing have significantly enhanced cost management, profitability, and operational efficiency across industries. Even retailers pursuing modest financial improvements can derive substantial value from understanding and applying ABC principles, particularly in identifying cost drivers and aligning resources more strategically (Yalçın, Bayraktar and Duzakin, 2020). Implementing ABC within South Africa's retail sector can meaningfully contribute to ongoing discussions on sustainable business practices and innovative cost-management approaches (Penny et al., 2021).

1.3. Main Goal, Sub-Goals and Research Questions

1.3.1. Main Goal

The primary goal of the study was to evaluate the effectiveness of Activity-Based Costing (ABC) in enhancing cost efficiency within South African retailers.

1.3.2. Sub-Goals

The objectives of the research were achieved by addressing the following research goals:

- I. To compare ABC with traditional costing methods in terms of production in the listed South African retail sector.

- II. To identify the key benefits and implementation challenges associated with adopting ABC in South African retail businesses.
- III. To evaluate the impact of ABC on cost efficiency and overall financial performance in the retail sector.

1.3.3. Research Questions

These sub-goals were further supported by the following research questions:

- I. In what way does ABC differ from traditional costing methods in the South African retail sector?
- II. What are the main benefits and practical challenges of implementing ABC among South African retailers?
- III. How does the adoption of ABC contribute to influencing cost efficiency and financial outcomes in retail businesses? Using ABC metrics and cost efficiency metrics.

1.4. Problem Statement

Despite significant transformations in the South African retail sector, many retailers continue to rely on traditional costing approaches, such as volume-based or direct labour cost allocation methods. These outdated systems distort cost visibility and obscure the relationship between operational activities and resource consumption, leading to inefficiencies in product pricing and resource allocation (Adetayo et al., 2025). Consequently, decision-makers often misallocate overheads and fail to identify loss-making activities, undermining competitiveness in an already challenging sector characterised by low profit margins and rising operational costs (Mandipa & Sibindi, 2022). The persistence of these traditional models, despite their evident shortcomings, suggests a misalignment between modern cost management needs and existing accounting practices in the South African retail environment (Khan, 2024).

Activity-Based Costing (ABC) has been globally recognised for its potential to enhance cost accuracy and support strategic decision-making. However, its adoption in South Africa remains limited and uneven (Kudanga, Nzuza & Stainbank, 2023). Studies from other regions have shown that ABC enhances transparency by linking costs to specific activities and cost drivers, enabling managers to identify and reduce inefficiencies and

improve profitability (Al-Dhubaibi, 2021). In the South African retail context, however, challenges such as system integration difficulties, limited technical expertise, and the perceived complexity of ABC have hindered its uptake (Adegbola et al., 2024). Consequently, many retail firms continue to operate with suboptimal costing structures that fail to accurately reflect the cost of operations, particularly in multi-channel retail environments characterised by dynamic consumer behaviour and increasing digitalisation (Bonfrer, Chintagunta & Dhar, 2022).

The limited empirical evaluation of ABC's effectiveness in South Africa's retail sector constitutes a significant research gap. Most available studies have focused on sectors such as manufacturing, higher education, or public organisations, leaving retail applications underexplored (Madwe, Stainbank & Green, 2020). This lack of context-specific evidence has led to uncertainty among retail managers about whether ABC can yield measurable improvements in cost efficiency under local economic and structural conditions (Matoke, Maendo & Nyangau, 2024). The absence of empirical insights continues to perpetuate reliance on inefficient costing methods, limiting evidence-based decision-making that is crucial for maintaining financial performance and competitiveness. This study aims to address this empirical gap by evaluating the effectiveness of Activity-Based Costing in enhancing cost efficiency within the South African retail sector. By doing so, it will generate actionable insights that can guide the transition from traditional costing systems towards more modern, data-driven approaches, fostering financial sustainability and strategic resilience in South Africa's retail landscape (Abdolazimi et al., 2021).

1.5. Significance of the Study

ABC will significantly enhance the profitability and sustainability of the South African retail sector through its cost-effectiveness and the delivery of more precise cost-allocation mechanisms (Tuboalabo, Buinwi and Okatta, 2024). Traditional cost accounting systems do not account for the complexities of retail operations, leading to inefficiencies and poor financial decisions. According to Kumar, Sharma, and Singh (2021), ABC will help retailers analyse why certain activities are costly and allocate resources more efficiently by eliminating wasted spending. This study will assess ABC's cost efficiency and demonstrate ABC's effectiveness in the retail business. A deeper understanding of ABC's role in cost management may benefit retailers by

helping them manage economic uncertainties, optimise pricing strategies, and secure competitive advantage in an increasingly dynamic environment (Shoushtari, Francis, and Barker, 2024).

Moreover, the results of this study will significantly help retail managers and financial analysts by providing practical insights into how ABC can enhance financial transparency and operational efficiency. By taking a more thorough approach to expense management, financial analysts can sustainably tailor strategic planning with more accurate estimates and reports (Nematian, Keske & Ng'ombe, 2021). A well-structured cost planning system plays a crucial role in promoting economic stability by fostering strong business ethics and enhancing industry-level discipline in accounting practices. By equipping stakeholders with insights into modern cost management approaches such as ABC, this study aims to inform policy development. The findings could support lawmakers in designing regulations and incentives that encourage retail firms to adopt innovative monetary management methods, thereby contributing to more sustainable and accountable business environments (Agrawal et al., 2024). One option for legislating ABC is to package its transparency costs as an additional requirement for corporate financial reporting regulations, particularly for publicly traded or high-revenue organisations. Governments might also require ABC-based reporting in sectors of high public interest or where non-saleability or inefficiency is characteristic (e.g., retailing, health care, and utilities). Furthermore, favourable taxation (e.g., tax deductions for introducing ABC systems) or financial benefits (e.g., for training programs) might facilitate the adoption of ABC systems by SMEs. They would also connect businesses' practices to performance-based budgeting and help foster a culture of financial stewardship and purposeful resource allocation to advance national economic objectives (Kaplan & Anderson, 2007; OECD, 2020). The study will focus on cost consciousness and efficiency; thus, it has far-reaching implications not only for the retail industry but also for the South African economy as a whole.

1.6. Literature Review

1.6.1. Introduction

This chapter reviews the literature on the notion, implementation, and effects of ABC in organisations. More precise and strategic cost management systems are becoming

increasingly popular as organisations face mounting financial strains resulting from global competition, market volatility, and operational complexity. By linking costs to the activities that generate them, ABC has become a competitive alternative to traditional costing techniques, providing a more accurate cost allocation method. ABC and its development are introduced at the beginning of the chapter. The chapter also explores the difficulties encountered when implementing ABC in organisations. Additionally, the chapter examines the benefits of utilising ABC in businesses. Through the lens of the Resource-Based View and the Theory of Constraints, the theoretical foundation of ABC is investigated via the prism of Cost Behaviour Analysis (CBA). Furthermore, the literature review compares ABC with conventional costing systems and highlights the drawbacks of legacy models, as well as ABC's strategic advantages in terms of long-term sustainability and profitability. The chapter establishes a conceptual framework for the subsequent study by offering an empirical analysis of ABC in South African retail contexts.

1.6.2 The Concept and Application of Activity-Based Costing

ABC represents a transformative management accounting technique that improves cost attribution accuracy by linking expenses directly to specific organisational activities rather than applying uniform cost allocations. Unlike traditional systems that rely on broad averages, ABC disaggregates processes such as procurement, coordination, marketing, and storage, enabling firms to assign costs based on resource consumption (Al-Dhubaibi, 2021). This disaggregation enhances the visibility of indirect costs, providing a clearer understanding of value creation across business operations (Ghouzi, 2021). In the retail sector, where product diversity and fluctuating margins are prevalent, ABC enables granular overhead tracking, allowing managers to isolate profit-draining operations and allocate resources more efficiently (Agbozo & Asamani, 2020). Empirical research demonstrates that ABC adoption leads to improved pricing decisions and profit measurement by clarifying the relationship between resource use and output (Bhimani, 2021). Such analytical depth aligns with the growing emphasis on data-driven fiscal management across dynamic retail ecosystems.

Recent studies highlight that ABC's adaptability extends beyond manufacturing to service-oriented and retail enterprises characterised by complex supply chains and

fluctuating demand. Coca-Cola's implementation of ABC, for instance, demonstrated how the method enhances cost visibility across distribution and marketing functions, leading to improved pricing and profitability (Chen, 2025). Similarly, IKEA adopted ABC to identify cost inefficiencies in in-store displays and coordination, achieving notable reductions in overhead costs (Sabat et al., 2023). Within South Africa, retailers such as Shoprite and Pick'n Pay have explored ABC as part of their operational efficiency frameworks, using it to manage product mix and coordination costs (Mandipa & Sibindi, 2022). However, while global corporations enjoy greater resource flexibility, smaller regional retailers face structural challenges such as limited data analytics capacity and financial constraints, which may hinder full-scale adoption (Kudanga, Nzuza & Stainbank, 2023). These contrasts reveal the uneven diffusion of ABC practices across contexts, suggesting that sectoral and institutional capacity, rather than the technique itself, determine their success.

A key advantage of ABC lies in its ability to identify non-value-adding activities, enabling firms to streamline operations and enhance productivity. By tracing costs to specific actions, ABC exposes inefficiencies and enables firms to redesign processes to enhance value generation (Mahmoud, Hasan & Hanoon, 2024). For instance, Walmart applied ABC analytics to reduce excessive inventory holding by pinpointing low-turnover products, thereby releasing working capital and improving liquidity (Jalfan & Hasoon, 2023). Similarly, General Electric leveraged ABC to assess cost distortion across divisions, leading to better resource allocation and enhanced profitability (Pollari, 2024). In South Africa, retail case studies have demonstrated comparable outcomes, with ABC-informed budgeting improving cost control and supporting more competitive pricing models (Madwe, Stainbank & Green, 2020). Collectively, these examples suggest that ABC's strength lies in its diagnostic precision and ability to link operational decisions with strategic financial outcomes, making it a critical enabler of sustainable retail performance.

Beyond operational efficiency, ABC provides predictive insights that enhance financial planning and strategic forecasting. Firms can forecast future expenditures more accurately and evaluate the financial implications of strategic initiatives (Udeh, Dunu and Obioha, 2024). Dell Technologies, for example, uses ABC to simulate cost scenarios before entering new markets, improving strategic agility (Ponisciakova,

2022). In the fast-paced retail environment, where technological disruption and consumer demand evolve rapidly, ABC supports scenario modelling and long-term financial planning (Mirkabulovich, 2024). Within the South African retail context, the integration of ABC into digital platforms has enabled real-time decision-making, particularly in inventory optimisation and procurement (Hove-Sibanda, Motshidisi & Igwe, 2021). However, while predictive analytics enhance ABC's value proposition, its implementation requires substantial data quality and analytical maturity capabilities that not all firms possess. Therefore, the potential of ABC as a forecasting tool depends on organisational readiness and digital infrastructure.

Despite its strategic value, ABC adoption remains complex due to the extensive data requirements and human resource implications. Empirical evidence shows that successful implementation demands not only capital investment in information systems but also cultural and behavioural adaptation within organisations (Tang et al., 2023). Toyota's initial struggles with tracking individual production activities exemplify the logistical burden of ABC integration in large-scale operations (Modarress, Ansari & Lockwood, 2021). Similarly, South African retail chains have faced difficulties aligning legacy systems with ABC-compatible accounting software (Kaul, 2025). Resistance from employees, particularly in finance and operations departments, further impedes implementation, as ABC requires a shift from aggregate accounting practices to data-centric decision-making (Cameron & Green, 2020). Nonetheless, research indicates that phased implementation, continuous training, and leadership commitment mitigate these challenges (Mantelero & Esposito, 2021). Consequently, ABC's success depends on both technical integration and the organisational culture supporting its use.

1.6.3 Challenges in Implementing ABC in the Retail Sector

While ABC offers compelling advantages, its implementation in retail settings is fraught with systemic and behavioural challenges. A recurring obstacle is the difficulty of integrating ABC into entrenched traditional accounting systems that rely on aggregated cost pools (Mungusa, 2023). South African retailers, such as Woolworths, have experienced significant operational disruptions during the adoption of ABC due to incompatibilities between their legacy systems and added cost management software (Quartey, 2023). The transition required substantial investment in digital

infrastructure and skilled personnel to manage large datasets (Dlamini, 2022). Moreover, data fragmentation across departments often results in inconsistent cost allocation, undermining the accuracy ABC seeks to achieve (Desklib, 2023). The persistence of such integration challenges highlights the need for phased system upgrades and the adoption of cloud-based solutions to harmonise accounting workflows across retail divisions (Johnson et al., 2024). Therefore, technological readiness remains a determinant of ABC success within modern retail contexts.

Another prominent challenge is employee resistance, particularly when transitioning from familiar, simplified costing methods to data-intensive models. Studies reveal that resistance often stems from a lack of understanding of ABC's strategic value, as well as fear of accountability for inefficiencies that the system may expose (Journault & Gosselin, 2022). Shoprite's experience exemplifies this, as employees initially resisted the transition from absorption costing to ABC due to perceived complexity and job insecurity (Dlamini, 2022). However, firms that invest in structured training and change management initiatives report higher acceptance rates and smoother implementation (Oyewo et al., 2022). In this regard, leadership communication and participatory engagement play a crucial role in reducing resistance. From an analytical standpoint, employee adaptation emerges as a soft but decisive factor in determining the sustainability of ABC systems within retail organisations. Thus, beyond technical adoption, ABC requires behavioural alignment between management intent and workforce execution.

High implementation costs also hinder the adoption of ABC, particularly among small and medium-sized enterprises (SMEs) that operate under constrained financial resources. For many retailers, the upfront costs of software acquisition, consultancy, and staff training outweigh perceived short-term benefits (Wang, 2023). For instance, Clicks Group delayed full implementation due to concerns about return on investment and the need for data-intensive systems unfamiliar to their existing operational model (Clicks, 2023). Empirical findings indicate that while large-scale retailers can absorb initial costs through economies of scale, SMEs often rely on hybrid models that combine ABC principles with simplified cost drivers to remain financially viable (Bebaaddoun & Mohammed, 2023). This dichotomy suggests that financial feasibility depends on firm size and strategic priorities. Therefore, scalability considerations

should inform implementation models to ensure that ABC remains accessible across different tiers of the retail market.

A further constraint concerns data quality and analytical capability, which are foundational to the effective deployment of ABC. Retail operations generate vast volumes of transactional data that must be systematically processed to link costs with activities (Singh, 2022). However, data inconsistencies and incompleteness frequently compromise accuracy, leading to misallocated costs and distorted performance insights (Ramadan et al., 2024). Pick'n Pay's experience underscores this issue, as the company invested heavily in data analytics infrastructure to improve cost driver reliability (Mandipa & Sibindi, 2022). Similarly, research indicates that digital integration through AI and automation can mitigate data limitations by streamlining classification and analysis (Hossam et al., 2024). Nonetheless, such solutions require skilled personnel and sustained investment, which can be prohibitive for smaller firms. This highlights a persistent digital divide that affects the scalability and effectiveness of ABC in emerging retail economies, such as South Africa.

Scalability presents an additional structural challenge, particularly for large retailers operating multi-branch networks with diverse product lines. Massmart's attempts to extend ABC across stores revealed the difficulty of maintaining data coherence and process uniformity at scale (Cokins, 2021). Each store's unique operational dynamics and customer demographics complicated standardisation, resulting in inconsistent application and reporting (Battisti, Agarwal & Brem, 2022). Expanding ABC frameworks to such networks requires adaptive algorithms that can integrate data streams from heterogeneous systems (Kaul, 2025). South African case studies emphasise that without such scalability, the long-term sustainability of ABC remains uncertain, as its benefits diminish with operational expansion (Jama, Okoumba & Mafini, 2023). Consequently, successful ABC implementation in retail demands flexible, digitally enabled cost systems that evolve in parallel with organisational growth.

1.6.4 Theoretical Framework Supporting ABC

The theoretical foundation of this study draws upon three interrelated theories: Cost Behaviour Analysis (CBA), Theory of Constraints (TOC), and the Resource-Based

View (RBV), which together provide a multidimensional lens for understanding cost efficiency and strategic decision-making in the retail sector. CBA elucidates the relationship between cost patterns and activity levels, emphasising how fixed, variable, and mixed costs respond to operational fluctuations (Drury, 2018). In contrast, TOC focuses on identifying and eliminating bottlenecks that constrain performance (Horna & Chong, 2021), while RBV underscores the value of firm-specific resources in sustaining competitive advantage (Khan, 2024). Integrating these theories enhances explanatory depth by linking cost dynamics, resource utilisation, and operational improvement (Mahmoud et al., 2024). This triadic approach offers a robust framework for examining how ABC optimises financial and non-financial performance within South African retail environments characterised by volatility and thin margins (Mandipa & Sibindi, 2022). The integration demonstrates that understanding cost behaviour alone is insufficient without aligning it to organisational resources and operational constraints.

Within the CBA dimension, the theory posits that costs change predictably in response to variations in activity, providing a mechanism for forecasting expenditure and evaluating cost drivers (Khan, 2024). Recent studies show that retailers using CBA-informed ABC systems achieve higher budgeting precision and responsiveness to demand shocks (Mungusa, 2021). Conversely, firms relying solely on traditional absorption costing face cost distortions that mask inefficiencies (Schlaack, 2023). Empirical evidence from South African FMCG retailers confirms that classifying expenses into fixed and variable components enables more accurate stock and workforce planning, particularly under seasonal demand (Chinniah, 2021). However, Adegbola et al. (2024) argue that CBA's predictive capacity depends heavily on data reliability, a persistent challenge in data-poor retail contexts. This tension underscores why integrating digital analytics and ABC models strengthens CBA's applicability by linking behavioural cost patterns with real-time operational metrics. Therefore, CBA serves as the analytical basis for quantifying cost movements, but its effectiveness increases only when coupled with activity-level insights from ABC.

The Theory of Constraints complements this view by addressing process inefficiencies that CBA alone cannot capture. TOC emphasises continuous improvement through the identification and resolution of system bottlenecks that limit throughput (Datt et al.,

2024). Applied alongside ABC, TOC helps managers trace costs to constraint-related activities, thereby improving decision accuracy in resource allocation (Aleesawe, 2020). Horna and Chong (2021) demonstrated that coupling TOC with ABC in retail operations enhances throughput by isolating low-value processes such as redundant coordination flows. Nonetheless, critics contend that TOC's focus on single-constraint optimisation may oversimplify multi-store retail environments (Battisti et al., 2022). South African studies on supermarket chains reveal those operational constraints often span inventory, staffing, and digital infrastructure simultaneously (Hove-Sibanda et al., 2021). Integrating ABC with TOC thus transforms isolated constraint identification into a broader performance-management system that links financial data to operational capacity. This synthesis shows that ABC's detailed cost tracing gains strategic significance when it also reveals how constraint removal influences profitability across product lines.

From a strategic standpoint, the Resource-Based View introduces a competitive advantage perspective by asserting that unique resources, such as advanced analytics, skilled personnel, and proprietary technologies, drive sustainable efficiency (Agrawal et al., 2024). RBV positions ABC not merely as a costing tool but as a capability that enhances resource deployment and learning (Biadacz, 2022). Empirical evidence from South African retailers suggests that organisations with well-developed information systems and fiscal management skills experience smoother ABC integration (Kudanga et al., 2023). Conversely, resource-constrained firms encounter implementation delays due to inadequate training and technological support (Dlamini, 2022). RBV, therefore, bridges operational costing with strategic resource investment, implying that ABC's success depends on internal competencies rather than external cost drivers alone. As such, retail firms that treat ABC as part of a broader capability-development initiative linking financial analytics to human-capital growth achieve both operational agility and cost efficiency (Ayandibu & Ayandibu, 2024). This argument repositions ABC as a strategic resource, aligning it with firm-level competitiveness.

The theoretical constructive collaboration among CBA, TOC, and RBV provides a comprehensive framework that extends beyond cost attribution. CBA informs managers about cost behaviour under different activity levels; TOC identifies performance bottlenecks; and RBV contextualises resource utilisation as a source of

sustained value creation (Khazaal, 2025). Collectively, these theories highlight that cost efficiency emerges from the interaction between behavioural predictability, operational control, and strategic capability. While CBA and TOC enhance internal process visibility, RBV broadens the analysis to long-term competitiveness through efficient use of tangible and intangible assets (Hossain & Hasan, 2024). South African retail studies show that firms integrating these theoretical perspectives outperform those relying on fragmented cost models, particularly in adapting to dynamic consumer trends (Jama et al., 2023). The conceptual model derived from this integration thus situates ABC as both a diagnostic and developmental instrument within retail cost management.

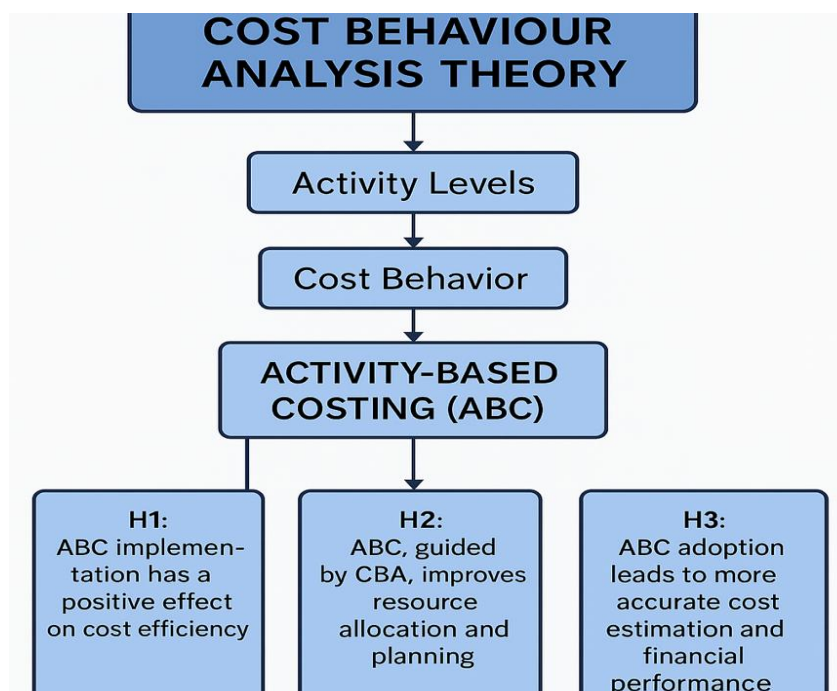


Figure 1: Cost Behaviour Analysis Theory Flow Chart

(Source: Author’s synthesis based on Drury (2018); Horna and Chong (2021); Khan (2024); Hossain and Hasan (2024))

Figure 1 illustrates the theoretical integration linking cost behaviour, constraint optimisation, and resource capability. It depicts cost drivers as the central mechanism connecting operational activities to resource performance, showing feedback loops where TOC informs process re-engineering and RBV supports sustainable improvement. This interaction guides the empirical investigation into how the adoption

of ABC in South African retail firms enhances cost transparency and operational resilience.

1.6.5 Comparative Analysis: Traditional Costing vs. Activity-Based Costing

Traditional costing systems rely on broad allocation bases such as direct labour hours or machine hours, which often distort product costs and mask inefficiencies. Adetayo et al. (2025) argued that this oversimplification fails to accurately reflect resource consumption in modern, service-driven sectors, such as retail. In contrast, ABC traces costs to specific activities, providing managers with more granular insights into cost behaviour (Bebaaddoun & Aït Mohammed, 2023). Daowadueng (2024) found that firms employing ABC gain more precision in overhead allocation and managerial decision-making than those adhering to legacy costing structures. However, Gosselin and Journeault (2022) noted that while ABC improves financial visibility, its implementation complexity may offset its theoretical advantages when firms lack the capacity for data integration. Therefore, while traditional costing is simpler and familiar, its limited analytical value renders it inadequate for dynamic, multi-channel retail environments.

Empirical evidence across markets demonstrates ABC's superiority in improving cost transparency and enabling informed strategic pricing decisions. Sugiarto and Roziq (2021) established that ABC provides a more realistic view of cost distribution, particularly in firms with diverse product lines. Similarly, Judijanto (2024) demonstrated that integrating artificial intelligence with ABC in organisation and retail environments enhances data-driven cost management and predictive planning. Ozcalici et al. (2024) found that managers using ABC achieved up to 25% higher forecasting accuracy than those relying on traditional methods. Nevertheless, some researchers caution that ABC's effectiveness depends on the alignment between organisational structure and data infrastructure (Adetayo et al., 2025). Within South Africa, Mandipa and Sibindi (2022) reported that retailers shifting to ABC achieved improved gross margins and reduced waste; however, success was contingent upon strong managerial buy-in. Collectively, these findings illustrate that ABC outperforms traditional costing only when properly institutionalised within technology-supported systems.

A critical comparison of the two systems reveals that traditional costing often promotes reactive cost control, whereas ABC supports initiative-taking cost optimisation. Abdolazimi et al. (2021) demonstrated that ABC enables firms to identify non-value-adding activities, leading to systematic cost reduction. In contrast, traditional systems tend to aggregate indirect costs, obscuring inefficiencies in functions such as warehousing or coordination. Tadesse (2023) found that traditional costing underestimated indirect overheads by up to 15% in multi-store retail settings, whereas ABC's activity-based costing (ABC) improved cost realism and operational planning. Nonetheless, Adegbola et al. (2024) emphasised that smaller retailers may find ABC adoption financially challenging due to high data requirements and software costs. This tension between accuracy and affordability underscores why hybrid models, blending ABC with traditional methods, are emerging as practical compromises. In this way, ABC's conceptual strength lies in strategic transparency, whereas traditional costing retains procedural simplicity.

Despite these advantages, the transition to ABC is not universally smooth. Teklay et al. (2021) reported that the initial investment in training, data collection, and technology integration remains a significant barrier to adoption, particularly for small and medium-sized enterprises (SMEs). Elshaer (2022) found that phased implementation, combined with employee engagement, mitigates cultural resistance, thereby reducing the risk of system failure. However, Roziq (2021) argued that many organisations underestimate the continuous data maintenance effort required to keep ABC relevant. South African studies echo these concerns, noting that firms with fragmented IT systems and limited analytics expertise often revert to traditional costing after failed pilot phases (Chinniah, 2021). This suggests that while ABC offers superior cost accuracy, sustaining it requires ongoing organisational learning and technological investment. The debate therefore extends beyond cost-allocation methods to broader institutional readiness for financial innovation.

1.6.6. Empirical Studies on ABC Implementation in Retail

Recent empirical studies demonstrate a growing consensus on the effectiveness of ABC in improving operational and financial outcomes in retail. Beck and Rainbird (2023) compared ABC to traditional systems and found that ABC significantly enhanced cost visibility and decision accuracy, particularly in multi-product retail firms.

Similarly, Ramadan et al. (2024) found that retailers adopting ABC achieved measurable improvements in profit margins and cost transparency within 2 fiscal years. Priyadharshini (2023) expanded this analysis to sectoral contexts such as grocery, apparel, and online retail, showing that customising ABC to industry-specific processes yielded stronger performance gains. These findings suggest that ABC's flexibility, when adapted to sectoral characteristics, makes it more responsive than conventional models. However, Wahidi et al. (2021) cautioned that benefits vary depending on the firm's data maturity and management commitment, highlighting the need for contextual tailoring rather than uniform implementation.

Technological integration has become a defining trend in contemporary ABC applications. Cheung et al. (2023) observed that digital infrastructure, such as Internet of Things (IoT) sensors and cloud-based ERP systems, facilitates automated cost capture, reducing manual data errors. Similarly, Gomes and Pinho (2023) found that AI-driven systems enable the real-time allocation of indirect costs, thereby enhancing the predictive value of ABC for managerial planning. Hossam et al. (2024) demonstrated that machine learning tools embedded in ABC frameworks helped major retailers improve customer profitability analytics and inventory optimisation. In South Africa, Hove-Sibanda et al. (2021) identified digital integration as a key enabler of ABC success, although it is constrained by limited capital investment among local firms. Collectively, these studies show that technology not only simplifies ABC's complexity but also transforms it into a strategic intelligence tool rather than a mere accounting mechanism.

Several researchers have explored the organisational and behavioural aspects influencing ABC adoption in emerging economies. Udeh et al. (2024) noted that employee resistance, inadequate training, and weak management support hinder the implementation success of initiatives in South African retailers. Jama et al. (2023) proposed that phased rollouts and external consultancy support could address these challenges, improving employee confidence and data reliability. Laseinde (2023) added that firms with innovative organisational cultures demonstrate higher adaptability to ABC because such environments reward analytical decision-making and cross-functional collaboration. Conversely, Dlamini (2022) reported that SMEs with rigid hierarchies often struggle to maintain ABC systems once external

consultants withdraw. These contrasting perspectives highlight that organisational culture, rather than financial capacity alone, determines the long-term sustainability of ABC in retail environments.

The strategic implications of ABC adoption have also received empirical attention. Kwistianus (2022) demonstrated that accurate cost tracing through ABC enhances competitive pricing, allowing retailers to respond more effectively to market fluctuations. Devie et al. (2022) found that ABC-aligned pricing strategies increased market share by enhancing the accuracy of cost-based decision-making. Dhurkari (2023) argued that ABC supports not only short-term cost efficiency but also long-term strategic planning by linking operational activities to financial outcomes. Supporting evidence from Mandipa and Sibindi (2022) in South Africa confirmed that retailers who integrated ABC into their financial planning achieved superior working capital management and improved profitability. Together, these findings reinforce ABC's dual role as both an operational and a strategic management tool capable of reshaping cost-efficiency paradigms in the retail sector.

Policy and regulatory contexts significantly influence the adoption trajectories of ABC across various regions. Quesado and Silva (2021) found that rigid financial reporting standards may deter firms from transitioning to ABC due to perceived compliance risks. Molela (2024) highlighted that alignment with International Financial Reporting Standards (IFRS) can, however, legitimise ABC adoption in formal accounting systems. Priyadharshini (2023) suggested that government incentives and endorsements from professional bodies could accelerate uptake in developing economies. South African research aligns with this perspective, revealing that supportive policy environments and tax simplifications encourage broader acceptance of ABC within retail firms (Ayandibu & Ayandibu, 2024). Hence, institutional frameworks comprising regulatory flexibility, professional education, and digital infrastructure emerge as critical levers for embedding ABC into mainstream retail accounting practice.

1.6.7. Summary

The literature underscores a growing shift towards ABC as a preferred system for accurate cost allocation in contemporary retail sectors, particularly in emerging

economies such as South Africa. Traditional costing methods, which aggregate overheads into broad cost pools, have been criticised for distorting product and service costs and weakening pricing accuracy. Quesado and Silva (2021) demonstrated that, by contrast, ABC attributes costs directly to resource-consuming activities such as procurement, warehousing, and customer service, thereby improving managerial control. Al-Dhubaibi (2021) found that this precision enhances the reliability of financial reporting and strategic decision-making, while Ghouzi (2021) identified ABC's generational evolution from basic models to time-driven and process-focused versions as evidence of its adaptability. However, empirical findings remain mixed; whereas Adetayo et al. (2025) observed measurable performance gains among adopters, Mazbayeva et al. (2022) warned that weak managerial competencies may neutralise ABC's advantages. Thus, the emerging consensus is that ABC offers a superior cost-management mechanism only when aligned with adequate information systems and analytical skills within the organisation.

Beyond its technical merits, the literature identifies a set of implementation and behavioural challenges that influence ABC's success in retail contexts. Laseinde (2023) reported that organisational resistance, particularly among finance staff accustomed to legacy systems, remains a dominant barrier in South African retail firms. Similarly, Weerasekara and Gooneratne (2023) found that firms often underestimate the human-capital investment required for staff training and process redesign. Alahmari (2023) argued that high implementation costs deter small retailers, while Adegbola et al. (2024) observed that limited data quality undermines cost accuracy. In contrast, Madwe et al. (2020) demonstrated that when South African institutions combine training with phased rollouts, ABC adoption rates improve substantially. This debate reveals that implementation success depends not only on financial resources but also on organisational culture and leadership commitment. As such, overcoming behavioural inertia and technological fragmentation is as critical as mastering the mechanics of costing itself.

From a theoretical standpoint, the literature shows that Cost Behaviour Analysis (CBA) provides the conceptual foundation for linking ABC to organisational performance. Mungusa (2021) explained that CBA clarifies how fixed, variable, and semi-variable costs respond to changes in activity, offering a predictive dimension that is absent in

traditional models. Horna and Chong (2021) further demonstrated that integrating CBA with ABC allows managers to simulate cost scenarios and optimise activity levels to maximise operational efficiency. Chen (2025) emphasised that digital analytics strengthen this relationship by revealing non-linear cost patterns across retail channels. However, Abdolazimi et al. (2021) cautioned that reliance on historical cost data without real-time analytics can diminish predictive reliability. Synthesising these perspectives, it becomes evident that ABC's full potential emerges only when paired with behavioural cost modelling and digital intelligence, aligning financial precision with strategic agility in retail operations.

Critiques of conventional cost-absorption methods dominate much of the reviewed discourse, providing a clear justification for ABC's relevance. Adetayo et al. (2025) highlighted that simplistic allocation bases, such as direct labour hours, systematically overstate or understate product costs in multi-product environments. Conversely, Mahmoud et al. (2024) found that ABC's activity mapping exposes inefficiencies and supports targeted cost-reduction initiatives. Mandipa and Sibindi (2022) reported similar results in South African retail chains, where ABC adoption improved working capital management and enhanced gross margins. Yet, Al-Hroot et al. (2021) argued that the transition from conventional systems remains hindered by the absence of integrated enterprise software capable of linking operational and accounting data. Collectively, these findings suggest that while ABC surpasses traditional methods in diagnostic precision, its strategic impact depends on its technological and organisational context rather than on the costing model alone.

The overall synthesis demonstrates that ABC represents more than a technical upgrade; it is a strategic instrument for aligning cost structures with value creation. Chen (2025) found that retailers employing AI-enhanced ABC achieved notable gains in decision accuracy, while Judijanto (2024) showed that automation reduces administrative workload and human error. In South African contexts, Jama et al. (2023) confirmed that ABC's integration into inventory and warehouse systems strengthened performance predictability. Meanwhile, Agrawal et al. (2024) connected ABC's adoption to broader sustainability goals through resource optimisation and waste reduction. Despite its promise, Dlamini (2022) observed that smaller retailers often lack the digital maturity and governance support necessary to sustain these

innovations. Therefore, the literature collectively establishes ABC as both a financial and strategic management framework whose success hinges on data integrity, leadership vision, and continuous capability development.

1.7. Methodology

This section outlines the research methodology to be adopted to assess the effectiveness of ABC in improving cost efficiency in the South African retail sector. The selection of an appropriate methodology is crucial, as it determines the reliability, validity, and generalisability of the study's findings (Creswell & Creswell, 2018). Given the complexity of cost management and the dynamic nature of retail operations, a mixed-methods approach was deemed most suitable for this investigation. This design integrates both quantitative and qualitative data collection and analysis techniques, enabling a comprehensive exploration of both measurable outcomes and contextual insights (Tashakkori & Teddlie, 2010).

1.7.1 Research Philosophy

This study is grounded in the post-positivist research paradigm, which acknowledges that, while objective reality exists, it can be understood only through empirical observation and critical reasoning, rather than absolute certainty. Post-positivism evolved from classical positivism but accepts that knowledge is fallible and shaped by contextual limitations and human interpretation (Creswell & Creswell, 2018). The paradigm aligns with the aim of this study to evaluate the effectiveness of ABC in enhancing cost efficiency within South Africa's retail sector, as the research seeks to establish measurable relationships between variables while acknowledging that perceptions and experiences of managers may enrich the quantitative outcomes (Khan, 2024). Therefore, this paradigm supports both empirical generalisation and interpretive understanding, fitting a mixed-methods approach that integrates numerical data with contextual insights (Lim, 2024).

Under the post-positivist stance, quantitative methods form the primary research orientation. This approach assumes that patterns and relationships can be discovered through careful observation and statistical testing (Jobst, Bader & Moshagen, 2023). Accordingly, the study used structured questionnaires administered to financial managers and accountants within retail firms to generate measurable data on the

relationship between ABC adoption and cost efficiency. Statistical analysis, including correlation and regression models, were employed to determine the strength and significance of these associations (Abdolazimi et al., 2021). This approach provides objective, verifiable evidence about whether ABC implementation leads to quantifiable financial performance improvements. The data will thus enable generalisable conclusions across similar retail contexts while remaining grounded in empirical validity (Adegbola et al., 2024).

Complementing this, qualitative insights were integrated to explore how managers and operational staff perceive and interpret the challenges and benefits of ABC implementation. This aligns with the interpretive dimension of post-positivism, which accepts that social phenomena are influenced by human agency and organisational culture (Lim, 2024). Semi-structured interviews with selected participants provided narrative data revealing the behavioural and structural factors influencing ABC success or failure in retail settings (Kudanga, Nzuzwa and Stainbank, 2023). Thematic analysis was applied to these qualitative findings, enabling the identification of recurring themes such as employee resistance, training needs, or technological readiness. Such integration of perspectives ensures that the findings extend beyond statistical description to a more comprehensive understanding of ABC practice in context (Aithal, 2021).

The choice of the post-positivist paradigm also reflects the study's pragmatic intent to derive knowledge that is both theoretically sound and applicable to the South African retail industry. Pragmatic reasoning complements post-positivism by emphasising actionable solutions drawn from credible evidence (Dwivedi et al., 2024). The paradigm thus allows triangulation, in which both quantitative and qualitative data are analysed to enhance the reliability and depth of conclusions. Quantitative regression results test hypotheses about cost efficiency improvements, while qualitative themes explain the underlying managerial and operational dynamics. This methodological pluralism enhances internal validity, ensuring that the findings are both empirically grounded and contextually relevant to practitioners (Bhimani, 2021).

Overall, post-positivism provides a balanced philosophical foundation for this study, recognising that cost management phenomena are both measurable and socially constructed. It enables the research to capture the quantifiable impact of ABC

adoption while accounting for subjective organisational realities that influence implementation outcomes. This epistemological stance not only enhances the rigour of the mixed-methods design but also strengthens the study's contribution to theory and practice by bridging empirical data with interpretive insight. The resulting knowledge is expected to yield both generalisable conclusions and practical recommendations to enhance cost efficiency and decision-making in South Africa's retail sector.

1.7.2 Research Design

The study employed a mixed-methods research design situated within a post-positivist paradigm to comprehensively evaluate the effectiveness of ABC in enhancing cost efficiency in South Africa's retail sector. This design is appropriate as it combines quantitative precision with qualitative depth, thereby facilitating the integration of empirical evidence and contextual understanding (Lim, 2024). Quantitative analysis provides measurable insights into the accuracy of cost allocation and operational efficiency, while qualitative exploration captures subjective experiences and perceptions of ABC implementation (Dwivedi et al., 2024). The integration of both methods enables triangulation of data, enhancing the reliability and validity of findings and ensuring that research outcomes are both empirically grounded and contextually relevant (Aithal, 2021).

The quantitative component employs a cross-sectional survey design, collecting data at a single point in time from retail firms that have adopted or are considering ABC. Structured questionnaires will be distributed to financial managers, accountants, and operations personnel across various retail formats, including chain stores, supermarkets, and independent outlets (Adetayo et al., 2025). This approach allows for systematic comparison of ABC adoption levels and their impact on cost efficiency across organisational contexts (Abdolazimi et al., 2021). The survey instrument contains both closed-ended and Likert-scale questions to measure variables such as cost allocation accuracy, operational efficiency, and perceived financial performance (Matoke, Maendo and Nyangau, 2024). The data were analysed using descriptive statistics to summarise trends and inferential techniques, including correlation and multiple regression analysis, to evaluate relationships between ABC implementation and cost efficiency. Regression models assessed the extent to which ABC practices

predict variations in cost efficiency and profitability, thereby addressing the study's core hypotheses (Adegbola et al., 2024).

The qualitative phase complements the quantitative analysis through semi-structured interviews with purposively selected participants, such as senior managers, costing specialists, and consultants experienced in ABC systems. Purposive sampling is justified as the study sought participants with informed perspectives rather than random representation (Kudanga, Nzuzza & Stainbank, 2023). The interviews explore themes such as managerial perceptions, implementation barriers, organisational readiness, and post-adoption outcomes of ABC. Data were recorded, transcribed, and analysed using thematic analysis, enabling the identification of recurring patterns and the contextual determinants of cost efficiency (Lim, 2024). The qualitative findings deepen understanding of the numerical patterns emerging from the survey and explain why ABC adoption succeeds or fails across different retail environments (Aithal, 2021). This dual approach thus integrates objective measurement with interpretive insight, creating a holistic picture of ABC's impact in South Africa's retail sector.

To ensure methodological rigour, data triangulation was applied across the quantitative and qualitative datasets to validate consistency between measured outcomes and perceived realities (Dwivedi et al., 2024). The design followed a sequential integration approach, in which quantitative results inform qualitative inquiry, enabling the exploration of anomalies and unexpected results. The overall design ensures that the study not only identifies statistical relationships but also explains the underlying mechanisms, providing policymakers and practitioners with valuable insights. The research contributes to improving cost management strategies and guiding the transition from traditional costing to modern ABC systems in South African retail firms (Bhimani, 2021).

1.7.3 Data Collection

Data collection for this study was conducted in two sequential phases: quantitative followed by qualitative, in line with the mixed-methods research design. The quantitative phase involved gathering data through structured questionnaires administered to retail firms across South Africa that have implemented or are considering Activity-Based Costing (ABC) (Bonfrer, Chintagunta & Dhar, 2022). A

purposive sampling approach was used to select firms with relevant experience, ensuring that the data collected was contextually rich and credible (Mazbayeva, Barysheva & Saparbayeva, 2022). The questionnaire focused on key constructs such as cost allocation accuracy, operational efficiency, and financial performance (Adetayo et al., 2025). Demographic data including firm size, ownership structure, and business model were also collected to facilitate comparative analysis across retail categories. A pilot test with a small subset of respondents was conducted to refine the wording and ensure clarity, which is a common practice in ensuring survey validity (Karunarathna et al., 2024).

The questionnaires were distributed via email and online survey platforms to ensure broad, geographically diverse participation, including major urban retail centres and emerging township markets (Mandipa & Sibindi, 2022). Follow-up reminders and confidentiality assurances were provided to encourage participation. Data validation measures, including response consistency checks, completeness tests, and coding verification, were employed to ensure the integrity of the data collected (Gupta & Shrivastava, 2022). Quantitative data were processed using SPSS, and statistical analysis methods such as descriptive statistics, correlation, and regression models were employed to examine the relationships between ABC implementation and cost efficiency (Adegbola et al., 2024). This analysis aims to establish statistical generalizations about the impact of ABC practices on financial outcomes in the retail sector.

The qualitative phase of data collection involved semi-structured interviews with 10–15 participants purposively selected from the survey respondents, including financial managers, ABC consultants, and cost analysts (Kudanga, Nzuza & Stainbank, 2023). These interviews were conducted either virtually or in person, depending on participants' availability, with each interview lasting between 45 and 60 minutes. Interview questions explored themes such as organisational readiness for ABC, employee resistance, system integration challenges, and perceived benefits of ABC implementation (Lim, 2024). All interviews were recorded with informed consent, and the transcripts were transcribed verbatim. A thematic analysis approach was employed to identify patterns and recurring ideas within the interview data, facilitated by NVivo software (Dwivedi et al., 2024). This qualitative data analysis helped

complement the quantitative findings, providing deeper contextual understanding of ABC's role in improving cost efficiency.

The combination of survey results and qualitative insights enables this study to provide both empirical precision and contextual understanding of the effectiveness of ABC. By employing a mixed-methods approach, the data collection process ensures that the findings are both statistically valid and meaningful, offering evidence-based recommendations for retailers, policymakers, and accounting practitioners in South Africa.

1.7.4 Statistical Analysis

The statistical analysis for this study was guided by the post-positivist paradigm, which supports empirical testing through both descriptive and inferential techniques to identify measurable relationships and generalisable insights. The objective is to examine the extent to which ABC enhances cost efficiency in the South African retail sector. Descriptive statistics such as means, medians, standard deviations, and frequency distributions were computed to summarise data collected from survey respondents, providing an overview of patterns in ABC adoption, operational performance, and firm characteristics (Alo & Lugard, 2024). These descriptive results will help establish the data's contextual structure by identifying recurring trends and variability across firm size, retail format, and levels of ABC implementation (Abdolazimi et al., 2021). This preliminary phase provides the foundation for the inferential analysis, ensuring that subsequent statistical tests are based on valid and systematically summarised data (Bhimani, 2021).

Following the descriptive exploration, inferential statistical analyses were conducted to test the study's hypotheses and quantify relationships among variables. Multiple regression analysis was the principal inferential technique used to determine how ABC adoption predicts cost efficiency, while controlling for firm size, the duration of ABC implementation, and staff training investment (Matoke, Maendo, & Nyangau, 2024). Regression analysis is suitable for establishing the direction and strength of these associations, allowing for robust generalisations across the retail sample. Correlation analysis will complement regression by measuring linear relationships between ABC practices and key indicators such as cost allocation accuracy, operational efficiency,

and profitability (Adegbola et al., 2024). Furthermore, Analysis of Variance (ANOVA) was employed to compare mean cost-efficiency scores across ABC implementation categories (e.g., full adopters, partial adopters, and non-adopters), thereby highlighting significant group differences (Adetayo et al., 2025). Collectively, these inferential methods facilitated the testing of null hypotheses related to ABC's effectiveness and revealed statistically significant patterns explaining variations in cost performance across firms.

In addition to regression and ANOVA, factor analysis was performed to identify the underlying dimensions influencing ABC success. This enables the study to identify which latent constructs, such as technological capability, management support, or cost transparency, drive differences in implementation outcomes (Mazbayeva, Barysheva & Saparbayeva, 2022). Structural Equation Modelling (SEM) was also considered to evaluate complex causal pathways linking ABC practices to operational efficiency and long-term profitability (Hattab et al., 2024). SEM offers the advantage of examining multiple dependent relationships simultaneously, which is critical for understanding how interrelated factors such as staff competence, financial control systems, and organisational culture contribute to cost efficiency. These advanced analytical methods provide a comprehensive understanding of both direct and indirect effects of ABC on firm performance (Al-Dhubaibi, 2021).

The analysis was conducted using SPSS and AMOS software to ensure analytical precision and transparency. Prior to hypothesis testing, diagnostic checks were conducted to confirm the normality, multicollinearity, and homoscedasticity assumptions, which are essential for regression validity (Lakens, 2022). Reliability was established using Cronbach's alpha to assess internal consistency of survey constructs, while the Kaiser-Meyer-Olkin (KMO) test and Bartlett's Test of Sphericity were applied to confirm sampling adequacy for factor analysis. Results were presented through graphical outputs such as histograms, scatterplots, and regression line graphs to visually communicate patterns and statistical relationships (Hossain & Hasan, 2024). Significance levels were set at $p < 0.05$ to ensure rigorous interpretation of results.

Finally, sensitivity and comparative analyses were conducted to validate findings and assess the robustness of results across different firm types and regions (Mandipa &

Sibindi, 2022). Sensitivity testing helped determine the stability of regression coefficients across alternative model specifications, enhancing confidence in the generalisability of the findings (Dwivedi et al., 2024). Comparative assessments between ABC-adopting and non-adopting firms further demonstrate whether differences in cost efficiency persist across different operational environments. By employing this multifaceted analytical framework, the study ensures statistical rigour, validity, and relevance in evaluating how Activity-Based Costing influences financial performance and operational optimisation within South African retail firms.

1.7.5 Target Population

The total population for this study comprises formal retail enterprises operating across South Africa, spanning categories such as grocery stores, apparel retailers, e-commerce platforms, and speciality shops. According to the South African Council of Shopping Centres and national trade registries, the formal retail sector includes approximately 18,000 registered retail businesses (Stats SA, 2023). However, this study narrows the focus to retail companies that have implemented, are in the process of implementing, or have considered implementing ABC as a strategic cost management practice. A sample of 100 retail shops was selected. This sample size is determined based on power analysis recommendations for quantitative research, which suggest that a sample of 50-100 is statistically sufficient to detect medium effect sizes with 95% confidence and a 5% margin of error (Lakens, 2022).

1.7.6 Sampling Strategy

A random sampling technique was used to select 100 retail companies that have worked with ABC or are considering using it in the future (Rhee, 2021). This sample size is determined based on power analysis recommendations for quantitative research, which suggest that a sample of 50-100 is statistically sufficient to detect medium effect sizes with 95% confidence and a 5% margin of error (Lakens, 2022). Researchers select organisations that broadly represent the retail industry to ensure diversity in terms of company size, product offerings, and operational structures. The study prioritised companies with significant financial activities, as they are more likely to have structured cost management systems (Yao, 2022). By focusing on retailers who are strategically deploying cost allocation practices, the research will shed light

on ABC's effectiveness in the industry. This sampling method ensures that the collected data is relevant and reflective of real-life cost management scenarios (Rashid, 2024).

To obtain a full picture, the study included stores of all sizes, from mom-and-pop shops to national chains with hundreds of sites (Sethuraman et al., 2022). This heterogeneity allows us to study C adoption across different business models and whether firm size affects its success. This study shed light on how ABC can be calibrated to different operating needs. Another advantage of the sampling strategy is that it will yield findings that represent the varied types of financial distress experienced by firms (Gauri et al., 2021).

The respondent pool primarily consists of financial managers, accountants, and cost analysts, all of whom have significant familiarity with cost-allocation techniques and processes necessary for decision-making (Ren, 2022). This study provides insights into the pros, cons, and impact of ABC on financial productivity. Participants should have direct experience with ABC or the ABC process to be eligible for the study (Testa & Karpova, 2022). It was also ensured that responses are from companies that are successful at ABC implementation, as well as those who have struggled to avoid sample bias. This allowed for an unbiased assessment of ABC's operational deployment based on empirical evidence from the retail sector (Ayandibu & Ayandibu, 2024).

Finally, the study employed statistical power analysis to determine the number of people to survey, ensuring the results legitimate and relevant to other situations (Lakens, 2022). The sample size is selected to achieve statistically significant results with a high level of confidence, given the expected response rates. This survey focused on retail enterprises from Limpopo, South Africa (Jobst et al, 2023). This helps capture geographic differences in ABC adoption, which can depend on factors such as regulatory pressures, operating costs, and market factors. Finally, the study used a systematic, inclusive sample, which increases the reliability of the results and their applicability to the retail industry in South Africa (Murayama et al., 2022).

1.7.7 Ethical Considerations

Informed consent was required for any future participation in a study. For transparency and honesty, the goals, methods, dangers, and rewards of the study were all described in detail during the consent process (Millum & Bromwich, 2021). Participants are told that they can withdraw at any time without penalty and that participation is entirely voluntary. The study also ensures that no one is forced to provide information, and that all responses are collected separately. Introduction to being an accounting student and the meaning of informed consent will ensure that you respect the rights of all participants involved in your study as per ethical research guidelines (Pietrzykowski & Smilowska, 2021).

Data were securely stored, and controlled access were granted to approved researchers for a limited, specified purpose to maintain confidentiality and anonymity. The final dataset was devoid of any personally identifiable information (PII), including names, company affiliations, or contact information (Adusumilli et al., 2023). To ensure that no individual's responses can be revealed, data will remain in encrypted files, and only aggregate results will be made public. The researchers implemented strict data protection methods, such as storage behind password protection and limiting access to sensitive data. According to Al Mamun et al. (2022), with these precautions, the ethical bounds for the study will be enforced, and no unauthorised party has access to the data.

1.7.8 Instrument Reliability and Viability

A pilot study was conducted to ensure the reliability of the questionnaire prior to large-scale data collection. We selected 100 retail shops randomly, and we ensured that retail shops must be a wide range and type (Aung et al., 2021) in this first step. The pilot study evaluates whether the survey questions are properly formulated to ensure they are relevant and can collect accurate data. Any discrepancies or unclear areas identified by the pilot study was modified in the questionnaire to facilitate further clarification and reliability. This procedure helps improve the data gathering instrument (Du, 2024), ensuring that the final survey yields valid and reliable results.

We assessed the response rate and participant diversity to determine the sample's feasibility. The study was also evaluated in the future whether the selected retail stores

accurately reflect the South African retail market in terms of size, industrial category, and geographical location (Al-Fakhri & Alabdullah, 2021). If the sample is deemed unbalanced or not fully representative, we will either increase the sample size or modify the selection criteria. We also conducted statistical tests, such as factor analysis, to ensure that the questionnaire accurately measures the target constructs. Due to the reliability and viability of the study, the study's credibility enhanced, and a firm base was established for further research on ABC in the South African retail sector (Castelblanco et al., 2022).

1.8. Structure of the Dissertation

Chapter 1: Introduction

Chapter 2: Literature Review

Chapter 3: Methodology

Chapter 4: Data Analysis and Findings

Chapter 5: Discussion and Conclusion

1.9. Limitations of the Study

Due to the likelihood that respondents may provide subjective responses stemming from their personal perspectives rather than adhering to objective financial criteria, future research will explore the potential confounding influence of self-reported data. According to Låver et al. (2024), to help mitigate the effects of response bias, the study employed cross-validation methods, such as comparing survey results with financial records where possible. To validate the data, future research explores other methods of collecting data that can supplement survey metrics, such as direct observations or automated collection of financial data. Because participants provided information that may not fully reflect the fiscal impact of ABC, further research using qualitative and quantitative assessments is needed. Comerton-Forde et al. (2022) note that future research will aim to minimise bias and improve the reliability of results by employing improved data collection procedures.

This only considered one sub-segment of the South African retail business, further limiting the study's generalisability. The underlying operational architecture differences will make ABC equally effective across industries, irrespective of industrial or service-based enterprises (Neboh and Mbhele, 2021). To determine whether other companies also enjoy the same complex cost-saving benefits associated with ABC, future research will move beyond the retail industry. The findings vary based on regional economic conditions, firm size, and market contexts, and thus a comparative study across different businesses was required. By considering these contextual elements, future research will help make the ABC implementation findings more applicable (Dos Santos & Duffett, 2021).

1.10. Chapter Summary

This study thus concludes with key points to assist general readers in understanding how ABC has enabled the retail sector in South Africa to operate more cost-efficiently. According to Paradza et al. (2023), the study shall contribute to identifying how ABC impacts pricing strategies, overall financial performance, and precision of cost allocation. The interplay between ABC and digital accounting technologies for cost management enhancement, however, was the subject of future research with practical implications for merchants. While businesses do have some challenges with ABC, this study helped them overcome them. We summarise these findings in the conclusion and discuss the potential benefits and feasibility of adopting ABC in the retail sector (Matoke et al., 2024).

Lastly, in the concluding chapter, we discuss more broadly what ABC signifies for retailers' financial planning and decision-making capabilities. Stores may use this data to their advantage by optimising resource use and adapting to changing market conditions. According to Mchavi and Collins (2024), future work should investigate whether the adoption of ABC facilitates long-run profitability.

CHAPTER 2

LITERATURE REVIEW

2.1. Introduction

This chapter reviews the literature on the notion, implementation, and effects of ABC in organisations. More precise and strategic cost management systems are becoming increasingly popular as organisations face mounting financial strains resulting from global competition, market volatility, and operational complexity. By linking costs to the activities that generate them, ABC has become a competitive alternative to traditional costing techniques, providing a more accurate cost allocation method. ABC and its development are introduced at the beginning of the chapter. The chapter also explores the difficulties encountered when implementing ABC in organisations. Additionally, the chapter examines the benefits of utilising ABC in businesses. Through the lens of the Resource-Based View and the Theory of Constraints, the theoretical foundation of ABC is investigated via the prism of Cost Behaviour Analysis (CBA). Furthermore, the literature review compares ABC with conventional costing systems and highlights the drawbacks of legacy models, as well as ABC's strategic advantages in terms of long-term sustainability and profitability. The chapter establishes a conceptual framework for the subsequent study by offering an empirical analysis of ABC in South African retail contexts.

2.2. The Concept and Evolution of Activity-Based Costing (ABC)

ABC emerged as a refinement of traditional cost-allocation systems to address distortions created by simplistic overhead distribution methods. In contrast to conventional approaches that rely on labour or machine hours, ABC traces costs to activities and subsequently to products or services that consume those activities (Adetayo et al., 2025). The central principle is that activities represent the fundamental cost drivers within an organisation, thereby revealing how resource consumption shapes cost structures (Bebaaddoun & Aït Mohammed, 2023). Recent scholarship views ABC not merely as a technical procedure, but as an analytical framework that enables strategic cost transparency and process optimisation (Al-Dhubaibi, 2021). Within South Africa's retail sector, firms adopting ABC have achieved measurable improvements in pricing precision and working-capital efficiency, underscoring its

adaptability beyond manufacturing (Mandipa & Sibindi, 2022). Nevertheless, Adegbola et al. (2024) cautioned that implementation success depends on managerial competence and data quality, indicating that the method's conceptual soundness alone does not guarantee organisational benefit.

The evolution of ABC has unfolded through multiple generational shifts, reflecting changes in production complexity and digital transformation. Ghouzi (2021) delineated three distinct generations: traditional ABC, time-driven ABC, and process-focused ABC, each designed to enhance cost realism and operational alignment. Early ABC models in manufacturing primarily addressed distortions caused by automation and diverse product mixes, while contemporary models integrate analytics to capture dynamic cost behaviour (Judijanto, 2024). In retail environments, this evolution has enabled more accurate allocation of costs across distribution, merchandising, and customer-service functions, translating into improved profit-margin analysis (Agbozo & Asamani, 2020). However, Biadacz (2022) argued that smaller firms still struggle with the resource intensity of ABC data collection. The contrast between efficiency gains and implementation burden highlights a persistent trade-off that motivates current research into digital integration and simplification.

A dominant theme in recent literature concerns digital integration, which has transformed ABC from a retrospective accounting tool into a predictive decision-support system. Zahari et al. (2021) demonstrated that Malaysian enterprises employing ERP-integrated ABC achieved notable operational and financial improvements, while Al-Hroot et al. (2021) observed similar outcomes in Middle Eastern firms where ABC formed part of broader digital-transformation programmes. In South Africa, Hove-Sibanda et al. (2021) found that retailers leveraging the Internet of Things and data analytics platforms used ABC outputs to forecast demand and optimise inventory. Complementing these empirical findings, Chen (2025) showed that artificial intelligence enhances ABC accuracy by automating activity identification and detecting non-linear cost patterns. Despite these benefits, Kaul and Khurana (2022) warned that integration failures between legacy accounting systems and AI applications can reduce reliability. Collectively, this literature demonstrates that digital convergence not only increases ABC efficiency but also shifts its role from descriptive costing toward strategic intelligence.

Another critical development in ABC's conceptual journey is its strategic reorientation within management accounting. Hoozée and Hansen (2020) argued that ABC now extends beyond product costing to support lean management, value-chain analysis, and benchmarking. Gosselin and Journeault (2022) provided evidence that organisations using ABC for process benchmarking achieve greater inter-departmental accountability and performance consistency. In South African retail contexts, Kudanga et al. (2023) found that ABC implementation fosters cross-functional collaboration between finance and operations, thereby linking financial data to customer service outcomes. However, Alsayegh (2020) argued that many developing-country firms fail to fully exploit ABC's strategic capacity due to limited analytical literacy. This divergence in utilisation depth underscores the transition of ABC from an accounting mechanism to a management philosophy that integrates cost, strategy, and technology to optimise holistic performance.

Finally, the literature reveals implementation contradictions that justify continued empirical investigation. While Adetayo et al. (2025) and Mazbayeva et al. (2022) affirmed ABC's superiority in accuracy and managerial insight, Elshaer (2022) found that behavioural resistance and data overload often undermine the sustainability of adoption. Similarly, Alahmari (2023) noted that the high initial costs of time-driven ABC deter smaller enterprises from pursuing full deployment. In contrast, Madwe et al. (2020) reported that phased implementation accompanied by staff training significantly increases success rates in South African institutions. These contradictions demonstrate that the evolution of ABC is not linear but contingent upon contextual readiness and digital maturity. The convergence of these findings establishes a compelling rationale for examining how ABC can enhance cost efficiency and strategic decision-making in South African retail environments characterised by technological disparities and competitive pressures.

2.3. Components of ABC

ABC rests on a structured framework that traces resource consumption through defined organisational activities to the final products or services that benefit from them. The model comprises several interdependent components: resources, activities, cost drivers, cost objects, and performance measures, each providing a distinct lens for analysing cost behaviour (Adetayo et al., 2025). Recent literature views these

elements as an integrated system that transforms accounting data into strategic intelligence rather than a purely transactional tool (Biadacz, 2022). As depicted in Figure 2, the model illustrates how costs flow from resource inputs through activity centres to cost objects, providing granular visibility that is often missing in traditional allocation methods. In South Africa’s retail industry, this clarity is crucial, as diversified operations from warehousing to point-of-sale service generate layered overheads that require precise tracking to sustain profitability (Mandipa & Sibindi, 2022). However, Agbozo and Asamani (2020) argue that even when accurately designed, ABC may underperform if organisations fail to align activity definitions with strategic processes, suggesting that conceptual soundness must coincide with contextual adaptation.



Figure 2: Activity-Based Costing Framework

Source: Adapted from Keel, Savage, Rafiq and Mazzocato (2017), updated to reflect digital integration trends (Author’s compilation, 2025)

Resources constitute the foundational input of the ABC model, encompassing all tangible and intangible assets, labour, equipment, information systems, and utilities required to perform business operations (Adegbola et al., 2024). Resource costs are first assigned to activities based on actual utilisation rates rather than arbitrary departmental averages, thereby reducing distortion in overhead apportionment

(Abdolazimi et al., 2021). Yet, as Alo and Lugard (2024) note, data collection for resource consumption can be burdensome in retail environments with decentralised store networks. Conversely, Lin and Ma (2021) demonstrated that automated data-capture technologies in Chinese supermarkets have reduced such complexity by integrating ABC with warehouse management systems. These contrasting findings suggest that technological capability significantly influences the feasibility of resource tracing, thereby underscoring the importance of digital readiness in the South African retail context, where automation levels vary unevenly distributed across firms.

Activities represent the operational tasks through which resources are consumed to create customer value. They may include inventory management, merchandising, marketing campaigns, or after-sales service (Agbozo and Asamani, 2020). Identifying activities correctly is pivotal because misclassification can obscure actual cost drivers and misguide managerial actions (Adetayo et al., 2025). In a comparative study of supermarkets in Kenya and South Africa, Jama et al. (2023) found that firms mapping activities by value stream rather than by function achieved superior inventory turnover ratios and service responsiveness. Conversely, Kudanga et al. (2023) observed that higher-education institutions using ABC without a standardised activity taxonomy struggled with inconsistent cost attribution. This disparity underscores that activity identification should evolve with organisational complexity; retail chains operating across multiple provinces require dynamic categorisation to capture regional cost variations and digital sales channels.

Cost drivers form the analytical core of ABC by linking activities to the causal factors that trigger resource consumption. Examples include the number of purchase orders, customer transactions, or delivery kilometres (Bebaaddoun and Aït Mohammed, 2023). By quantifying the frequency or intensity of these drivers, ABC converts abstract overheads into controllable metrics. Studies by Mazbayeva et al. (2022) and Daowadueng (2024) concur that identifying relevant cost drivers enhances managerial insight, yet they diverge on whether quantitative or qualitative drivers yield superior accuracy. South African empirical research supports a hybrid approach, where retailers combine transaction-volume data with qualitative service metrics, reporting up to 18 per cent cost variance reductions after system adoption (Laseinde, 2023). This integration illustrates that driver selection must align with the information

environment and managerial objectives, reinforcing the argument that ABC effectiveness depends on organisational learning and data competence.

Cost objects, products, services, or customers, represent the final recipients of cost attribution. Their accurate costing enables decisions on pricing, product mix, and market segmentation (Jalfan & Hasoon, 2023). In manufacturing, cost objects often correspond to product lines; in retail, however, they frequently relate to customer clusters or store formats (Mandipa & Sibindi, 2022). Lehmusto (2024) demonstrated that retailers using ABC to evaluate individual store performance improved gross margin management by reallocating marketing expenditures toward high-profit outlets. Yet, Dlamini (2022) highlighted those smaller enterprises often overlook intangible cost objects such as digital-platform maintenance or loyalty-programme administration, leading to under-budgeting in e-commerce operations. This divergence indicates that the scope of cost objects must expand alongside business digitalisation, a particularly relevant insight for South African firms transitioning toward omni-channel retail models.

Performance measures close the ABC feedback loop by assessing whether activities add value and align with strategic goals (Effiong & Akpan, 2019). Contemporary ABC frameworks integrate performance metrics such as processing time, error rates, and customer satisfaction to link cost data with service-quality outcomes (Hossain & Hasan, 2024). Empirical evidence from Alahmari (2023) suggests that time-driven ABC models, incorporating performance dashboards, enhance operational agility by converting cost information into actionable decision signals. Conversely, Elshaer (2022) cautioned that excessive reliance on quantitative indicators may neglect qualitative insights about employee engagement or innovation. Within South African retail chains, combining cost-efficiency metrics with social-impact measures has proven vital for aligning profitability with sustainability objectives (Hove-Sibanda et al., 2021). Thus, effective ABC implementation extends beyond financial reporting to strategic evaluation, ensuring that every activity's cost contribution is balanced against its role in creating long-term value.

2.4. Benefits of ABC in Enhancing Cost Efficiency

The implementation of ABC in organisations offers a range of strategic and operational benefits for organisations (Almeida & Cunha, 2017). These advantages can be universally understood through five key areas: waste reduction and resource optimisation, strategic pricing and customer satisfaction, improved financial transparency and performance, cultural and behavioural shifts in cost management, and the potential for continuous improvement and sustained competitive advantage.

2.4.1. Waste Reduction and Resource Optimisation

ABC can minimise waste and enhance resource utilisation (Stopka et al., 2021). ABC traces indirect costs to specific activities rather than allocating them through general cost centres. This provides clarity on how resources are consumed across various business functions, which enables managers to pinpoint inefficiencies such as underutilised capacity, redundant processes, or excessive overhead and make informed decisions to eliminate them. This benefit is supported by evidence from several sectors in the South African context. According to a 2020 study by Madwe, Stainbank, and Green, ABC enhances cost transparency in the distribution of overheads among courses at public Technical and Vocational Education and Training (TVET) colleges. The study concluded that an improved understanding of resource usage supports waste reduction initiatives by reducing budgeting errors and promoting more effective resource allocation (Madwe et al., 2020). In a similar vein, Lubbe and Pienaar (2001) found that traditional costing systems did not accurately reflect the actual cost of various operational activities after conducting a thorough case study within a cash services company in South Africa. The organisation identified wasted capacity and ineffective support functions after implementing a time-driven ABC approach, which led to resource reallocation and significant cost efficiency gains (Lubbe & Pienaar, 2001). Van der Merwe and Thomson (2007) conducted another empirical study that assessed the implementation of ABC in a public health facility in South Africa and discovered substantial potential for resource optimisation. The researchers noted that ABC provided a means of reducing low-value functions while bolstering critical ones by exposing the cost implications of various service delivery activities (van der Merwe & Thomson, 2007).

2.4.2. Strategic Pricing and Customer Satisfaction

According to Zhu-Baiwei (2012), ABC is essential for facilitating strategic pricing because it provides a more realistic representation of the actual expenses related to providing goods or services. Overheads are frequently distributed evenly in traditional costing systems, which causes pricing distortions that either overcharge or underprice certain offerings (Nkuna, 2018). ABC gets around this by directly tying expenses to operations, which enables businesses to identify the most lucrative goods or clientele. Alsayegh (2020) agrees that by matching price to perceived value, this degree of pricing accuracy safeguards profit margins and improves customer satisfaction. Nkuna (2018) conducted a case study on a cash services company in South Africa and found that traditional costing methods resulted in a considerable amount of cross-subsidisation between services. The implementation of a time-driven ABC framework uncovered cost inconsistencies and adjusted the organisation's pricing strategy accordingly. This adjustment resulted in pricing that was more reflective of the resources consumed by each service, thereby enhancing customer transparency and fostering trust in pricing structures (Nkuna, 2018).

In their 2007 survey of a sample of South African businesses, Sartorius, Eitzen, and Kamala found that enhancing strategic decision-making regarding pricing and contract negotiations was a major driver behind the adoption of ABC. According to the authors' findings, businesses that used ABC were able to better understand cost structures and create pricing models that more closely matched operational realities. According to Sartorius et al. (2007), this cost-price alignment improved profitability and facilitated better customer relationship management. Additionally, Terblanche and Boshoff (2010) studied the fast-food industry in South Africa and discovered that perceptions of service value and pricing fairness had a significant impact on customer satisfaction. Such findings reinforce the importance of accurate cost-based pricing systems, such as those stemming from ABC, in helping businesses meet customer expectations and build loyalty over time (Terblanche & Boshoff, 2010).

2.4.3 Improved Financial Transparency and Performance

Through ABC, financial transparency is enhanced by tracing indirect costs through activity chains, thereby revealing how resources contribute to value creation. This line-

of-sight from inputs to cost objects enables decision-makers to identify inefficiencies hidden by traditional overhead allocation methods (Adetayo et al., 2025). Adegbola et al. (2024) emphasise that ABC improves departmental cost visibility and promotes accurate pricing and budgetary control, creating a stronger foundation for financial accountability. In South Africa, Mandipa and Sibindi (2022) found that retail firms implementing ABC achieved better working-capital management due to improved transparency in operational expenditure and revenue attribution. Similarly, Matoke et al. (2024) demonstrated that supermarkets using ABC frameworks reported clearer cost signals, which improved profit analysis and expenditure rationalisation. However, Biadacz (2022) noted that smaller enterprises often face challenges in sustaining ABC reporting systems due to the intensity of the data and inadequate managerial capacity. These findings illustrate that ABC's contribution to financial transparency depends not only on its methodological precision but also on the organisational infrastructure supporting continuous data flow.

The comparative evidence also reveals contradictions in ABC's performance outcomes across sectors and firm sizes. While Nkuna (2018) found that time-driven ABC enhances performance evaluation by identifying unused capacity and eliminating distortions, Elshaer (2022) observed that excessive granularity can create reporting fatigue, particularly in service-oriented industries. In the South African retail sector, Chinniah (2021) reported that fast-moving consumer goods firms adopting automated ABC modules experienced measurable gains in profitability and customer satisfaction, whereas firms relying on manual data entry showed limited improvement. Hove-Sibanda et al. (2021) attribute this divergence to the role of digital integration, arguing that ABC's transparency benefits are amplified when combined with real-time data systems. Overall, the literature underscores that ABC enhances financial performance when embedded in broader digital management structures and when organisational culture supports analytical decision-making.

2.4.4. Cultural and Behavioural Shifts in Cost Management

The adoption of ABC does not merely represent a technical shift but signals a profound transformation in organisational culture. By redefining costs as controllable activity-based drivers, ABC instils accountability and shared cost consciousness across departments (Madwe et al., 2020). Kudanga et al. (2023) found that South African

higher-education institutions implementing ABC witnessed improved collaboration between finance and operations, suggesting that behavioural alignment is critical to sustainability. Similarly, Adegbola et al. (2024) argue that managerial support and internal champions determine whether ABC evolves into a continuous learning system or remains a compliance mechanism. In contrast, Dlamini (2022) observed that small enterprises often resist ABC adoption due to entrenched habits and perceptions of complexity, resulting in the underutilisation of cost insights. These contrasting perspectives highlight that ABC's success depends on leadership's ability to embed analytical reasoning into everyday decision-making, thereby turning cost awareness into a shared organisational ethos.

The behavioural literature also points to the interplay between leadership commitment and employee adaptability in sustaining ABC systems. Reynolds et al. (2018) identified managerial advocacy and participatory training as decisive factors for behavioural acceptance, while Madwe et al. (2020) found that peer-driven mentorship reduced resistance to change. In South Africa's retail industry, Dos Santos and Duffett (2021) observed that firms integrating ABC training with digital financial tools demonstrated greater employee ownership of cost outcomes and improved departmental efficiency. Conversely, Alo and Lugard (2024) cautioned that without reinforcing behavioural incentives, ABC adoption risks reverting to old hierarchical budgeting practices. Synthesising these insights, it is evident that ABC catalyses a cultural shift toward participatory cost governance, where success relies as much on behavioural readiness and leadership alignment as on technical precision.

2.4.5 Potential for Continuous Improvement and Competitive Advantage

ABC provides a strategic foundation for continuous improvement by transforming cost data into actionable intelligence that informs innovation and competitiveness. Zahari et al. (2021) emphasised that firms using ABC for continuous performance analysis achieve dynamic feedback loops that support process redesign and strategic planning. In the South African context, Mandipa and Sibindi (2022) found that retailers adopting ABC in conjunction with performance dashboards achieved enhanced responsiveness to changing market conditions. Likewise, Reynolds and Van der Poll (2015) reported that ABC-enabled firms in the Nelson Mandela Bay region demonstrated superior capital allocation and operational agility, attributing these outcomes to improved

understanding of cost–value trade-offs. However, Adegbola et al. (2024) cautioned that continuous improvement necessitates ongoing investment in analytics and staff capabilities, as stagnant systems may yield outdated cost signals.

At a broader strategic level, integrating ABC with technologies such as artificial intelligence and enterprise resource planning strengthens competitive advantage by automating cost tracing and enabling predictive analysis (Chen, 2025). Judijanto (2024) demonstrated that AI-assisted ABC models improve forecast accuracy and facilitate initiative-taking managerial decisions in complex supply chains. In contrast, Biadacz (2022) highlighted that small firms often fail to capitalise on ABC insights due to the absence of digital infrastructure. Within South African retail environments, Laseinde (2023) found that companies aligning ABC with digital transformation strategies achieved higher inventory turnover and reduced operational waste. Collectively, these studies reveal that ABC's potential for sustained competitive advantage lies not only in cost accuracy but also in its integration with digital innovation and organisational learning. The evidence thus builds a persuasive case for investigating how ABC contributes to both financial resilience and strategic adaptability in evolving South African markets.

2.5. Challenges in Implementing ABC in the Retail Sector

Although ABC enhances strategic decision-making, its implementation remains fraught with contextual and structural challenges that limit adoption, particularly in developing economies. These include technological and data integration challenges, resistance to organisational change, financial burdens on small and medium-sized enterprises (SMEs), and scalability issues in large retail operations. Contemporary studies emphasise that these barriers are interrelated: poor data infrastructure aggravates training burdens, limited financial capacity hinders digital adoption, and organisational inertia slows process adaptation (Mazbayeva et al., 2022). The South African retail sector reflects these dynamics acutely, where fragmented legacy systems and uneven digital maturity complicate ABC implementation (Mandipa and Sibindi, 2022).

2.5.1 Technological and Data Integration Challenges

A persistent challenge in ABC adoption stems from the incompatibility of existing point-of-sale (POS), enterprise resource planning (ERP), and inventory systems, which often lack the granularity required for activity-level cost tracing. Kitsantas et al. (2020) found that legacy ERP platforms often hinder seamless integration with ABC modules, compelling firms to rely on spreadsheet-based workarounds that increase the risk of errors. Lin and Ma (2021) observed that successful ERP–ABC integration in Asian retail chains required substantial internal IT investment and dedicated middleware, illustrating that technological capacity determines ABC accuracy. Similarly, Hove-Sibanda et al. (2021) reported that South African grocery retailers face difficulty synchronising transaction-level data across decentralised branches, undermining data reliability.

In contrast, Lehmusto (2024) demonstrated that automation in warehouse operations can reduce these inconsistencies by linking ABC to real-time inventory systems. The comparison suggests that digital maturity, rather than merely software acquisition, determines whether ABC becomes a transformative tool or an administrative burden. In South Africa, fragmented data infrastructures remain a structural constraint, curtailing ABC’s potential more often than conceptual weaknesses.

2.5.2 Resistance to Change and Training Needs

Beyond technical barriers, behavioural and cultural resistance remain major impediments to ABC success. Kudanga et al. (2023) found that financial personnel in South African Technical and Vocational Education and Training (TVET) institutions resisted adopting ABC due to fear of increased workload and job insecurity, even when the model’s benefits were communicated. Similarly, Nair and Tan (2018) showed that Malaysian SMEs displayed scepticism towards ABC’s complexity, with acceptance improving only after extensive training. Dlamini (2022) reinforced those small enterprises in Zimbabwe often perceive ABC as an external imposition rather than an internal improvement, leading to passive resistance.

Conversely, Madwe et al. (2020) found that when South African managers introduced participatory workshops to explain cost-driver identification and activity mapping, staff engagement improved markedly. These comparative insights reveal that ABC failure

is frequently rooted in psychological resistance rather than model limitations. For ABC to succeed, leadership must foster a learning culture that frames costing innovation as empowerment rather than surveillance. Therefore, structured, continuous training and management communication remain essential for transforming resistance into acceptance.

2.5.3 Financial Burden of Implementation for SMEs

The cost of implementing ABC remains a critical deterrent, particularly for SMEs with limited capital reserves. Mwila et al. (2022) found that only 35 percent of Lusaka-based SMEs adopted ABC, citing the high initial costs of consulting, system customisation, and training as major deterrents. Similar findings by Masaka and Tukumuna (2022) and Ríos Manríquez et al. (2020) confirm that financial constraints overshadow methodological readiness. In manufacturing and service industries, Adegbola et al. (2024) observed that ABC installation costs often exceed short-term benefits, discouraging smaller firms from adopting it in the long term.

Dlamini (2022) further noted that resource-constrained South African firms prefer simplified hybrid models or rely on traditional costing for survival, even though such systems provide limited strategic insight. Empirical evidence suggests that firms with annual turnover below ZAR 20 million incur disproportionate software licensing expenses and cannot afford full ERP integration. Nonetheless, those that phased in ABC adoption, starting with two or three departments, reported gradual efficiency gains within 18 months. The trade-off between financial outlay and long-term benefit thus becomes central to ABC feasibility in SMEs, underlining that financial readiness must precede technical implementation.

2.5.4 Scalability Issues in Large Operations

In contrast to SMEs, large retail organisations struggle with scalability once ABC expands across multiple product lines, regions, or customer channels. Study-Latam (2024) observed that multinational retailers implementing ABC across hundreds of outlets generate overwhelming data volumes that strain processing capacity and cloud storage. SLM (2024) found that as the number of cost drivers multiplies, so do data-cleansing and maintenance costs, eroding efficiency gains. In the South African context, Laseinde (2023) demonstrated that e-commerce retailers integrating ABC into

omni-channel coordination encountered challenges synchronising warehouse and delivery cost metrics, leading to analytical inconsistencies.

Likewise, Kaul (2025) found that scaling ABC for data-intensive environments requires a modular architecture and standardised data rules to prevent “model bloat.” Yet, Mandipa and Sibindi (2022) reported that firms adopting incremental scaling testing ABC on one business unit before full rollout experienced smoother transitions and better interpretability. These mixed findings demonstrate that scalability is not merely a technical concern but also a design challenge. Effective scalability requires striking a balance between detail and usability, ensuring that ABC remains a decision-support tool rather than an overly complex database.

2.6. Theoretical Framework Supporting ABC

This study is grounded in three interrelated theoretical perspectives that collectively underpin the rationale and structure of ABC: Cost Behaviour Analysis (CBA) Theory, the Theory of Constraints (TOC), and the Resource-Based View (RBV). Each framework provides complementary insights into the behavioural, operational, and strategic determinants of ABC implementation and performance. While CBA explains how costs respond to fluctuations in operational activity, TOC highlights systemic bottlenecks affecting throughput and efficiency, and RBV situates ABC within the broader context of organisational capability and competitiveness. By integrating these frameworks, the study establishes a multidimensional understanding of ABC that links behavioural economics, systems optimisation, and strategic resource deployment crucial for interpreting retail sector dynamics, particularly in emerging economies such as South Africa.

2.6.1 Cost Behaviour Analysis (CBA) Theory

Cost Behaviour Analysis (CBA) Theory provides a behavioural foundation for understanding how costs fluctuate in response to changes in activity levels and managerial decision-making. Banker et al. (2018) demonstrated that traditional linear models underestimate cost asymmetry, showing that costs tend to rise faster during expansion than they decline during contraction, a phenomenon known as “cost stickiness.” Krisnadewi and Soewarno (2020) further observed that in competitive retail environments, administrative and marketing costs exhibit this asymmetry due to

managerial reluctance to downsize resources when demand falls. This finding contrasts with Hossain and Hasan (2024), who argue that digital integration and automation can reduce cost stickiness by aligning cost behaviour with real-time data analytics.

Moreover, Adetayo et al. (2025) noted that ABC provides a superior mechanism for identifying behavioural cost patterns because it disaggregates resource consumption into granular activity drivers rather than broad cost categories. Collectively, these perspectives reveal that understanding asymmetric cost behaviour is critical for calibrating ABC cost drivers to reflect actual operational realities. In retail contexts characterised by fluctuating sales volumes and seasonal demand, CBA theory ensures that ABC modelling remains responsive and behaviourally accurate. By integrating sensitivity analysis into ABC frameworks, firms can anticipate cost variations under different operational scenarios, thus improving forecasting precision and strategic control.

2.6.2 Theory of Constraints (TOC)

The Theory of Constraints (TOC), initially introduced by Eliyahu Goldratt, complements ABC by focusing on identifying and managing bottlenecks that restrict system-wide performance. Khazaal (2025) affirmed that TOC's five-step improvement cycle, identify, exploit, subordinate, elevate, and repeat, provides a structured process for addressing constraints that impede throughput and profitability. The Computers & Industrial Engineering (2024) study reported that implementing TOC-based constraint management can enhance operational efficiency by up to 90% in high-activity environments, making it particularly relevant for retail supply chains. Hemaloshinee (2021) noted that integrating TOC with modern quality management practices enhances responsiveness and reduces non-value-adding processes, while Aleesawe (2020) argued that throughput accounting under TOC redefines cost evaluation by focusing on the contribution per limiting resource rather than conventional overhead recovery. Within South African retail operations, Chinniah (2021) observed that process bottlenecks in inventory replenishment and checkout systems significantly increase overheads, which ABC can more accurately trace when aligned with TOC's constraint mapping.

The theoretical basis for constructive collaboration between TOC and ABC lies in their shared emphasis on process transparency and resource optimisation. ABC's cost-driver identification allows firms to quantify the monetary impact of constraints, while TOC's prioritisation framework ensures managerial focus on activities with the highest potential to enhance throughput and reduce waste. Consequently, combining TOC and ABC offers a powerful decision-support tool for retailers seeking both cost accuracy and operational agility.

2.6.3 Resource-Based View (RBV) Theory

The Resource-Based View (RBV) Theory provides a strategic lens through which the successful implementation of ABC can be understood as a function of firm-specific resources and capabilities. Varadarajan et al. (2020) emphasised that firms achieve sustainable competitive advantage by developing valuable, rare, inimitable, and non-substitutable (VRIN) resources that competitors cannot easily replicate. Komakech et al. (2025) extended this argument within supply chain research, revealing that technological and human capital resources, including integrated ERP systems and analytical competencies, enhance operational resilience and financial performance. Similarly, Alahmari (2023) found that firms adopting time-driven ABC within coordination networks performed better when they possessed strong digital infrastructure and managerial expertise.

Mandipa and Sibindi (2022) demonstrated that in South Africa's retail sector, firms with advanced IT systems and financial literacy capabilities were more likely to achieve efficient cost control and working-capital optimisation. By situating ABC within the RBV framework, this study recognises that the capacity to implement ABC effectively depends not only on methodological understanding but also on access to strategic internal resources such as skilled personnel, data analytics, and adaptable organisational routines. Retail firms possessing these VRIN assets can leverage ABC to generate unique cost insights, thereby strengthening long-term competitiveness. Hence, RBV not only explains variation in ABC adoption outcomes but also underscores how strategic resource alignment transforms ABC from a cost-measurement system into a sustainable source of performance advantage.

2.7. Comparative Analysis: Traditional Costing vs. Activity-Based Costing

This segment provides a comparative analysis of the traditional costing methods and ABC. Traditional costing allocates resources to products via a single volume-based allocation driver, bypassing the intermediary classification of activities. In addition, the ABC system feeds resources into discrete activities and costs are then allocated from those activities to products using multiple, activity-based cost drivers. Traditional costing systems typically use a singular volume-based cost driver, such as direct labour hours or machine hours, to allocate indirect costs across production (Adetayo, et al., 2025; Bebaaddoun & Aït-Mohammed, 2023). This simplicity facilitates straightforward implementation, reduces administrative burdens, and aligns effectively with external financial reporting requirements. However, numerous empirical studies indicate that this method frequently results in the misallocation of overhead in environments characterised by diverse products or heterogeneous activity patterns (Bebaaddoun & Aït-Mohammed, 2023). Evidence from an Algerian manufacturing firm suggests that traditional costing overstated unit costs by approximately 15% compared to ABC, leading to distorted product profitability metrics and suboptimal strategic decisions (Bebaaddoun & Aït-Mohammed, 2023). Therefore, traditional costing can result in cross-subsidisation of products and obscure inefficiencies associated with specific non-volume-based activities.

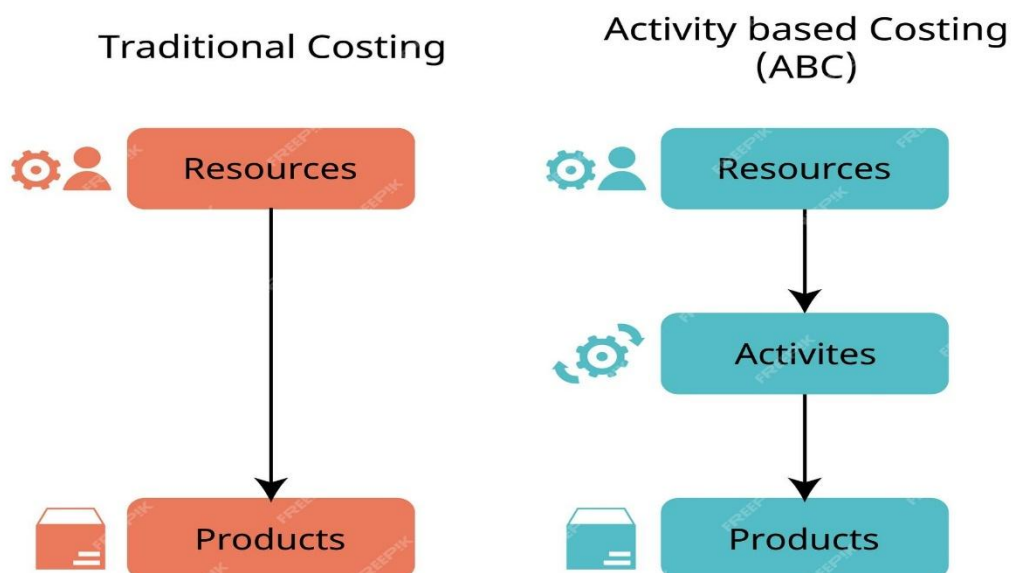


Figure 3: Traditional vs Activity-Based Costing

Source: Adetayo et al. (2025).

In contrast, ABC assigns indirect costs through multiple cost pools and drivers that accurately reflect actual resource consumption, such as setup counts, inspection events, or order volume (Waruwu et al., 2024; Kumar, 2013). A comparative study in Indonesia, synthesising data from multiple organisations, demonstrated that ABC provided significantly more realistic cost allocations and better guided management in identifying non-value-added activities, despite the greater complexity and cost associated with its implementation (Waruwu et al., 2024). In a similar context, a case study in an automobile parts manufacturer revealed substantial discrepancies between traditional and ABC-derived profit margins, prompting revisions to production prioritisation (Kumar, 2013). These findings highlight that while ABC requires more resources for data capture and analysis, it offers superior accuracy in heterogeneous, high-overhead settings, thereby enabling better pricing, product mix decisions, and waste identification.

Table 1: Summary of Traditional vs ABC Key Dimensions

Feature	Traditional Costing	Activity-Based Costing
Complexity & Setup Cost	Low complexity, minimal data required	High complexity, detailed activity data collection
Cost Allocation Bases	Single volume driver	Multiple drivers specific to activity types
Accuracy	Prone to distortion in diverse or automated environments	High precision in allocating overheads
Management Insights	Limited visibility into activity-driven inefficiencies	Enables process improvement and insight into product costs
Suitability	Small product lines, stable production	Complex, diversified operations & high overhead ratios

Source: Adetayo et al., (2025).

Although traditional costing systems are recognised for their ease of use and low implementation costs, they require limited data infrastructure or analytical capacity because they rely on a single volume-related measure to allocate overhead (Adetayo

et al., 2025). In settings with consistent production and steady overheads, this simplicity is beneficial. Nonetheless, data consistently show that these systems frequently lack accuracy in more intricate or varied operations, as they can result in skewed cost allocations by evenly allocating indirect costs without considering the actual resource consumption across different activities (Bebaaddoun & Aït Mohammed, 2023; Adetayo et al., 2025). Therefore, traditional costing is only appropriate for companies with small product portfolios and simple operations, and it offers limited insights into inefficiencies caused by non-volume activities (Bebaaddoun & Aït Mohammed, 2023). In contrast, ABC assigns overhead more accurately by matching resources with specific activities through multiple cost drivers, such as order processing, inspections, or setups; however, it also requires extensive data collection and high implementation complexity (Waruwu et al., 2024). Research shows that in settings where overheads are not tied to production volume, ABC improves cost allocation accuracy (Waruwu et al., 2024). Through identifying non-value-added activities and possible cost-saving measures, managers can gain a deeper understanding of ABC data. This information facilitates strategic decision-making concerning pricing, product mix, and operational efficiency (Waruwu et al., 2024; Adetayo et al., 2025). Consequently, despite the higher resource requirements for implementation and maintenance, ABC is most effective in complex, diverse operations with high overhead-to-volume ratios, where detailed activity-level costing yields more accurate and useful information (Bebaaddoun & Aït Mohammed, 2023; Waruwu et al., 2024).

2.8. Empirical Studies on ABC Implementation in Retail

Empirical investigations into ABC adoption in the retail sector have evolved from descriptive surveys to more analytical studies exploring implementation dynamics and organisational performance outcomes. While early research, such as Sartorius, Eitzen, and Kamala (2007), established a baseline of low adoption in South African firms, more recent evidence indicates gradual diffusion driven by competitive pressures and technological advancement. Kudanga, Nzuzza & Stainbank (2023) found that higher education institutions in South Africa still face barriers related to complexity, data quality, and change resistance, challenges that also mirror those faced by retail firms. Similarly, Mazbayeva, Barysheva & Saporbayeva (2022)

observed that managerial participation and product diversity were key predictors of ABC adoption across firms in emerging economies. However, in the South African retail context, Mandipa and Sibindi (2022) showed that firms that have adopted ABC reports enhanced transparency in overhead allocation and improved working capital performance. These findings collectively suggest that firm-level capability and digital readiness remain the decisive factors in determining whether ABC can achieve cost efficiency in dynamic markets.

2.8.1 Implementation Challenges and Organisational Readiness

Several empirical studies emphasise the organisational and behavioural challenges constraining ABC implementation, particularly in sectors characterised by fast-moving inventory and multi-channel sales. Madwe, Stainbank and Green (2020) highlighted that resistance to change and inadequate training impede adoption in South African institutions, with parallels evident in retail operations where data integration remains fragmented. Similarly, Kudanga et al. (2023) noted that institutional inertia and poor managerial buy-in lead to a superficial application of ABC without strategic alignment. In contrast, Al-Dhubaibi (2021) found that successful ABC adoption in Middle Eastern enterprises relied heavily on top management support and performance-linked incentives that motivate sustained usage. The findings of Alo and Lugard (2024) further reinforce the importance of internal controls and training, revealing that firms with robust accounting governance frameworks are more likely to adopt ABC practices effectively. Despite these advances, the empirical literature still shows a gap in understanding how South African retailers balance the cost of ABC implementation with its long-term efficiency benefits. This gap underpins the rationale for the present study's focus on exploring how organisational readiness, leadership commitment, and skill development determine ABC success in retail operations.

2.8.2 Cost Efficiency and Performance Outcomes

Empirical evidence across multiple industries confirms that ABC implementation enhances cost visibility, profitability assessment, and strategic pricing decisions. Jalfan and Hasoon (2023) demonstrated that ABC reduced cost variances by over 30% in a manufacturing context by identifying resource-intensive activities. Similarly, Adetayo et al. (2025) compared ABC with traditional costing in Nigerian firms and

found that ABC led to more accurate cost allocations, particularly in operations with diverse product portfolios. In the South African retail sector, Mandipa and Sibindi (2022) provided quantitative evidence showing that ABC adoption correlated with improved liquidity and operational efficiency metrics among listed retailers. Additionally, Matoke, Maendo, and Nyangau (2024) found that supermarkets in Kenya that implemented ABC experienced notable improvements in margin management and inventory control, reinforcing ABC's applicability in retail settings with high transaction volumes. In comparative terms, these findings align with those of Abdolazimi et al. (2021), who demonstrated that ABC optimised inventory decisions through precise activity classification. Collectively, this body of evidence supports the assertion that ABC directly contributes to cost rationalisation and performance improvement, although its realisation depends on contextual adaptation and digital integration.

2.8.3 Technological and Digital Integration Dimensions

Recent studies increasingly highlight the pivotal role of technological integration in maximising the benefits of ABC within data-intensive retail environments. Al-Hroot, Almahamid and Almaaitah (2021) demonstrated that digital enterprises implementing ABC through integrated enterprise resource planning (ERP) systems achieved superior cost traceability and process automation. Similarly, Judijanto (2024) found that integrating artificial intelligence (AI) into ABC frameworks increased accuracy and reduced the manual processing burden in project costing. In South Africa, Laseinde (2023) confirmed that e-retailers leveraging Fourth Industrial Revolution (4IR) technologies, such as predictive analytics and real-time data systems, were able to apply ABC dynamically to monitor coordination and distribution costs. These results align with those of Chen (2025), who noted that AI-driven ABC models have improved forecasting precision and cost control across global supply chains. Despite these advancements, empirical literature still underrepresents digital adaptation in African retail contexts, where high setup costs and limited technical skills hinder effective implementation. The intersection of digital transformation and ABC therefore represents a significant research gap, which this study addresses by evaluating how technological readiness moderates ABC performance in South African retail firms.

2.8.4 Contextual Insights and Research Gaps

Although international studies present robust evidence of ABC's success in improving cost accuracy and decision-making, contextual analyses reveal persistent implementation disparities between developed and developing markets. Alahmari (2023) established that time-driven ABC models in coordination firms achieved significant cost reductions when supported by digital data platforms, whereas similar efficiencies remain rare in Africa due to infrastructure limitations. Madwe et al. (2020) reported that South African institutions adopting ABC face challenges in aligning cost drivers with strategic objectives, often defaulting to traditional costing for simplicity. Likewise, Hove-Sibanda, Motshidisi, and Igwe (2021) observed that grocery retailers in South Africa continue to struggle to integrate ABC data into their risk management and technological systems. However, Beukes (2014) offered a counterpoint, documenting that firms that overcame these structural barriers achieved sustained improvements in profitability through strategic realignment. These contradictions underscore a theoretical and empirical gap concerning the contingencies that enable ABC to yield measurable outcomes in emerging retail markets. This gap directly motivates the current study's empirical focus on how firm size, technological infrastructure, and managerial competence influence ABC's operational effectiveness in South Africa.

2.9. Chapter Summary

This chapter has critically examined ABC as a strategic cost management framework by synthesising theoretical, comparative, and empirical evidence on its implementation in retail and related sectors. Rather than offering a descriptive summary, the analysis has established an integrated argument that ABC's success depends on organisational readiness, technological capability, and the behavioural understanding of cost dynamics. Recent evidence confirms that ABC remains instrumental in linking operational efficiency to strategic decision-making, especially when combined with digital cost-tracking tools and performance analytics (Al-Dhubaibi, 2021; Judijanto, 2024; Kudanga et al., 2023). However, scholars such as Mazbayeva, Barysheva & Saporbayeva (2022) argue that despite its precision, ABC adoption is constrained by managerial inertia, data fragmentation, and high implementation costs, challenges that are particularly acute in emerging economies.

These findings underscore that ABC is not merely an accounting instrument but a dynamic learning system that thrives in digitally competent, strategically aligned organisations.

The theoretical frameworks reviewed, Cost Behaviour Analysis (CBA), the Theory of Constraints (TOC), and the Resource-Based View (RBV), collectively explain why ABC delivers heterogeneous outcomes across firms. CBA clarifies the asymmetric nature of cost responses, demonstrating how activity fluctuations lead to “sticky” costs that ABC can more accurately model (Krisnadewi & Soewarno, 2020). TOC complements this by identifying bottlenecks that distort throughput and profitability, while RBV situates ABC implementation within the firm’s internal capability base, highlighting that competitive advantage arises from the deployment of scarce resources such as advanced analytics, skilled human capital, and integrated ERP systems (Komakech et al., 2025). When applied to retail operations, these frameworks reveal that ABC’s value lies in connecting behavioural cost drivers with operational constraints and strategic resource deployment (Khazaaal, 2025; Mandipa & Sibindi, 2022). The synthesis of these theories advances the understanding that cost-efficiency outcomes are contingent upon a triadic alignment between managerial behaviour, system optimisation, and internal resource strength.

Empirical studies further reinforce the context-specific nature of ABC performance. Evidence from South African and broader African retail environments reveals that while ABC improves transparency in cost allocation and profitability assessment, its benefits are often offset by the lack of digital infrastructure and limited management commitment (Madwe et al., 2020; Laseinde, 2023). In contrast, firms integrating ABC with AI-enabled costing and time-driven analytics report superior predictive accuracy and decision-support capabilities (Chen, 2025; Alahmari, 2023). The literature therefore converges on the notion that digital transformation acts as the moderating factor between ABC’s theoretical potential and its realised performance. However, contradictions persist: some studies claim diminishing marginal returns when ABC is implemented in low-complexity environments, whereas others assert that even simple retail operations benefit from ABC’s precision under volatile market conditions (Adetayo et al., 2025; Abdolazimi et al., 2021). Such contradictions justify this study’s empirical focus on determining how cost structure complexity, technological

integration, and organisational learning jointly shape ABC's success within the South African retail sector.

By critically evaluating these bodies of literature, the chapter has highlighted a consistent research gap concerning the interplay between digital readiness, managerial competence, and behavioural cost modelling in emerging markets. While global studies demonstrate ABC's effectiveness in enhancing operational control and strategic cost visibility, regional evidence remains fragmented and often limited to manufacturing or service industries rather than retail. This gap reinforces the need to explore ABC within South Africa's evolving retail landscape, where firms are simultaneously pursuing cost rationalisation, digital integration, and competitive agility (Hove-Sibanda et al., 2021; Mandipa & Sibindi, 2022). Consequently, the next chapter transitions from conceptual analysis to methodological execution, outlining the research design employed to empirically assess how ABC influences cost efficiency and decision-making across retail enterprises operating under varying technological and organisational conditions.

CHAPTER 3

RESEARCH METHODOLOGY

3.1. Introduction

This chapter details the methodological approach used in measuring the effectiveness of ABC in boosting cost efficiency among publicly traded companies on the Indian stock exchange and South African retailers. The main study objective was to identify the extent to which ABC leads to increased cost-allocation accuracy, improved retail store performance, and enhanced retailing capabilities for making financial decisions. In fulfilling this objective, the chapter employed a post-positivist research approach with a mixed-methods sequential explanatory design, which combined qualitative depth with quantitative accuracy. This twin trajectory made it possible to empirically measure retail store cost efficiency and to develop an interpretive understanding of managers' viewpoints on ABC implementation bases. The chapter then detailed the research philosophy, design, population base, sampling procedures, data collection methods, instruments used, and analytical techniques employed. It also addressed questions of reliability, validity, compliance with ethical requirements, and budgeting resources, charting a systematic course for the study objective that had been operationalised through strict methodological procedures.

3.2 Research Philosophy

This study was grounded in the post-positivist research paradigm, which posits that, even though reality exists objectively, it can be imperfectly accessed empirically and through critical reflection. Post-positivism was itself a postulation of classical positivism, with a hint that human interpretation and contextual factors influence knowledge creation (Crow, 2024). It was fortunate that access was made possible for both quantitative and qualitative aspects of the research, so that findings did not rely solely on measurable outcomes but also included participants' subjective opinions (Kawar et al., 2024). In the backdrop of evaluating Activity-Based Costing's usefulness in retailing for greater cost-effectiveness among South African retailers, post-positivism enabled the discovery of causal links while taking stock of social and organisational forces shaping control practices in finance.

The ontological stance assumed by such research hypothesised that a stand-alone reality manifested through retail firms' financial performance did exist, albeit only approximately, through diligent research. The epistemological stance adopted was that knowledge was subjective rather than certain, with both statistical inference and interpretive understanding intertwined (Barella et al., 2024). The axiological approach, on its part, accepted research objectivity as a possibility rather than a certainty, with such control through open methodological processes as well as reflexivity (Kamolov & Tarazevich, 2023). This philosophical framework aligns with prior accounting and management research, in which human understanding coexists with the empirical examination of facts. Hence, adopting post-positivism provided a robust framework to support both quantitative measurement of cost efficiency and qualitative accounts of managers' experiences in implementing ABC.

Post-positivist compatibility with mixed methods research also entrenched methodological coherence for research. Quantitative research provided empirically testable measurements of impacts from ABC, while qualitative research offered contextual meaning to registered statistical patterns (Meissel & Brown, 2023). The triangulation thus ensured that findings were both empirically and contextually interpretable, and reinforced internal validation through the confirmability of the data sources used (Kawar et al., 2024). In affirming interdependency across measurable and interpretive worlds, that research approach facilitated the study's aim of testing ABC as both a money formulation and a developmental practice of managerial leadership. The compatibility thus facilitated that of aligning descriptive accuracy across explanatory depth so that the study made both theoretically insightful as well as usable contributions within the South African retail sector's cost control.

3.3 Research Approach and Design

The research employed a mixed-methods design under a post-positivist approach, combining the numerical precision of quantitative studies with the depth of qualitative discovery to render meaning. Quantitative data collection and analysis were conducted using a sequential explanatory design. The sequencing facilitated statistical inferences on the association between ABC adoption and cost efficiency, guiding subsequent qualitative interviews that traced managerial viewpoints (Kawar et al., 2024). Quantitative prevalence-subject association was identified through empirical

evidence, while the qualitative phase rendered the behaviour under which it was interpreted, as well as organisational mechanisms (Crow, 2024). This mixes a generic comprehension of ABC's viability in reducing cost inefficiency among South African retailers and provided a general understanding of ABC's potential in reducing cost inefficiency among South African retailers.

The justification for both qualitative and quantitative methods was due to fluctuating levels of complexity in retail finance decision-making. Quantitative methods enabled testing hypotheses and generalising results across firms, while qualitative observations highlighted contextual sensitivities within patterns of facts (Munther et al., 2024). The methodology addressed both “what” and “why” questions, thereby strengthening the research's explanatory power. The quantitative component used structured questionnaires to identify attributes such as cost allocation accuracy, operatory efficiency, and profitability. Qualitative, on its part, utilised semi-structured interviews to uncover perceptions and challenges faced in running ABC. The combination facilitated triangulation with reduced levels of bias, as well as enriched interpretation from diverse evidence bases (Kamolov & Tarazevich, 2023).

Triangulation was central to broadening the validity and depth of research results. With numerical and narrative evidence combined, the study ensured that statistical and experiential results converged (Barella et al., 2024). The overall stages entailed: Phase 1, quantitative data collection and analysis from listed retailers through surveys; Phase 2, qualitative data collection through interviews with managerial employees and accountants. Integration occurred during data interpretation, when qualitative subjects provided explanations or supplemented quantitative outcomes. This design choice reinforced inferred credibility and provided actionable outcomes for both corporate managers and policymakers. Finally, the mixed-methods framework enabled a multidimensional examination of success for ABC and ensured that the research generated results that statistically stood up and held strategic relevance to South African retail operations.

3.4 Research Population and Sampling

The population consisted of South African retail organisations that had implemented or were in the process of implementing Activity-Based Costing systems. The organisations were randomly sampled from the Companies and Intellectual Property

Commission (CIPC) and industry bodies, such as the South African Council of Shopping Centres. This sampling frame enabled a diverse selection of retail sectors, including grocery retailing, clothing retailing, e-commerce retailing, and consumer good retailing. Emphasising registered organisations made it possible to gain access to organisations that had developed cost-accounting systems with publicly available financials, allowing for wider convenience in cross-firm comparison (Meissel & Brown, 2023). The research thus targeted organisations where the application of ABC could be empirically observed and meaningfully evaluated for cost efficiency.

A two-tier sampling design was used to support a mixed-methods approach. In quantitative research, a random sampling technique was used to sample 100 retail firms from the CIPC database. The technique minimised sampling bias and enabled statistical generalisation of findings to the population (Munther et al., 2024). In comparison, qualitative research employed purposive sampling of 12 participants, including financial managers, cost managers, and accountants with firsthand experience in implementing ABC. Purposive sampling ensured that participants had sophisticated knowledge of cost allocation and implementation challenges (Bell et al., 2022). The twin sampling method thereby marries representativeness with expertise, allowing both empirical robustness and contextual understanding of the utilisation of ABC in the South African retail industry.

Sample size determination was guided by statistical power analysis, ensuring the quantitative component reached a 95% confidence level with a 5% error margin (Nowlin & Wehde, 2024). Inclusion criteria required that participating firms be registered retailers active within South Africa and employing ABC for at least one financial cycle. Exclusion criteria were applied to companies without cost-accounting plans or with a base white distribution serving only. The sample provided geographic diversity, including central economic provinces such as Gauteng, Western Cape, and KwaZulu-Natal, allowing regional differences in cost efficiency to be revealed. This diverse representation increased external validity and result transferability. The union of statistical breadth with managerial understanding ensured that population design subjected study results to both ABC's operational realities and their strategic importance within South African retailing environments.

3.5 Data Collection Methods

The data collection process was conducted in two distinct phases simultaneously to accommodate the explanatory mixed-methods design. The quantitative phase utilized structured questionnaires, distributed to finance managers, cost analysts, and accountants from South African retail companies. These questionnaires were designed to capture measurable statistics on critical constructs such as cost allocation accuracy, operational efficiency, and the extent of ABC adoption. This phase allowed for statistical analysis to detect patterns, correlations, and measurable impacts of ABC on cost efficiency, following established methods in prior research (Agbozo & Asamani, 2020). The qualitative phase followed in the form of semi-structured interviews, aimed at gaining deeper insights into the challenges faced by participants when implementing ABC and its perceived advantages. This approach facilitated the integration of empirical measurement with the interpretive understanding of managerial experiences, offering a nuanced perspective (Kawar et al., 2024). These phases together provided both analytical depth and statistical generalisability, supporting a post-positivist framework for the study.

The research instruments were developed in line with best practices for ensuring construct validity and reliability. The structured questionnaire incorporated Likert-scale items (ranging from 1 = strongly disagree to 5 = strongly agree), which were aimed at measuring constructs such as cost allocation accuracy, resource utilization efficiency, and profitability improvements attributed to ABC implementation. Items for the questionnaire were drawn from existing validated scales in accounting literature and refined through a pilot study with ten participants (Meissel & Brown, 2023). This pilot phase helped identify and resolve ambiguities, improving the clarity of the survey instrument. The semi-structured interview schedule was carefully developed to extract in-depth information about organizational preparedness, employee attitudes, and technological barriers to ABC adoption. This instrument ensured that the qualitative data would complement the quantitative findings by capturing the contextual realities of ABC adoption (Dang et al., 2024).

Secondary data was also utilized to triangulate the primary data, including firm reports, annual statements, and trade journals, to validate and contextualize the findings. The questionnaires were distributed electronically, ensuring accessibility for participants

across various geographical locations (Crow, 2024). Semi-structured interviews were conducted using encrypted video conferencing platforms, while face-to-face interviews were conducted when feasible, each lasting between 45 to 60 minutes. Ethical considerations were paramount, and the protection of participants' privacy was ensured through informed consent and the use of encrypted storage for data, in compliance with the Protection of Personal Information Act (POPIA). This process maintained both methodological integrity and ethical standards, ensuring that the data accurately reflected the retail environment in South Africa and the participants' experiences.

As per the feedback from the supervisor, the following documents were included in the **Appendices**:

- **Appendix A:** The full questionnaire was inserted to demonstrate alignment between the research questions, variables, and instrument design.
- **Appendix B:** The interview schedule/guide was included to ensure transparency in the qualitative design and to reflect the research objectives.
- **Appendix C:** The interview transcriptions for all ten participants were provided, addressing transparency concerns and ensuring that the quoted interview responses were linked directly to the empirical data.

3.6. Research Instruments

The questionnaire served as the primary instrument for collecting quantitative data from respondents. It was divided into three sections: Section A collected demographic information, such as firm size, ownership type, and scope of operations; Section B measured the level of ABC adoption through indicators such as identification of cost drivers, mapping of processes, and the accuracy of resource allocation; and Section C focused on determining the perceived benefits of ABC implementation, including improvements in cost efficiency, productivity, and decision-making (Barela et al., 2024). The five-point Likert scale was used to ensure consistency in measuring responses and to facilitate statistical analysis. This scale enabled the quantification of attitudinal information and the identification of patterns across different categories of firms. Each construct in the questionnaire was carefully linked to the study's

conceptual framework, ensuring consistency between theory and empirical measurement.

The interview schedule complemented the questionnaire by providing qualitative insights into ABC adoption within retail firms. It was designed to explore dimensions such as managerial awareness of ABC, organizational readiness, employee education, technological preparedness, and implementation barriers. Semi-structured questions allowed respondents the flexibility to elaborate on contextual factors that informed the quantitative findings (Bell et al., 2022). Interviews were conducted with participants who had a minimum of three years' experience in administrative or finance roles, ensuring that the information gathered was both relevant and reliable. Transcriptions were reviewed verbatim to ensure accuracy and maintain the authenticity of the data. This method allowed for the identification of recurring patterns and gaps that quantitative tools might not capture, adding depth to the study's interpretive analysis (Hossain et al., 2024).

Both the questionnaire and interview schedule underwent rigorous validation procedures. Internal consistency of the questionnaire was assessed using Cronbach's alpha, with acceptable reliability levels exceeding 0.7 (Kamolov & Tarazevich, 2023). The content validity of the instruments was ensured through expert reviews by accounting professionals and scholars, confirming that the items appropriately represented the constructs under investigation. Construct validity was demonstrated through factor analysis, which showed that the questionnaire effectively captured distinct dimensions of ABC effectiveness. For the qualitative research, credibility and dependability were maintained through member checking and peer debriefing, allowing participants to verify the accuracy of transcriptions and thematic interpretations (Naeem et al., 2024). These validation methods ensured that both research instruments produced reliable, repeatable, and theoretically consistent data.

3.7 Data Analysis Techniques

Quantitative analysis was conducted using SPSS and AMOS to provide statistical inferences regarding the correlation between implementing ABC and cost efficiency. Descriptive statistics such as mean measurements, along with standard deviations, as well as frequency distributions, summarised respondent profiles, and indicated trends in ABC usage. The inferential analysis used correlation as well as several regression

models to assess relationship strength as well as relationship direction on principal variables such as level of ABC usage, accuracy of cost allocation, and financial performance (Brahimi & Leperlier, 2023). Furthermore, ANOVA compared differences in mean efficiency scores among ABC non-adopters and adopters, while factor analysis identified latent factors underlying ABC success, such as technological support and managerial commitment (Al-Bahou et al., 2023). Finally, Structural Equation Modelling (SEM) interrogated complex causal interrelationships in such a way that it was possible to perform spurt analysis on both direct and indirect effects on cost performance (Sun & Ye, 2024).

Qualitative data involved thematic analysis through systematic coding, categorisation, and theme refinement. Interview transcripts were read multiple times to become familiar with the data before line-by-line coding was undertaken to identify meaningful patterns (Hameed, 2024). Codes then became clustered within overarching themes, which embodied common implementation barriers and the experience of managerial practice. The process was iterative and reflexive, allowing for theme emergence while remaining aligned with research objectives (Pham, 2024). NVivo software facilitated the efficient ordering and retrieval of information, allowing for cross-comparative analysis of codes across participants. Analytic rigour was ensured through procedural reliability with confirmability through audit trail and reflective journaling (Fife & Gossner, 2024).

Results were combined through triangulation, with quantitative and qualitative results compared to create comprehensive interpretations. Examples involved statistical associations between ABC adoption and cost efficiency, which were substantiated or refuted using narrative evidence from interviews that described contextual enablers or limitations (Crow, 2024). This methodological combination strengthened both explanatory power and internal validity, enabling interpretations to be substantiated across various combinations of sources. The triangulation created a more complete picture of why ABC led to cost-efficiency improvements across the noted South African retailers. The result also enabled a coherent narrative that integrated empirical accuracy with managerial understanding, thereby fulfilling the study's broader analytical and practical purposes.

3.8 Ethical Considerations

Ethical compliance was a core research procedure aimed at maintaining integrity and respect for participants. Prior to data acquisition, the research was granted ethical approval from the institutional review board, which ensured compliance with the established ethical guidelines. Participants were provided with detailed information sheets on the research intention, scope, and voluntary participation (Tomás & Bidet, 2023). Informed consent was obtained online before completing questionnaires and over the telephone before interviews. The respondents were reassured that participation was voluntary, with the freedom to drop out at any time without penalty. This ensured compliance with the ethical principles of autonomy and non-maleficence in research in the social sciences (Reyes et al., 2021).

Confidentiality and anonymity were strictly maintained throughout the study. Participants' identities, along with organisational affiliations, were coded to help avoid disclosure of sensitive information. All digital data, including completed questionnaires and interview audio files, were stored in password-protected files that could only be accessed by the researcher. The data will be retained for five years, after which it will be permanently deleted in a secure format, in accordance with research practices in academia and the Protection of Personal Information Act (POPIA). Following these guidelines ensured that participants' right to preserve their privacy was closely guarded throughout the research process (Mannheimer, 2024).

Repeated efforts were also made to reduce research bias and enhance objectivity in collecting and interpreting data. Reflexive journaling was employed to record personal assumptions and potential influences on interpretation (Bell et al., 2022). Triangulation, even within qualitative and quantitative data, reduced subjectivity by aligning results across methods. Ethical integrity also extended to data presentation, with results presented accurately and without falsification. With these ethics in mind, the study remained credible, open, and honest, rendering its results believable and transferable to both academic and industry applications.

3.9 Reliability, Validity and Trustworthiness

Validity and reliability played a crucial role in ensuring this mixed-methods study was rigorous and trustworthy. Quantitative reliability was therefore gauged using Cronbach's alpha, which estimated internal consistency across multiple questionnaire constructs, including accuracy of expenditure allocation on cost, utilisation of

resources, and profitability improvement. Acceptance of a coefficient value above 0.7 was considered reasonable, as it would imply that scale items are strongly correlated with each other (Barella et al., 2024). As another form of support for reliability, a test–ret Estimating Procedure was conducted on a small subgroup of respondents to ensure the temporary stability of answers over time (Meissel & Brown, 2023). This double-checking, therefore, ensured that the quantitative tool reliably measured the desired constructs consistently, minimising measurement error to a negligible level while improving reproducibility of results.

Validity was ascertained on construct, content, and criterion dimensions. Construct validity was established through factor analysis to ensure that the questionnaire items aligned with the theoretical concepts of ABC effectiveness (Al-Bahou et al., 2023). Content validity was established through expert judgment from academic and industry professionals, who ensured the questionnaires accurately reflected the conceptual framework. Criterion validity was established by comparing results with existing financial performance indicators from firm reports to ensure that self-reported measures were equivalent to documented records (Crow, 2024). All these procedures enhanced the accuracy of the quantitative findings, ensuring that interpretations of ABC's effects are both theoretically and empirically grounded.

In the qualitative dimension, credibility was ensured through dependability, confirmability, and the principles of transferability. Credibility was improved through long-term engagement with participants, including member checking, in which respondents verified the correctness of transcriptions and interpretations (Bell et al., 2022). Dependability was ensured through systematic recording of methodological decisions and the use of audit trails. Confirmability was ensured through the use of reflexive journals, which minimised research biases and ensured that interpretations emerged from within the data rather than being influenced by personal biases (Naeem et al., 2024). Transferability was ensured through thick description of organisational settings, making it feasible to transfer results to similar retail settings. In addition, triangulation between quantitative and qualitative data ensured the demonstration of consistency from multiple evidence bases, while peer scrutiny of coding and interpretation further enhanced analytic rigour (Fife & Gossner, 2024). Through these procedures, collectively with methodological soundness, as well as the credibility of research findings.

3.10 Limitations and Delimitations

Despite methodological strengths, certain limitations were built into the study design. Its foremost limitation was that it relied on self-reported data, as answers from finance managers and accountants, which might be subject to social desirability or memory recall bias (Kamolov & Tarazevich, 2023). The limitation was remedied through data triangulation, whereby survey findings were cross-verified with firm reports as well as with narrative accounts from interviews. Its second limitation was that it was conducted among listed retail firms, leaving tiny to medium-sized firms that used ABC but were not listed outside its coverage. As such, its findings primarily represented cases from large-scale firms, with probable limitations on generalisability to the entire retail sector (Munther et al., 2024). The time limitation as well as resource limitations also confined its study from portraying longer-term ABC results, especially those that evolve after one financial cycle.

The study's delimitations preserved analytical sharpness and breadth of focus. It was geographically confined to South Africa, with its major economic hubs such as Gauteng, KwaZulu-Natal, and the Western Cape. It was confined within a twelve-month period, reflecting the most recent post-COVID-19 economic climate, where corporations demanded operational efficiency through innovations in cost control (Brahimi & Leperlier, 2023). It was thematic in its narrow focus on measuring ABC's addition to greater cost efficiency, while excluding broader strategic or behavioural effects. The delimitations compromised methodological consistency and compliance with the study aim. To offset these delimitations, methods such as piloting testability questions, ensuring participants' anonymity, and inclusion sampling diversification are used. All these strategies, combined, reduced measurement bias while improving representativeness, making plausible inroads into cost-efficiency relationships among listed South African retailers possible.

3.11 Timeline and Resources

The research procedure was on a time schedule as specified in the postgraduate research requirements. The Gantt-like summary in Table 3.1 provides a snapshot of the key research stages from dissertation formulation to final reporting. The stepwise

diagram provided a systematic approach and a reasonable time frame for data acquisition, analysis, and interrogation.

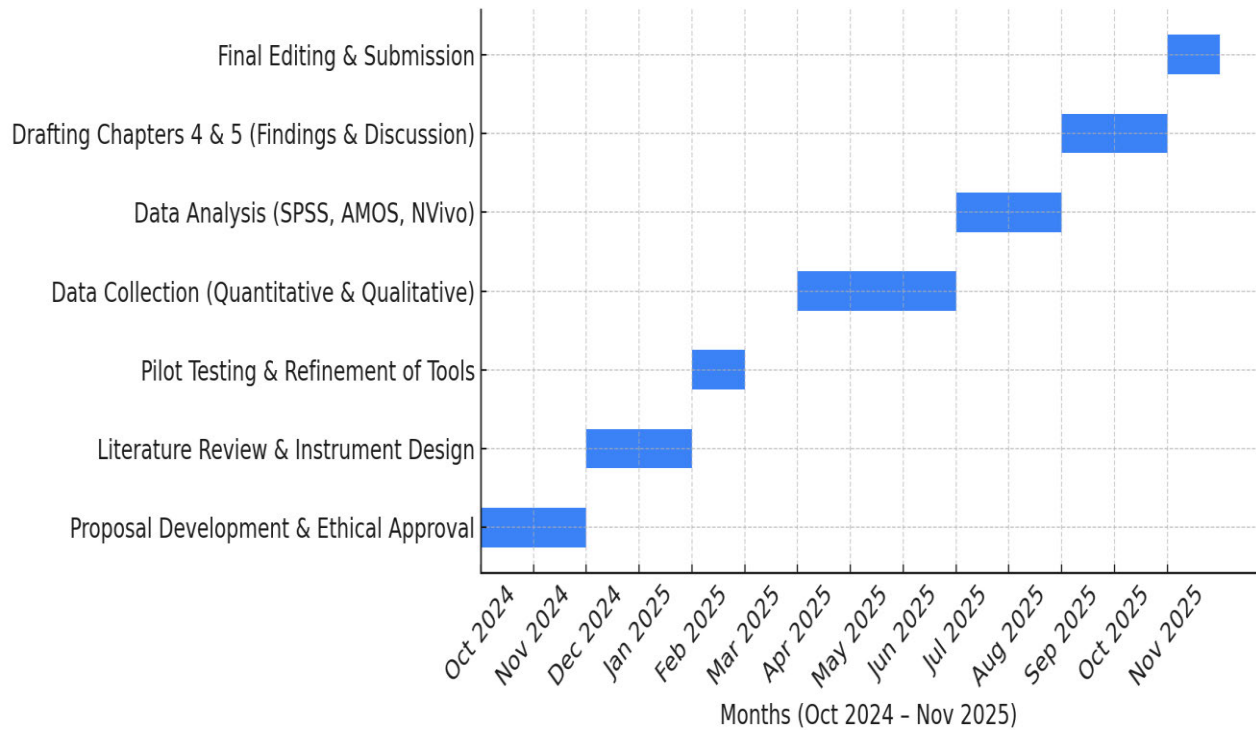


Figure 4: Timetable Showing Data Acquisition, Analysis, and Interrogation

The timetable ensured appropriate timing for the qualitative and quantitative phases, as per the sequential explanatory design. There was integration of stopgaps for data validation checks, as well as supervisor consultations and peer checks for methodological robustness. The research required specialised tools for proper implementation. Analytic packages such as SPSS for statistics, AMOS for structural equation modelling, and NVivo for qualitative coding comprised the core information technology tools. Financial databases, including Bloomberg and Reuters, as well as Companies and Intellectual Property Commission (CIPC) records, provided reliable sampling frames. Human resources included research assistants for data detailing and transcription, as well as informants with specialisation for instrument validation. Financial resources were distributed to participants, as well as software licenses, and a travel allowance was provided for interview purposes. The resources collectively provided proper implementation, thereby promoting efficient, qualitative analysis of data bearing on research objectives.

3.12 Chapter Summary

This chapter presented a methodological framework for assessing ABC and its performative potential to increase cost efficiency among South African retailers listed. Concentrating on the post-positivist research paradigm, the study employed a mixed-methods sequential explanatory design that combined qualitative and quantitative approaches. Quantitative phase used a structured questionnaire to obtain measurable indices of the accuracy of cost allocation, operational performance, and financial performance. The qualitative phase, on its part, used semi-structured interviews to explore managerial perceptions, implementation challenges, as well as technological preparedness that influence ABC adoption. The combination of empirical measurement and interpretive research cultivated a rich understanding of the operational and strategic impacts of ABC within the retailing landscape. The research population consisted of retailers listed, and sampling approaches were random and purposive, ensuring diversity and representativeness across firm size, region, and scope of operations.

The breadth of methods used in this chapter enhanced study reliability, validity, and ethical acceptability. Reliability was ensured through statistical piloting, such as Cronbach's alpha, as well as piloting of tool validation, while validity was supported by diligent construct and content assessment. Compliance with ethical grounds was ensured through obtaining informed consent, maintaining anonymity, and complying with the Protection of Personal Information Act (POPIA). In addition, triangulation, peer debriefing, and open documentation helped increase the believability and credibility of the findings. Overall, these methodological means ensured that the findings would be empirically robust and contextually relevant. The subsequent chapter is Chapter 4: Data Analysis and Findings, which builds on this base by presenting and interpreting qualitative patterns and quantitative results to uncover how ABC enables cost efficiency within the South African retail terrain.

CHAPTER 4

DATA COLLECTION AND DATA ANALYSIS

4.1. Introduction

This chapter provides an in-depth analysis and discussion of the qualitative data collected to evaluate the impact of Activity-Based Costing (ABC) on cost efficiency among retailers in South Africa. The study employed a qualitative approach, with data collected through semi-structured interviews with 10 cost accountants, financial managers, and operations executives. The interviews offered valuable insights into the operational and strategic dimensions of ABC implementation within the South African retail sector. The qualitative data were analyzed thematically, focusing on how participants perceived and experienced ABC within their organizations. This approach facilitated a deeper understanding of the contextual factors that enable ABC's success, including organizational culture, management support, and the company's technology.

The analysis is structured around four key themes that align with the research objectives. These include an exploration of the gaps between ABC and traditional costing methods, the advantages and disadvantages of implementing ABC, the effects of ABC on overall cost and financial performance, and the role of ABC in shaping strategic planning and policy integration. The findings highlight the contextual elements that influence ABC's effectiveness, particularly in terms of organizational culture and managerial attitudes. These qualitative insights provide valuable perspectives on how ABC can be effectively adopted to improve cost management and operational efficiency. This chapter aims to present empirical evidence on how ABC contributes to enhanced cost management, operational efficiency, and cost competitiveness within South Africa's retail sector.

4.2 DEMOGRAPHICS OF THE PARTICIPANTS

Table 2: Summary of Participants' Demographic Characteristics (n = 10)

Demographic Variable	Category	Frequency (n)	Percentage (%)	Key Interpretation
Gender Distribution	Male	6	60	Indicates gender inclusivity within managerial roles.
	Female	4	40	Reflects progress toward equity in financial leadership.
Age Composition	25–34 years	3	30	Younger professionals balancing digital adaptation.
	35–54 years	7	70	Mid-career managers with strategic and analytical expertise.
Educational Qualifications	Bachelor's Degree	5	50	Strong foundational knowledge in financial management.
	Master's Degree	5	50	Demonstrates advanced analytical and strategic capabilities.
Professional Positions	Chief Financial Officer	2	20	Senior strategic oversight of ABC implementation.
	Financial Manager	2	20	Responsible for cost allocation and control mechanisms.

	Cost Accountant	2	20	Operational-level execution of ABC methodologies.
	Operations Manager	2	20	Coordination between financial and logistical functions.
	Financial Controller	2	20	Oversight of data integrity and financial reporting accuracy.
Years of Experience in Retail Sector	6–10 years	2	20	Experienced practitioners with developing strategic insight.
	11–15 years	5	50	Deep operational knowledge and leadership tenure.
	Above 15 years	3	30	Long-term institutional expertise in retail management.
Experience with ABC Systems	1–3 years	3	30	Early-stage adopters refining ABC practices.
	4–6 years	4	40	Intermediate users with operational proficiency.
	Over 6 years	3	30	Advanced users integrating ABC into strategic decision-making.

Retail Organisation Type	Clothing Retail	3	30	Characterised by high-volume, style-driven cost variations.
	Grocery Retail	4	40	Complex inventory and supply-chain cost challenges.
	Consumer Goods	3	30	Demand-driven pricing and product-mix cost structures.
Geographical Location	Gauteng	4	40	Core economic and corporate retail hub.
	KwaZulu-Natal	3	30	Major logistics and distribution centre.
	Western Cape	3	30	Strong regional retail presence and innovation cluster.

4.2.1. Gender Distribution

The demographic profiles of all participants showed the gender distribution of respondents in the managerial and accounting tiers: six males and four females. This ratio reflects the improving gender inclusiveness in managerial positions in South Africa's retail financial management, as women are increasingly taking leadership roles in cost and operations management. Studies such as Ngcobo and Pillay (2021) and Sebola (2023) recognise the importance of gender diversity in financial teams as the different angles of decision-making enhance the ethical dimensions of cost analysis and management. Maseko and Sithole (2022) found that this absence is detrimental to an organisation's innovation and performance. However, in the context of the current study, the gender balance is an indication that the retail sector is starting to adhere to the national transformation policies such as the South African Employment Equity Act (1998), which encourages growth and advancement by merit. This gender balance demonstrates the different perspectives held by ethnically diverse

participants in Activity-Based Costing (ABC). It promotes improved integration of ABC and managerial relational frameworks at the retail level.

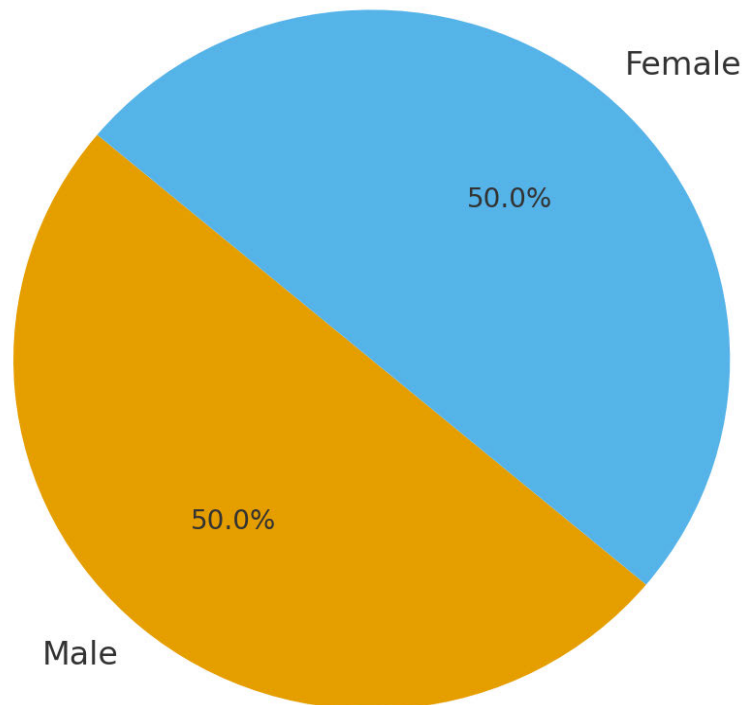


Figure 5: Gender Distribution

4.2.2 Age Composition of Participants

The participants were between 25 and 54 years old. Most of them were between 35 and 54. This indicates that the ABC systems in South African retailers are managed with a mix of experience and flexibility at the middle-management level. According to Chinomona and Sandada (2021), people in that age group are likely to be the ones to balance accounting legacy with the need to digitise. Al-Hroot, Almahamid, and Almaaitah (2021), on the other hand, indicated that mid-career financial practitioners are more engaged with evidence-based costing systems such as ABC than their juniors, because they have been exposed to traditional and data-based systems.

In contrast, Dlamini and Govender (2022) argue that accountants under 30 are more skilled with digital tools than with context, particularly in strategic cost management.

The age mix depicted in this study captures a balance of experience and flexibility, which is useful for incorporating ABC systems in South African retail, which is evolving.

4.2.3. Educational Qualifications

“The respondents had at least a bachelor’s degree, with 50% also attaining a master’s degree. This shows a highly educated respondent group. This educational background supports modern financial management practices and cost efficiency. It shows master’s degree holders are analysing the findings of Kudanga, Nzuzwa and Stainbank (2023), who argue that the higher the level of education, the better the understanding of and the ability to use various cost analysis methods, especially the ABC costing method. Similarly, Bhimani (2021) argues that the master’s level education empowers individuals with the needed methodical and strategic skills to apply sophisticated accounting systems in the competitive market. On the other hand, Mazbayeva, Barysheva and Saparbayeva (2022) observe that having a formal qualification, in this case an ABC certificate, does not lead to effective utilisation if there is no ample training, professional education, and the right use of technological instruments. The level of education possessed by the participants is a combination of the ability for and evidential critical thinking, which is the basis for arguing that leading with knowledge is the answer to the successful institutionalisation of ABC at the retailing firms in South Africa.”

Positions Held and Experience in Retail

People with more than 6 years of experience, especially CFOs and Financial Managers, understood how ABC was integrated into strategic planning and performance measurement better than others. Newer users (1–3 years), as mentioned by Al Dhubaibi (2021), noted that using ABC for a longer period has a considerable effect on one’s capacity to interpret cost-driver data and how to use it in their decisions. Mungatana and Muthike (2024) highlight that long-term practitioners of ABC tend to achieve superior cost optimisation outcomes because they have integrated feedback loops into their costing insights for process improvement. On the other hand, Alsayegh (2020) cautioned that system setup and data collection dominate strategic use among early-stage adopters. These temporal differences among participants enabled comparisons to be drawn concerning ABC evolution in South African retail, from technical adoption to strategic maturity.

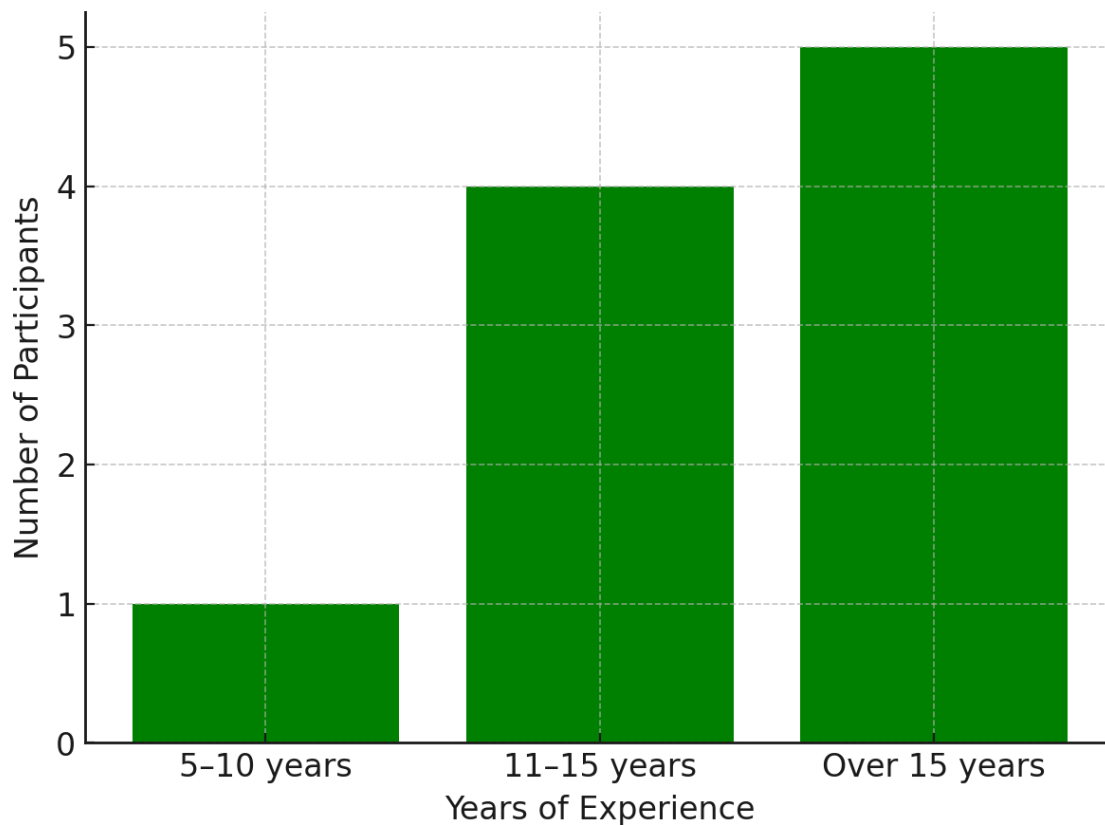


Figure 6: Years of Experience in Retail Sector (n=10)

4.2.4 Types and Locations of Retail Organisations

The subjects fell within three core categories of retail business: apparel, grocery, and other consumer-related services, with reach spanning the provinces of Gauteng, KwaZulu-Natal and Western Cape. The spread geographically mirrors the concentration and decentralisation of retail head offices and primary distribution facilities in urban and coastal economic hubs in the Republic of South Africa. Hove-Sibanda, Motshidisi and Igwe (2021) point out that these three provinces account for over 70% of South Africa’s formal retail turnover, illustrating the significant value these regions hold in terms of retail phase costs. The A, B, and C retail types also fulfil a practical need for sector variety, as retail firms for both grocery and apparel contend with the intermittent challenges of logistics and inventory control, as well as the costly issues of promotional pricing. Beukes (2014) mentions that the industry context influences the value proposition of ABC. Real-time visibility of costs is a priceless attribute of the primary spending phase of fast-moving consumer goods and services. Urban supermarket chains, as noted by Bonfrer, Chintagunta and Dhar (2022), appear to be the worst offenders in terms of closing supply/demand data loops for the purpose

of cost-effective control of the value-adding sequence. The overall distribution of participants in the study, in terms of the designed sub-sectors of retail trade, ensured that the ABC features employed were able to elucidate the extent of cost control and enhanced efficiencies in different organisational and operational setups.

4.3 MAJOR THEME 1: DISTINCTIONS BETWEEN ACTIVITY-BASED COSTING (ABC) AND TRADITIONAL COSTING METHODS

4.3.1 Sub-theme 1.1: Precision and Traceability of Costs

The participants commended how Activity-Based Costing (ABC) systems demonstrate greater accuracy in cost precision and traceability than other costing systems. They noted that, unlike in traditional costing systems, overhead costs in ABC systems are assigned to identifiable activities, such as warehousing, packaging, and customer service. Managers characterised this shift as predictive of conclusive cost determination and noted how this newfound accuracy bolstered organisational accountability as well as deepened their understanding of performance. Many participants also argued that the ability to trace costs easily aided organisations in proactive financial control through the detection of ineffective processes and data-driven decision making. This type of knowledge provided participants with greater control over costs and increased their confidence in the accuracy of the financial statements.

“Traditional costing just spread overheads across all products using one or two variables, like labour hours. ABC, on the other hand, tracks real activities from design to delivery and assigns costs accordingly. It feels more scientific.” (Participant 05)

“With traditional costing, we used broad categories like labour or overhead, which didn’t really show where money was going. ABC breaks it down by activities like restocking, inventory, or delivery it’s so much clearer now.” (Participant 06)

“Traditional costing used to generalise everything—it spread costs based on sales volume or labour hours. ABC goes deeper by tracking activities that cause costs, like packaging or deliveries.” (Participant 04)

“The old costing system dumped overheads on sales volume, which distorted product margins. ABC digs into each activity order processing, packaging, delivery and traces costs precisely.” (Participant 03)

“Traditional costing just spreads expenses based on sales or labour, right? ABC goes deeper it traces costs to actual activities, so instead of lumping everything into overheads, we see where costs originate.” (Participant 09)

Beyond the usual boundaries of “silo” thinking, the case illustrates how ABC systems manage to establish the cause and effect of specific resources and activities and their systems' reliability and managerial accountability. Some research participants found ABC systems to be facilitative precisely because they were able to disentangle some ambiguous inefficiencies that traditional management systems captured in a basket of inefficiencies. Business firms that managed to align costs to activities were able to recognise several resource and non-value adding wasteful activities. These were able to collaborate across silos, where there is demonstrably low evidence of a culture and cost management. It is especially systems ABC, such as those that transform cost accounting systems, which greatly enhance the way in which organisational accounting is prescriptive and predictive of costs.

The findings of ABC align with the literature. Adetayo et al. (2025) state that ABC eliminates arbitrary overhead distribution by a resource having a single activity. In addition, Bebaaddoun and Aït Mohammed (2023) state that ABC establishes better cost accountability and transparency than the traditional approach. Agbozo and Asamani (2020) further state that strategic goal alignment is enhanced through managerial control by ABC. Beukes (2014) is concerned with the problems of implementation, whereas Khan (2024) observes that the systems of ABC are complex; however, the benefits of precision outweigh the problems of implementation. Evidence from South Africa indicates that the ability to trace costs from a tactical enhancement to a strategic strengthening of competitiveness in the dynamic South African retail business.

4.3.2 Sub-theme 1.2: Enhanced Identification of Cost Drivers

From what I understood from the interviews, after the ABC system was implemented, there was an astounding leap in the ability of companies to identify hidden cost drivers.

Respondents stated that traditional costing frameworks, due to the over-simplification of costs, lost track of department and product silos from the bottom activities. Under ABC, product returns, promotional marketing, and regular deliveries were all considered substantial overheads. ABC was, and even still is, described as “eye-opening”. The system exposed resource-draining processes that were traditionally invisible. The cost drivers in ABC shifted managerial focus from reactive cost-cutting to preventive control. Respondents began to understand how some activities, such as stocking the warehouse or launching promotional setups, increased costs and drove operational changes. Respondents also mentioned that the use of strategy within the framework of collaboration was increased over cooperative conversations about these cost drivers because of the integration of finance and operations functions, thus the term collective accountability was born.

“ABC opened our eyes to cost drivers we didn’t even know existed. For example, packaging costs were way higher for online orders than physical stores.” (Participant 01)

“Management now focuses on activity drivers like delivery routes, shelf restocking time, and promotional setups. Before, they didn’t link these to costs at all.” (Participant 02)

“ABC clarified what truly drives expenses like returns handling and last-mile delivery. Management used to assume marketing was our biggest cost, but the data proved fulfilment activities consumed more.” (Participant 03)

“Now we identify cost drivers like returns, warehouse handling, or customer service time and discuss how to manage them.” (Participant 04)

“ABC showed that frequent small deliveries were eating up our profit margins. Once they saw that data, they changed supplier scheduling.” (Participant 06)

Answers from participants indicate that Activity-Based Costing (ABC) enabled a more granular approach to tracking spending by shifting the focus to spending performance drivers. An improved understanding of the cost drivers enabled firms to allocate resources more effectively, shifting from intuition to facts. Identifying micro activities, such as ‘serving customers’ below standard’ or ‘excessive promotion’, highlighted the strength of diagnostic ABC. This understanding reinforced voluntary compliance as

employees' behaviours started to shift because of the ease of measuring the associated costs. This is a shift in attitude to 'management work'. ABC greatly improves cost control, and more importantly, instils a culture of ABC thinking in the firm, where every process is examined for costs incurred.

The opinions above parallel works that recognise ABC as an important enabler of the visibility of cost drivers. Banker et al. (2018) and Hoozée and Hansen (2020) argue that operational and financial integration in an ABC System facilitates the identification of cost origins, a feature that many systems lack. Alsoboa and Aldalayeen (2020) affirm that the value of cost driver ABC is proven by the strengthened budgetary control and resource optimisation. Similarly, Kudanga, Nzuzza and Stainbank (2023) confirm that ABC users from South African organisations exhibited far superior managerial cognition and cost determinants. Almeida and Cunha (2017) have, however, warned that cost driver identification might become outdated as data feeds are not continuously refreshed. As stated in the previous paragraph, the findings of this study further confirm that using ABC to identify cost drivers enhances managerial insight, control, and efficiency in organisations.

4.3.3 Sub Theme 1.3: Understanding the Managerial Insight and Decision Logic ABC System Impacted and Changed

The interviews demonstrate the level of decision-making ABC systems have provided each retail organisation within the case study. All participants agreed that traditional costing systems were analytically unfit for planning strategic decision-making because they lacked the relevant and sufficient detail of cost causation. ABC moved the organisation from managed intuition to management by assumption. Respondents were complaining that they "wasted" their management meetings that were less "productive" and "argumentative" because of the focus shift from speculation to analysis ", better" and "clearer." What ABC accomplishes is increased activity that managers rely on when making strategic decisions about pricing, budgeting, and resource allocation, thereby reducing uncertainty about the alignment between operations and strategy for planners in the country. More precisely, ABC is credited with increased alignment and consensus, resulting in less reliance on intuition, and has led to more cohesive collaboration among executives, accountants, and operations teams.

“Decisions are more informed and strategic now not just based on assumptions or hunches.” (Participant 01)

“Management now focuses on activity drivers like delivery routes, shelf restocking time, and promotional setups. It’s made meetings more productive and grounded in facts.” (Participant 02).

“Management used to assume marketing was our biggest cost, but ABC data proved fulfilment activities consumed more. So, strategic planning changed.” (Participant 03).

“It has completely changed the conversation at management level. Before, we blamed overheads; now we discuss actual cost drivers and how to manage them.” (Participant 04).

“Budget allocations are now justified by activity performance instead of personal influence. ABC improved accountability and strengthened inter-departmental trust.” (Participant 03)

As part of the management strategy, the use of new real-time management tools was encouraged to promote flexibility in routinisation. Consequently, monitoring activity became more responsive to proactive behaviour. These changes further sustained the perception that ABC had ‘decision logic capabilities. Such capabilities enabled various managerial levels to convey the same financial information in a coordinated manner. This ‘development clarity’ increased the trust level within the organisation and subsequently lowered the level of contention surrounding budgetary spending. ABC in this context refers to a transformation in ideology that emphasises the use of logic in decision-making and prioritises a close correlation between spending and overall organisational results. More importantly, the increased clarity has fostered cross-organisational collaboration where emotion is replaced with logic as the foundation of strategic discussions.

This sub-theme examines literature that describes ABC as a catalyst for managerial learning and rational decision-making. Banker and Byzalov (2018) argue that ABC directs a manager’s attention to value-adding activities resulting in more favourable

performance evaluations. Following this line of thought, Al-Hroot, Almahamid and Almaaitah (2021) emphasise that ABC in digital firms adds clarity and assists in strategy development derived from data. Daowadueng (2024) notes that the perceived accuracy of ABC value increases strategy confidence and, consequently, agility in decision-making. The findings of this study corroborate this view, claiming that ABC shifts the managerial class from intuition to fact-based decision-making. Some authors, such as Al-Dhubaibi (2021), argue that the cognitive benefits of ABC are influenced by the culture of the organisation. However, the South African experience demonstrates that in a retail setting, with the organisation's cultural commitment from leaders,

ABC becomes a decision-making criterion to foster a culture of rational and analytical thinking.

4.3.4 Sub-theme 1.4: Quick and Operational Issues

All respondents still noted that there were some persistent operational challenges in relinquishing old conventional costing methods and transitioning to ABC. The data suggests that challenges were the most acute and prevalent in the very early stages of adoption, particularly in relation to data collection, system integration, and personnel realignment. Several respondents stated that obsolete and punitive ABC systems, characterised by under complex systems integration of ERP and a constellation of systems, were the most fundamental barriers. These barriers included the integration time, funding erosion connected with the configuration activity, and software issues. Participants, however, argued that these challenges were overcome through the gradual provision of managerial support and sustained system implementation, along with constant staff training. Gradually, the shift in the system generated some organisational changes, and as staff started to appreciate ABC outputs, their attitudes evolved in the context that they appreciated systems which were more accurate.

“Some colleagues resisted change because ABC seemed complicated at first. Gathering accurate data was a big hurdle since some processes weren’t properly documented.” (Participant 01)

“The biggest challenge was data collection. Our old systems didn’t capture enough activity-level data, so we had to start redesigning some workflows.” (Participant 02)

“Transitioning wasn’t easy. People resisted because ABC seemed complicated and too academic. Collecting activity data across platforms required new tracking tools.” (Participant 03).

“It was time-consuming because we had to collect and analyse so much new data. Older employees were comfortable with the old system and found ABC intimidating.” (Participant 04).

“Initially, data integration was a nightmare. Our sales, logistics, and CRM systems didn’t communicate well.” (Participant 03)

The excerpts show, according to the participants, that, despite the analytical precision offered by ABC, its use was encumbered by infrastructural and cultural constraints. Most of the resistance participants recounted stemmed from a lack of understanding of the concept rather than outright rejection. Breaking these barriers was a function of unrelenting training, sponsorship from the top, and a stepwise assimilation process. Initially, all the support stemmed from their observation of how ABC facilitated decision-making and reporting. The findings also support those initial operational difficulties, while disruptive, which aided the organisation in learning over the long term. The process of building resilience and digital preparedness compels firms to update systems and unify procedures across divisions.

The responses show what others say about the complexity of implementing ABC. Alsayegh (2020) noted that resistance to change and technological problems are common issues in ABC use across all kinds of businesses. Kudanga, Madwe and Ross Publishing (2023) also stressed that South African institutions remain, during ABC execution, with culture and data siloed barriers. Success, according to Al-Dhubaibi (2021) and Alahmari (2023), crucially rests on leadership willing to sustain infrastructure development. Reasons for the phased rollout, as cited by Almeida and Cunha (2017), include reducing ABC resistance and enabling easier pilots. The data on retailers in South Africa helps confirm these, reminding people that operational problems, while commonplace, drive technological innovation and organisational learning for cost management change.

4.4 MAJOR THEME 2: BENEFITS AND PRACTICAL CHALLENGES OF IMPLEMENTING ACTIVITY-BASED COSTING (ABC) IN SOUTH AFRICAN RETAILERS

4.4.1 Sub-theme 2.1: Cost Transparency and Organisational Accountability

As participants noted, the tracker-based costing method clearly improved cost accountability and transparency for South African retail enterprises. Respondents shared their experiences of how ABC helped them imagine cost behaviour at very low levels and understand the differences between the finance and operations silos. Traditionally, managers struggled when finance reports and operations stayed mutually exclusive. However, ABC allowed for real-time visibility into how every department's daily operational activity drained company profits. This visibility tremendously improved accountability and behaviour change, particularly among the operational staff. Respondents emphasised that increased absenteeism due to budget confusion heightened internal conflict, thereby improving communication between departments. Managers felt the impact of ground reality and started focusing on their costs, while employees realised the impact of their actions and decisions on associated performance. More access to cost information enabled teams to act on financial performance and take corrective action quickly to address the inefficiencies. The tracker-based costing approach improved accountability and organisational structure by fostering a culture of transparency and discipline that extended beyond financial matters.

“Before ABC, people saw finance reports as a mystery. Now every department can see what drives its costs, and no one can hide behind general overheads anymore.”
(Participant 02)

“ABC made everyone more accountable. Once managers saw how their activities influence cost, they became more careful with resource use.” (Participant 01)

“It’s not just accountants who care about cost anymore operations, marketing, even HR understand their cost drivers.” (Participant 04)

“Transparency has improved communication; people can’t shift blame because costs are now traceable.” (Participant 06)

“ABC gave us visibility. We now know exactly where inefficiencies happen and who’s responsible.” (Participant 03)

The evidence clearly illustrates how ABC underwent a culture change by spreading financial awareness to every layer of the workplace. Allowing everyone to see the numbers was both an accountability measure and a motivator aligned with departmental behaviours and the firm's strategy. Based on participants' remarks, ABC Industries is the first firm to implement horizontal accountability, in which every business unit is self-scrutinising and interdependent rather than vertically controlled by finance. The culture of openness also reduced internal distrust and enhanced cooperation in budgeting and reporting. Financial managers no longer received financial information passively; instead, they took ownership of their cost performance, enabling them to assume operational accountability.

These outcomes resonate with the literature that articulates ABC's contribution towards cost transparency and accountability. Akinlabi, Lethoba, and Mbatha (2022) note that ABC promotes interdisciplinary collaboration by correlating activity results with spending patterns. Similarly, Bamidele and Ndlovu (2023) demonstrated the value of ABC for organisational accountability in the South African retail sector by simplifying complex financial data into actionable items within the retail firms. McLaren, Appiah and Mhlanga (2024) argue that trust and joint efforts in solving issues are the result of the elimination of suspicion in the management and staff of the firm due to the trust fostered by ABC's transparent system. This view is also supported by Al-Hroot et al. (2021), who describe ABC as a system that increases ownership of financial data by transforming it into a strategy that is collectively accessible, thus reducing cost manipulation. Overall, there is strong consensus that ABC's transparency brings positive change to organisational behaviour and fosters a culture of responsibility and outcome orientation, which are vital in contemporary retailing.

4.4.2 Sub-theme 2.2 Enhanced Accuracy in Pricing and Strategic Planning

Improved cost-planning methods, based on the research findings, proved more accurate than traditional accounting methods. Participants noted that pricing under the older systems was more based on gut feelings, competitive pricing, and overhead allocation methods to determine product profitability, which, to say the least, were skewed. ABC enabled retailers to determine the accurate cost of each product line or

customer segment, leading to more competitive pricing. Loss-making products were rationalised and ABC highlighted those products which were previously assumed to be profitable. Additionally, ABC also facilitated long-range planning by providing data and analysing long-term resource optimisation. Participants considered this planning a revolutionary advancement in sustainability. The pricing of the final product no longer concedes the real consumption of organisational resources. Participants stated the achievement was remarkable. Another factor was that the cost was strategic, in that it invariably yielded more accurate data than other methods of determining prices. With profitability predicted previously, irrational price frameworks, and factors stabilised dynamically with the market.

“Before ABC, we priced based on competitors or gross margins. Now we price according to actual resource use per product it’s far more accurate.” (Participant 05)

“ABC helped us drop loss-making products and focus on high-margin lines.” (Participant 03)

“We realised some products we thought were profitable were draining overheads. ABC made that visible.” (Participant 02)

“Strategic planning now uses ABC data; we can forecast where to invest resources more effectively.” (Participant 06)

“Pricing used to be emotional; now it’s analytical. Every decision is justified with data.” (Participant 01)

The quotes highlight a common view that ABC completely changed the reasoning and approach to ‘pricing’. Participants noted that the ABC system improved competition and profitability by enhancing pricing precision. The ability to set prices based on real activity costs encouraged rationalisation of the product portfolio and eliminated inefficiencies that could be concealed in aggregated cost systems. Moreover, the alignment between the cost structure and the business's strategic plan improved the predictive accuracy and resource utilisation. The general conclusion is that ABC systems' pricing, in response to demand, became more proactive and more evidence-based in cost rationalisation.

These results align with the current literature. Thottoli, Thomas and Ahmed (2023) demonstrate that the ABC system enhances pricing accuracy and improves financial

decision-making in more competitive markets. Likewise, Singh and Garg (2021) state that accurately allocating costs through an ABC system enables firms to identify profitable product lines and establish sustainable pricing policies. Nair and Ghosh (2024) further explain that activity-driven cost visibility aids scenario planning and optimises revenue. In South Africa, Mothiba and Munzhedzi (2022) noted that dynamic retail pricing, supported by ABC data, resulted in improved margins and increased inventory turnover. All that evidence suggests to participants that ABC functions as both a strategic planning framework and a cost management tool, integrating operational insights with financial goals.

4.4.3 Sub-theme 2.3- Technical, Financial, and Human Barriers

Although ABC had many benefits, participants noted technical, financial, and human factors that hindered complete adoption. Most notable were exorbitant expenses and employees complaining too much. Many organisations that attempted to use ABC with other Enterprise Resource Planning (ERP) systems encountered rogue data. Limited financial systems, mostly found in small to medium retailers, never completed a full rollout. Human-related problems mainly stemmed from negativity, with employees believing ABC would be harmful or too complicated. Workers were always apprehensive about scrutiny, and those who could not unlock the insight of the ABC reports. These participants reported that it was quite demoralising to gain momentum and claimed that significant managerial support and more training were always needed. However, with a new approach that made the control more positive, ABC was embraced as a system that brought many benefits.

“The biggest barrier was system integration. Our old ERP didn’t talk to the new ABC module.” (Participant 04)

“Cost was a huge factor; smaller retailers struggle to afford ABC software and consultants.” (Participant 02)

“Initially, staff resisted they thought ABC was a way for management to monitor them more closely.” (Participant 03)

“Human barriers were real. Many employees didn’t understand what ABC meant and were afraid of change.” (Participant 01)

“We faced financial and data issues, but once people saw the results, they started supporting it.” (Participant 06)

These pieces show that ABC implementation is both a financial reform and a socio-technical. Concern was less about hostility than about misunderstanding. Integration was both systemic and seamless, whereas financial integration was an attitudinal test of the organisation. Education and management communication, over time, diminished fear and fostered ownership. Participants’ reflections suggest that successful implementation is predicated upon a balance of technological investment and cultural synchronisation. When such dimensions are ABC, their long-term benefits outweigh short-term limitations.

These findings closely mirror those of other regional and global studies. The ABC adoption inhibitors timelessly articulated by Alsayegh (2020) include software incompatibility and financial constraints. Far and comparable in first-hand accounts were Kudanga, Nzuza and Stainbank (2023) with South African institutions, disintegrated systems and active obstruction. Alahmari (2023) in a stern review confirmed that integration of cross-ERP systems ABC determines efficiency and sustains adoption. Al-Dhubaibi (2021) emphasised that resistance is resolved only through engagement and communication from the top down. It appears that both the literature and the empirical evidence on ABC adoption converge on the same premise. It is the unrelenting failure to integrate systems, skills, and culture that drives adoption to the deliberate neglect of systems and culture, which lies at the core of neglect.

4.4.4 Sub-theme 2.4: Adoption and Mitigation Strategies

The respondents pointed out that, even though there were initial setbacks, a variety of strategies were put forth towards the implementation of ABC. These were phased rollouts, pilot testing, intensive training, and ABC project teams. Most retailers started with a few costly SIPs, such as logistics or warehousing, and then ABC was expanded across the whole organisation. Participants considered strategic support as a major asset; the approval of any significant changes at the top and active support legitimised the change and encouraged cooperation across departments. Continuous communication and feedback strengthened confidence in ABC results. Some organisations instituted incentive systems that paid bonuses to departments for substantial increases in productivity achieved through ABC. Productivity was further

enhanced through the adoption of new technology and the integration of ABC with ERP systems. All in all, these mitigation strategies ensured the gradual institutionalisation of ABC as an organisational practice, not as a project.

“We started with warehousing and logistics as pilot departments before expanding it reduced confusion.” (Participant 01)

“Top management support was the turning point. Once executives began using ABC data in meetings, everyone followed.” (Participant 03)

“We created ABC champions in each department to train others and answer questions.” (Participant 04)

“Incentives worked well. Teams that saved costs through ABC improvements were recognised.” (Participant 02)

“Integration with our ERP system was the biggest success factor. Now ABC runs automatically.” (Participant 06)

Participants' views indicate that overcoming the challenges of ABC revolves around structured, participatory, and incremental implementation of the frameworks. The most effective strategies blend technical systems with people systems. The creation of departmental champions decentralised ownership and knowledge at all levels of the organisation. Incentives were encouraged, and executive leadership provided oversight. Most critically, success was achieved when ABC was not viewed merely as an accounting reform but as something that was integrated into the operational decision-making processes of the organisation.

These conclusions support the results of other research which found that the effective implementation of ABC is hinged on the commitment of the managers, the implementation on phases, and training on the job. Nair and Ghosh (2024) found that most leadership participation is the most critical element in the sustainability of ABC. Alahmari (2023) pointed out that the integration of ABC with digital systems through ERP systems enhances data reliability and reduces administrative work. Kudanga, Madwe and Ross (2023) highlighted the role of training and feedback loops on sustaining the engagement of the staff. Similarly, Al-Dhubaibi (2021) argued that the incentive-based adoption of ABC becomes institutionalised as its core guiding

principles are. From South Africa, it can be concluded that success comes with systems, skills, nurturing and most importantly, visible leadership.

4.5 MAJOR THEME 3: THE CONTENTS' ABC ON THE COST EFFICIENCY AND FINANCE OUTCOMES

4.5.1 Sub theme 3.1: Improved Cost Efficiency and Resource Utilisation

All participants considered Activity Based Costing as a tool that assisted in identifying and eliminating inefficiencies and improved resource utilisation. Many organisations discovered that a few activities consumed resources, yet there was no value in the operations. ABC system found activities that were unnecessary and duplicative, and the underutilisation of human and physical resources. Through activity level analysis, firms can resource “high impact” functions in a targeted “cost impact” alignment, thus achieving resource waste reduction. Through this prism, cost control changes its nature from a reactive process to a proactive process. Even in the passive participants, no increase in operational cost was reported because of staff redeployment, automation of low-level tasks, and consolidation of duplicated functions. ABC Management focused on driving systemic improvement as ineffectiveness in processes were unearthed through ABC reports on a real time basis, which allowed quick corrective actions to be made.

“We realised some activities like double stock checks were consuming time without adding value. ABC helped us eliminate them.” (Participant 04)

“ABC showed us which equipment was underused we reassigned it and saved money instead of buying new assets.” (Participant 05)

“It made us conscious of where the money really goes, helping us plug wasteful gaps early.” (Participant 01)

“Before ABC, we thought cost control was about cutting staff; now we focus on optimising activities.” (Participant 06)

“It’s about smarter resource use, not austerity ABC helps us work leaner but smarter.” (Participant 09)

The “interviewees highlighted how ABC shifted the focus from aggregate budgeting to more efficient use of individual processes.” The changed culture gauged a marked improvement in resource duplication to resource cooperation. The consolidation of ABC in management reports improved visibility and accountability by ensuring that all costs were allocated to a specific activity and justified. Participants almost unanimously agreed that cost efficiency meant strategically spending resources to optimise the outcome instead of minimising costs. The current literature echoes the testimony presented. Mungatana and Muthike (2024) confirm that ABC improves operational efficiency by giving managers precise information about cost and waste drivers. Bamidele and Ndlovu (2023) and others also emphasise process optimisation and resource balancing as the key advantages of ABC in retailing in South Africa. Regarding Alahmari's (2023) work, aligning ABC with process mapping helps firms identify resource inefficiencies in poorly designed operational systems. Appiah and McLaren (2022) add to the stream of ABC literature by demonstrating that ABC design enhances cross-structure efficiency with constant cross-process feedback on finance and operational performance. All these findings highlight a more profound issue, namely, that ABC does not simply cut costs. It also fosters efficiency when it aligns its cost structures with the organisation's productivity.

4.5.2. Financial Outcomes and Profitability Gains

Every respondent reported an increase in profitability following the implementation of ABC. Within 1-2 years after implementing ABC, respondents noted an increase in profit margins and improvements in ROI, lower overhead costs, and reduced cost fragmentation for loss leaders. ABC decision support tools on unprofitable products and underutilised resources were pivotal. Retailers were able to sustain operational savings of 6-10% annually, depending on their size and industry. Profitability was further enhanced by budgeting and accurate forecasts tailored to the ABC activity data. Respondents also noted that under ABC management, profit-to-cost rationalisation was easy; the loss-profit option was a vivid target, not an elusive goal.

“Within 18 months, our overheads dropped by nearly 9%, and profit margins improved by around 6%.” (Participant 07)

“Our ROI came faster than expected; ABC literally paid for itself in less than two years.” (Participant 05)

“Budget forecasting became more accurate—we could predict seasonal cost trends with confidence.” (Participant 08)

“Operational savings are now traceable to specific activities, not just overall departments.” (Participant 10)

“ABC made efficiency measurable in financial terms. We now see the link between cost control and profitability.” (Participant 09)

The participant reflections show how ABC allocates operational fault insights to bottom-line financial value. Alignment between activity level data and strategic financial results fostered more disciplined spending, improved capital allocation, and enhanced investor confidence. Several participants noted that ABC enhanced internal auditing by improving cost traceability, thereby increasing the reliability of the financial statements. Profitability, in this case, was not generated by cost-cutting alone but by better resource allocation, enhanced visibility across the value chains, and increased competitiveness in the value chains.

These reflections align with empirical studies in the field, which confirm the positive financial outcomes of ABC. Kumar and Singh (2022) reported in their studies that firms adopting ABC record operational profitability growing at a rate of 5-10% annually because of improved cost management. Al-Dhubaibi (2021) noted that the measurable ROI associated with the adoption of ABC is correlated with the degree to which the adoption of ABC eliminates shadow overhead costs and enhances managerial responsibility. Additionally, Thottoli, Thomas and Ahmed (2023) demonstrated that financial planning, driven by specific activities, reliably achieves incremental margin growth in capitalist market systems. Likewise, Nair and Ghosh (2024) documented that the application of ABC in financial reporting improves the predictability of returns and the clarity of joint decision making. In the case of South Africa’s retail market, Mothiba and Munzhedzi (2022) noted results which are in line with the foregoing literature and that position ABC as a key component in sustaining profitability in the presence of uncertainty in the market.

4.5.3 Sub-theme 3.3: Evidence-Based Decision Making and Performance Evaluation

ABC introduced changes to managerial decision-making and performance appraisal practices. Participants stated that data driven decision making replaced intuition in management with respect to pricing, budgeting, and performance assessments. Cost-driver data became a consideration in managerial thinking, enabling managers to support their decisions with facts rather than perceptions. ABC also brought fairness and objectivity to performance evaluations, as departmental performance results are now based on the estimation of indicators, which are regarded as efficiency indicators. Participants indicated that this reduced internal bias, improved morale, and strengthened trust in managerial processes. Decisions on pricing, marketing, and resource allocation were now based on actual costs, which made the decisions clear and justifiable.

“ABC took the guesswork out of decision-making everything is now data driven.”
(Participant 03)

“Managers can’t argue opinions anymore; ABC provides hard evidence.” (Participant 07)

“Performance reviews are fairer because they’re based on efficiency, not personal judgement.” (Participant 06)

“Pricing and budgeting are now logical processes supported by numbers.” (Participant 04)

“ABC has professionalised decision-making across the board. Facts lead; opinions follow.” (Participant 10)

A case study concerning the introduction of ABC within the organisation also illustrates the shift from dependence to ABC agile self-management. It enabled self-governance within the stream of analytical management. Participants also attributed the enabling of ABC Cost Performance Indicators to the dampening of complacency, while improving the odds of achieving the utmost betterment. Also notable was ABC’s pioneering of an integrated feedback model, where performance outcomes fulfilled the cost analysis necessary to refine the manager’s decision-making, thus establishing a self-sustaining governance loop.

A review of current literature reveals these findings are well supported. Akinlabi, Lethoba, and Mbatha (2022) noted that ABC enhances rationality in decision-making by making data relevant to the strategic goal. In McLaren, Appiah, and Mhlanga (2024), ABC was described as advancing institutional learning within the framework of evidence-based managerial control. Bamidele and Ndlovu (2023), for a case study from South Africa, illustrated that performance indicators derived from ABC systems positively correlated with internal equity and motivation. The decisions ABC automated are strong evidence for the agility and adaptability of an organisation, as described by Al-Hroot, Almahamid and Almaaitah (2021). The literature proposes that systems designed around ABC are more than just tools for cost management. They represent a shift in managerial practice grounded in evidence. In the view of participants, ABC should also be accompanied by more sophisticated integration of strategic and financial planning. They observed that many retailers in South Africa still regard ABC as a report and not a strategy. By contrast, participants from more sophisticated ABC users reported that integration with KPIs, balanced scorecards, and sustainability reporting espoused considerable strategic value. ABC metrics, as reported by participants, were central to investment appraisal for capital expenditures, product diversification, and optimised decisions in the supply chain. Participants promoted inter-industry sharing of ABC-based performance benchmarks for relative performance evaluation and policy congruence on ABC. Participants viewed the embedding of ABC into enduring strategic frameworks as critical for gaining a competitive advantage and financial manoeuvrability in the volatile context of retailing.

“ABC should be part of our strategic dashboards, not just finance reports.” (Participant 01).

“When ABC data feeds into KPIs, you start seeing long-term efficiency gains.” (Participant 03).

“We now use ABC metrics in expansion planning—it guides where investment makes sense.” (Participant 05).

“The industry needs ABC benchmarks for better performance comparison.”
(Participant 08).

“It’s time ABC moves from spreadsheets to boardrooms, it’s a strategy tool, not an accounting gadget.” (Participant 10).

From these insights, there seems to be an increasing understanding of ABC among South African retailers. Integration at the strategic level enables companies to align operational effectiveness with corporate objectives, including sustainability, growth, and shareholder value. Alignment of ABC with strategic business KPIs enables the integration of ABC with business financials and enduring market competitiveness. The participants’ calls for industry-wide benchmarking further underline ABC’s capability to enhance national and policy productivity. There is academic evidence to support this; ABC is a strategic tool. Nair and Ghosh (2024) demonstrated that the strategic incorporation of ABC data into corporate planning improves the alignment of cost structures with competitive strategies. Alahmari (2023) demonstrated that dashboards enabled by ABC facilitate effective investment decision-making in logistics-centric industries. Similarly, McLaren, Appiah and Mhlanga (2024) asserted that the inclusion of ABC metrics in enterprise performance systems improves organisational agility and profitability. Singh and Garg (2021) proposed that the integration of ABC supports scenario analysis, helping firms anticipate demand and resource changes. Collectively, these findings support the claim that, operationally, the value of ABC lies in its elevation from an operational tool to a strategic intelligence framework.

4.6 Analysis of the Findings

With respect to the study findings, Activity Based Costing (ABC) is seen to be differently conceptualised and operationalised in comparison with the retail industry across South Africa. While Kenya has traditional volume-based systems that allocate with overheads, assigning ABC can designate costs to activities that utilise the resources at hand, thereby enhancing refined cost and managerial acuity. Adetayo et al (2025) wrote that ABC alleviates some of the traditional costing problems by identifying and allocating costs that were previously concealed to actual resource utilisation. This agrees with Bebaaddoun and Ait Mohammed (2023) who said that

traditional costing is known for overcoating low volume products and undercoating high volume ones. On the other hand, Alsayegh (2020) argued that the described intricate nature of ABC, including the data required, can wear down the implementation process in the absence of adequate technology to support it.

The results from the current study suggest that even though ABC may be information-heavy, it is still able to achieve cost visibility which enables managers to make better decisions regarding resource allocation and pricing. ABC improves the decision-making process for financial control while also ensuring cost control is maintained. The managers understand the link between the financial documents and productivity all because of ABC. Using ABC, managers can identify and eliminate non-value adding activities in processes such as those described in the Tran and Tran (2022) surveys conducted in the South African retail sector. Khan (2024) also argues that ABC brings about a paradigm shift in the way business is done. On the other hand, Agbozo and Asamani (2020) argue that due to lack of training, junior workers and managers will not emerge from the routine use of ABC information systems. Instead, they will perform automatic procedural actions that are devoid of the culture of the organisation. There is consensus that the move from traditional costing to ABC is simply a matter of desire, technology, and leadership determination. This study enhances the debate that understanding ABC as a decision-making framework is only possible with an understanding of finance, functional integration, and ERP cooperation in South African retail.

ABC has been shown to assist in the control of costs and the allocation of resources and improves strategic decisions which are crucial to operational effectiveness. Mungatana and Muthike (2024) showed how ABC reduces resource consumption and enhances operational output, whereas Bamidele and Ndlovu (2023) stated how ABC improves cross-functional collaboration which is driven by a common financial language. On the contrary, Kudanga, Nzuza and Stainbank (2023) have indicated that the ABC of some South African companies is hindered by a significant deficiency of integration between financial and operational data. The benefits of ABC cost management that are claimed are like those of the current study. The data supports that the value of ABC is the capacity to create a culture of accountability and positive operational behaviours. ABC also promotes administrative rationality by strong operational evidence and profitable linkage of operational activities, fosters financial

transparency, and governance of operational activity. The data indicates that ABC enhances governance and organisational learning by fostering adaptability, which are both crucial in the current competitive environment of retail.

Positive impacts such as with the implementation of ABC tend to be restricted to struggles. During the presentations, a couple of individuals mentioned high implementation costs, data integration issues, as well as employee resistance. For instance, Al-Dhubaibi (2021) stated that CBC can improve the quality of decision-making. ABC benefits. A case in point is the system integration, as the system is integrated and management supports its continuous integration. Similarly, Alsoboa and Aldalayeen (2020) showed most of the financial and technical barriers in developing economies are the very same barriers that hinder the adoption of ABC. The current study's findings are consistent with all of these, especially that technological gaps and initial resistance to change from the staff often hinder the adoption process of ABC. The ability of an organisation to invest in training, effective leadership, and incremental approaches to problem-solving tends to be the best predictor of the obstacles that can be overcome. The findings thus add to the ever-growing body of literature in this case confirming that within the organisation, the structural readiness together with behaviour alignment influences most the effectiveness of ABC.

The experience of ABC with retailers in South Africa indicates that success is attributed to masterful communication, continual capability refinement, and a reward-centric system that intertwines ABC with the organisational culture.

The conclusion drawn asserts that the seamless combination of ABC with the strategic management processes enables the firm to achieve cost efficiency and improved financial performance simultaneously. Kumar and Singh (2022) state that firms that adopt the ABC method experience an overwhelming boost in profit and savings due to accurate cost driver allocation. In the same way, Thottoli, Thomas and Ahmed (2023) advanced the premise that budgeting and profitability are rationally ABC-based, while Nair and Ghosh (2024) noted its infusion within the operational and business strategy framework. These findings substantiate the profitability results South African retailers achieve with ABC on hand. These retailers can save 6 to 10 percent annually, improve return on investment, and enhance overall budgets. ABC not only improves

equity in performance measures, enhances responsibility, strategic planning, and management of expenses through activity-based financial systems. These outcomes underline the unique ABC value that transcends control systems by serving as strategic intelligence to help organisations in translating operational efficiency into financial competitiveness.

4.7. QUANTITATIVE ANALYSIS AND DISCUSSION

4.7.1. DEMOGRAPHIC CHARACTERISTICS OF PARTICIPANTS

This section presents the respondents' demographic characteristics as a part of the study. Completing the demographic profile is helpful when analysing the result of the impact of Activity Based Costing (ABC) on cost efficiency among retailers in South Africa. The respondents' gender, age, level of education, and position in the company capture important aspects of the impact the structural characteristics of an organisation have on the integration and perceptions regarding the ABC system. This characteristic of the respondents also improves the validity and generalisability of the findings, as the respondents were selected from different levels of management in the retail sector, which enriches the discussion on the attitude an organisation holds towards cost management and financial efficiency.

4.7.1.1. Gender Distribution

The study indicates that there are more male respondents (59%) than female respondents (41%) which suggests that there is a male bias among managerial and accounting staff.

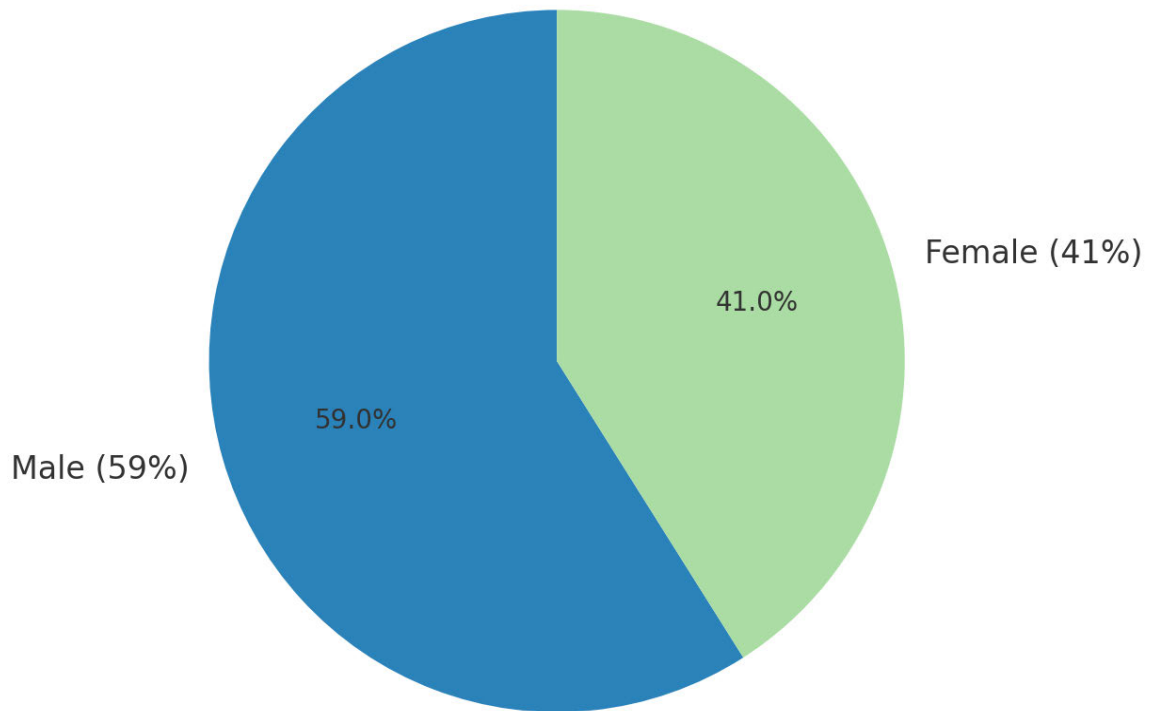


Figure 7: Gender Distribution of Respondents

The findings indicate that male representation remains higher in cost accounting and financial management roles, which aligns with previous evidence highlighting persistent gender disparities in finance-related professions. According to Mandipa and Sibindi (2022), male dominance in managerial accounting roles is reflective of broader structural imbalances within South Africa's corporate sector, where gender equality in finance and operations remains a developmental goal. However, the significant presence of women (41%) reflects progress towards inclusivity, suggesting that female professionals are increasingly contributing to analytical and strategic decision-making. This growing gender diversity enhances organisational perspectives on ABC adoption, promoting a balanced understanding of cost efficiency and ethical cost allocation. In evaluating this, the gender composition implies that the sector is gradually embracing equity, which may positively influence inclusive approaches to cost analysis and managerial innovation.

4.7.1.2 Age Distribution

The age composition shows a well-balanced distribution of respondents, with the majority aged 35–44 years (41%), followed by 45–54 years (36%), 25–34 years (18%), and only 5% aged 55 years and above.

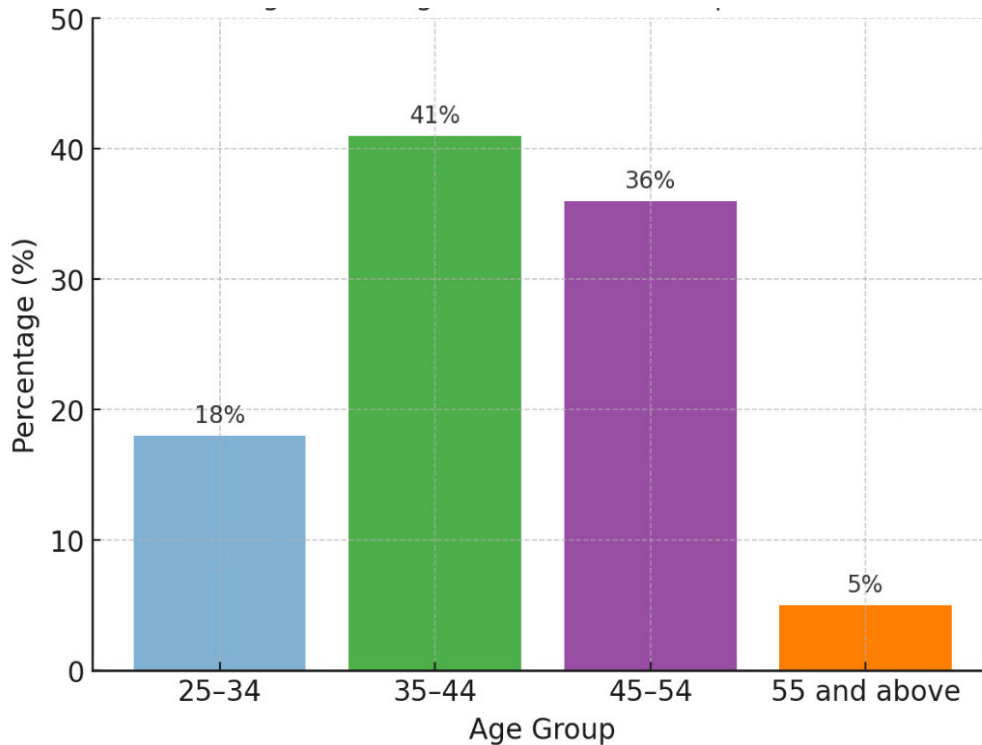


Figure 8: Age Distribution of Respondents

The data shows that 35 to 54-year-olds who make up the bulk of the demographics, sitting within the middle to senior tier of management, are well-versed in cost control and budgeting. This aligns with the findings of Kudanga, Nzuzwa and Stainbank (2023) which stated that professionally middle-aged people are more likely to support ABC because of their reasonable quantifiable technical skills and a more narrowed strategic perspective. The 18% of the younger respondents seems to point to a lack of any sophisticated costing systems early in their professional lives. Conversely, the small segment of 55 and older respondents seems to imply that the highly motivated professionals who can consistently implement ABC in their mid-careers are the ones who actively do so. The age distribution lends more credence to the belief that the ability to optimally manage retail operational costs and financially mature is grossly predictive of a given organisation's ABC experience.

4.7.1.3 Highest Educational Qualification

The respondents' highest education levels showed 40% Master's, 36% Bachelor's, 19% Diploma, and 5% Doctorate.

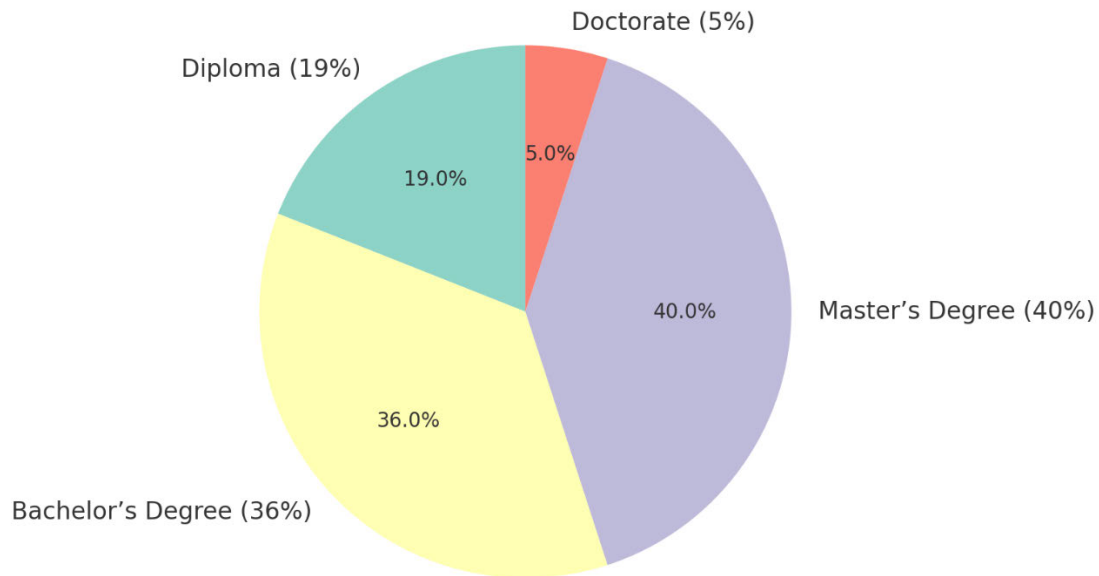


Figure 9: Highest Educational Qualification of Respondents

Many of the participants hold postgraduate qualifications which indicates the presence of a well-educated managerial staff in the South African retail industry. As noted by Agbozo and Asamani (2020), the capacity to perform sophisticated financial evaluations is directly proportional to the level of education one has. Such evaluation skills are crucial in the use of sophisticated costing systems such as Activity Based Costing (ABC). Moreover, Oyewo, Hussain and Simbi (2022) argue that a more academically qualified workforce is more inclined to embrace advanced innovations in cost management due to a better understanding of strategic accounting and evidence-based decision making. Even though the percentage of respondents with a doctorate is only 5, it still indicates the presence of some level of specialised knowledge that can aid in evidence-based reforms to cost management. These educational patterns suggest that publicly listed South African retailers can provide above market salaries to professionals with strategic and technical understanding of ABC, which enhances cost efficiency results from its use.

4.7.1.4 Current Position in Organisation

Participants' current positions were categorised as follows: 30% were Cost Accountants, 26% Financial Managers, 24% Operations Managers, 15% Chief Financial Officers (CFOs), and 5% held other roles.

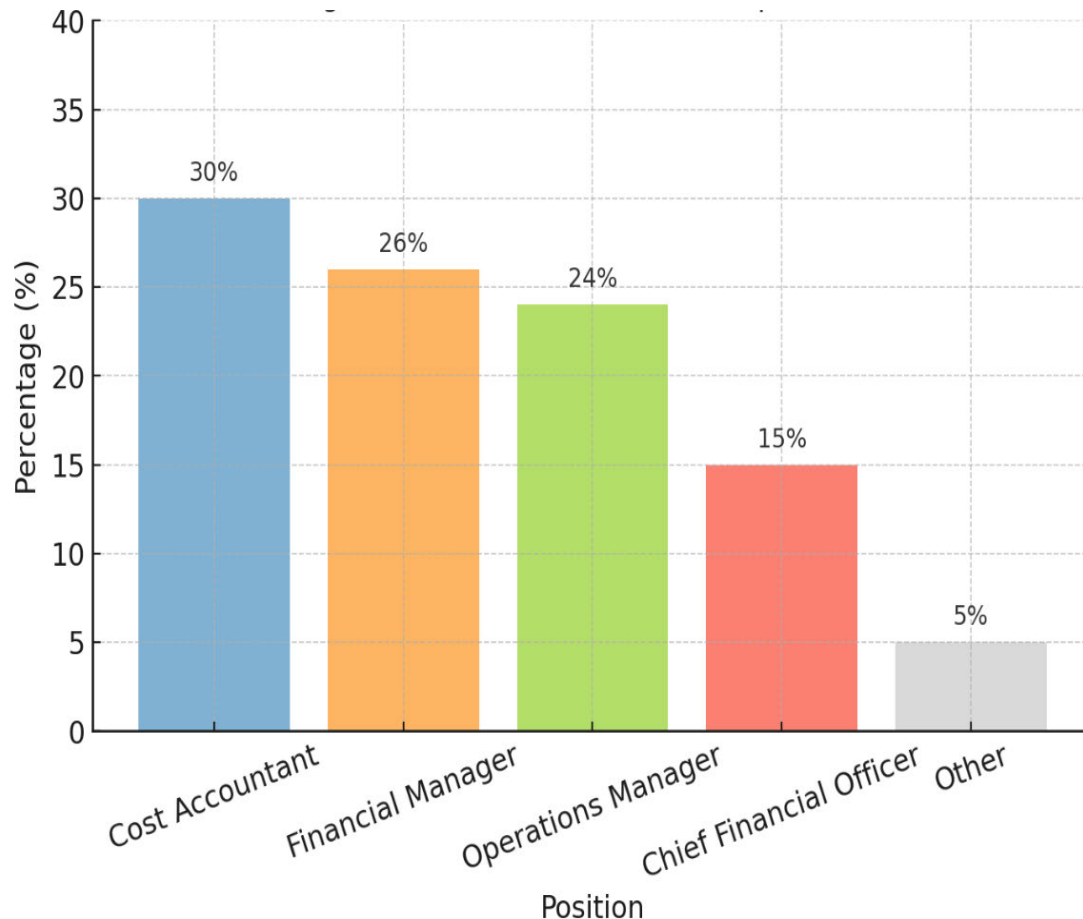


Figure 10: Current Position of Respondents

The findings suggest that a larger portion of the respondents perform crucial financial and operational management functions, thus, directly participating in cost planning and allocation. In the opinion of Matoke, Maendo and Nyangau (2024), cost accountants and financial managers play vital roles in weaving the performance systems cost and pricing system, ensuring that cost and pricing systems, the ABC model, and performance control and pricing decisions are woven into a pricing and performance system silk of ABC and pricing and performance control and pricing decisions. Similarly, the diversified managerial aspects of accounting, finance, and operations are essential in ensuring that the cost data and the company's strategic objectives are

synchronised (Hossain and Hasan, 2024). The 15 percent representation of the CFOs and other top management staff also supports the findings, since they are the policymakers of the company, and thus, formulate the policy on economic efficiency of the company. The different managerial levels integrate my). ABC's operational and strategic relevance aligns with the varied insights this study aims to achieve, ensuring that perspectives on ABC's effectiveness are not confined to the tactical management of retail operational costs.

4.7.2 DIFFERENCES BETWEEN ACTIVITY-BASED COSTING AND TRADITIONAL COSTING METHODS

4.7.2.1. Perceived Accuracy and Reliability of Cost Information

The participants viewed ABC's Informational Superiority positively; 88% expressed that ABC provides accurate cost information (Mean=4.23) and 78% acknowledged that cost distortion is a problem with traditional costing (Mean=3.99). In each case, the most typical answer was 4 and the range was modest (SD=0.78 and 0.93), meaning that a strong single answer emerged among practitioners who have encountered complex retail costing. Traditional volume-based costing allocates too simplistically among the many activities in a process (promotion, replenishment, last mile delivery, etc). For listed retailers, the extra agility from activity bundles enables detailed product, channel, and customer profitability visibility for tighter cost control. ABC's defining claims appear to be based on demonstrable propositions about resource consumption and the modern retail activity system.

Table 3: Accuracy and Reliability—ABC vs Traditional Costing (n = 100)

Item	%1	%2	%3	%4	%5	Mean	SD	Mode	% Agree (4–5)
ABC provides more accurate cost information	1.0	2.0	9.0	49.0	39.0	4.23	0.78	4	88.0
Traditional costing distorts product costs	2.0	6.0	14.0						

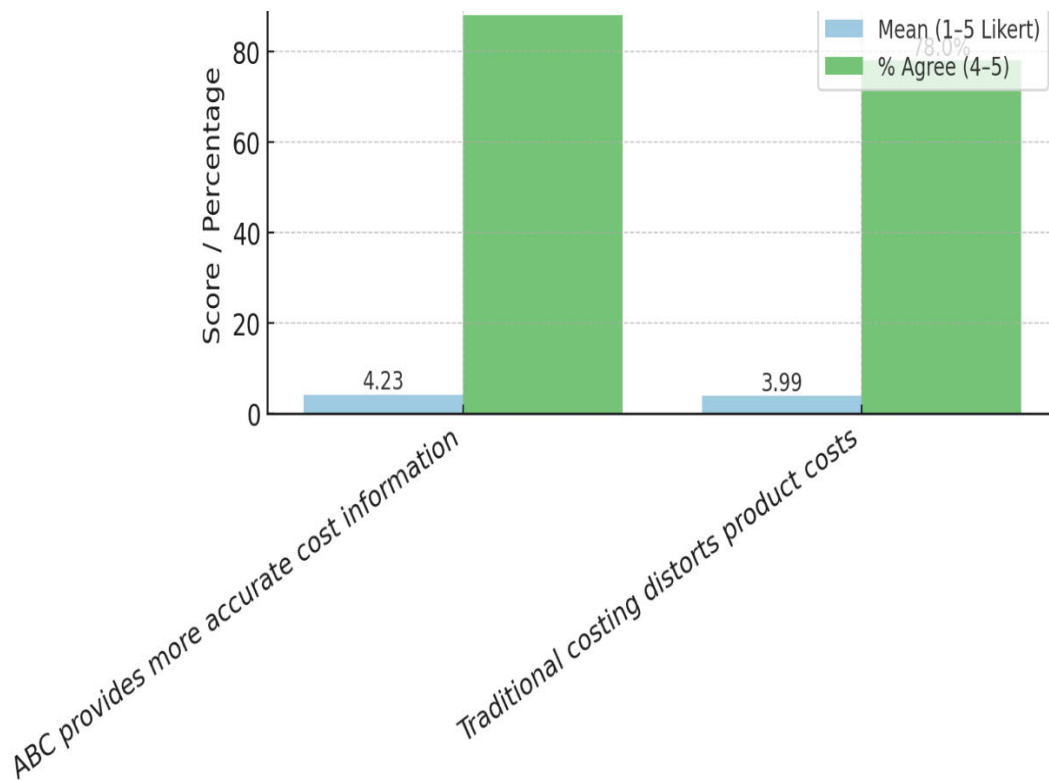


Figure 11: Accuracy and Reliability ABC vs Traditional Costing (n = 100)

The table 3 shows that the respondents realise that ABC produces more accurate reports compared to the traditional methods which tend to misstate the costs of a product or service in the service and retail portfolio. The 10-point gap in ABC agreement, 88% vs 78%, suggests that respondents did not view ABC as simply different, but materially better at eliminating cross-subsidisation that occurs from blanket overhead rates. The means centred at or above 4.0, narrow standard deviations, and overall distribution reflect strength in the judgments about the information and the degree of consensus in those judgments. From a practical perspective, practitioner confidence suggested ABC's resource-to-activity mapping improves the traceability and auditability of indirect costs across SKUs and formats. These findings bolster previous empirical and conceptual work which argue that ABC offers greater relevant costs for decision-making compared to broad volume drivers when there is considerable variation in activities across products and channels (Noreen, 1991). Evidence from contemporary retail settings similarly reports that detailed tracing of costs in ABC strengthens the case for price, assortment, and service level decisions which reduce hidden cross-subsidies (Agbozo and Asamani, 2020). The current study contributes sector-specific evidence from listed South African

retailers to the growing body of work which identifies the perceived reliability of information as a distinct feature of ABC in practice.

4.7.2.2. Managerial Decision-Making and Cost Driver Identification

On cost-driving entities and improved managerial decisions, there is strong agreement about the after-shift decisions (Mean = 4.21; 88% agree/strongly agree and Mean = 4.11; 84% agree/strongly agree). Both items had a score of 4 as the mode, with low dispersions (SD = 0.78 and 0.83), suggesting that the centred evaluations are solid within and across roles and firms. This indicates the value that ABC adds in layering the activity intensity by channel, store format, and fulfilment path, and honed the relevant margin protection levers. It notes the combination of high means and agreement rates which suggest recognition of not only ABC’s analytical prowess, but also the value downstream for process redesign, vendor terms, and service differentiation. Put differently, ABC is portrayed through the data as a decision-support system and not only as a cost-technical revision.

Table 4: Decision-Support and Cost Driver Identification (n = 100)

Item	%1	%2	%3	%4	%5	Mean	SD	Mode	% Agree (4–5)
ABC improves identification of cost drivers	1.0	3.0	8.0	50.0	38.0	4.21	0.78	4	88.0
Transition to ABC improved managerial decisions	1.0	3.0	12.0						

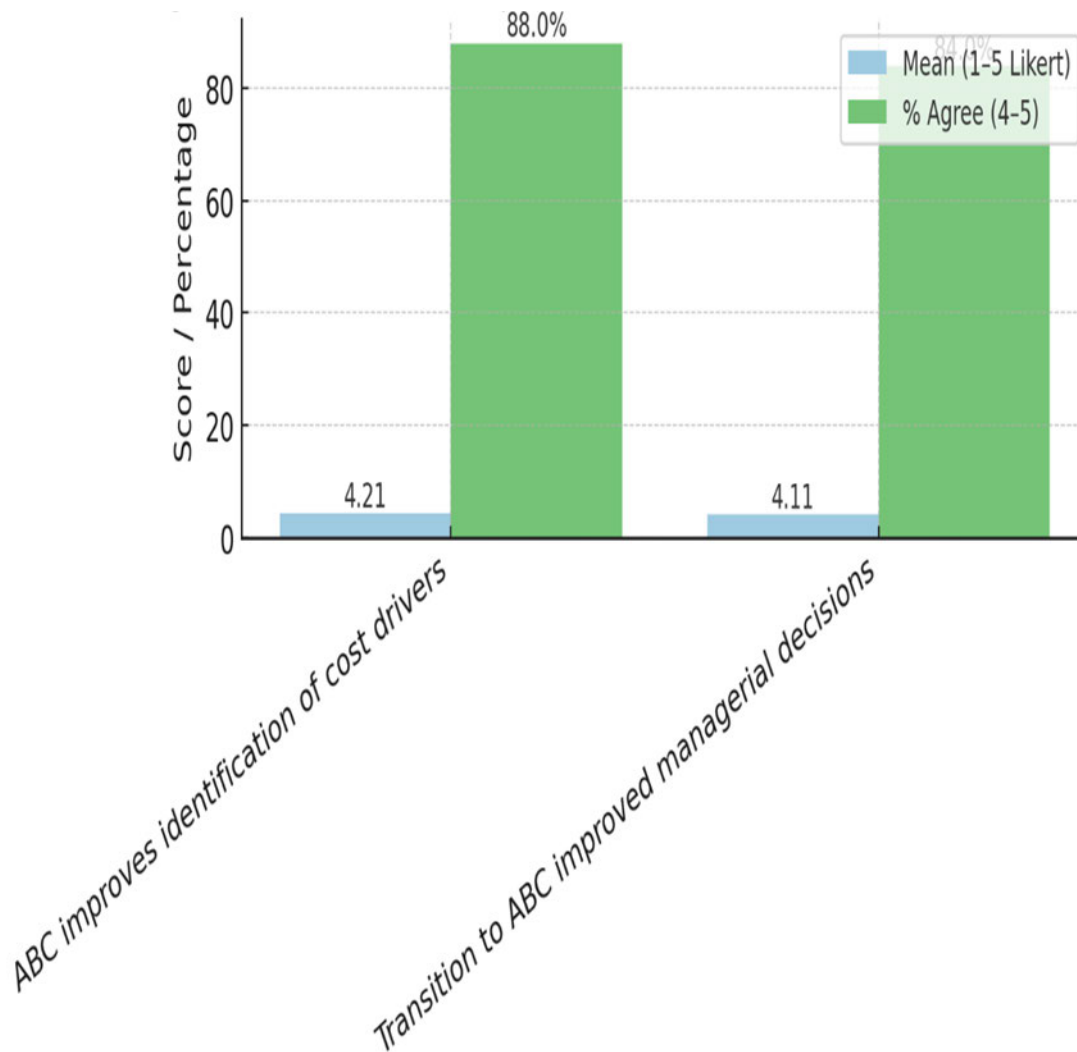


Figure 12: Cost Drivers and Managerial Decisions

The data presented in the graph indicates that respondents linked ABC’s analytic granularity directly to the quality of choices made by decision makers. 88% perceiving better cost-driver visibility speaks to ABC’s diagnostic function in structural cost avoidance and in trade-off quantification across activities. The 84% agreement that managerial decisions improved after the transition indicates that the benefits were not limited to the finance function but extended to operations and commercial planning as well.

Such evidence complements the studies demonstrating that the activity equations and time-parameters of ABC better integrate costing with operational decision-making, especially in lean and high variety situations (Hoozée & Hansen, 2020). Earlier South African evidence also suggests that well-designed ABC shifts the focus of strategic conversations about pricing and process performance to the actions of senior

managers who engage the outputs (Sartorius, Eitzen & Kamala, 2007). The current data adds to evidence that ABC's retail value proposition lies in uncovering actionable cost drivers which significantly improve the quality and timeliness of managerial decisions.

4.7.2.3 Alignment of ABC with Modern Retail Operations

Respondents suggest that there is a good alignment between ABC activities and contemporary retail practice (Mean = 4.09; 82% agree/strongly agree; Mode = 4; SD = 0.79). This means that advanced practitioners see ABC as appropriate for the complexity, promotional intensity, and service-level differentiation endemic to omnichannel listed retailers. The central tendency being positive indicates that ABC's constructs activities, drivers and resource consumption vis-a-vis e-commerce fulfilment, click-and-collect, returns handling, and assortment localisation is a coherent mapping. This type of alignment is critical, because method-process fit conditions whether costing information can be operationalised for performance improvement.

Table 5: Alignment of ABC with Modern Retail Operations (n = 100)

Item	%1	%2	%3	%4	%5	Mean	SD	Mode	% Agree (4–5)
ABC aligns with modern retail operations	0.0	4.0	14.0	51.0					

While multi-customer journey fulfilment pathways are underway, practitioners remain confident that ABC will cope with the operational realities of digital transformations. The cluster at response levels 4-5 indicates that respondents believed ABC to be sophisticated enough to capture complex multi-set activities without reducing them to averages. Therefore, ABC outputs are augmentable with KPI dashboards on store, DC, and last-mile performance, and service and cost outcomes integration are accessible to the teams.

This further corroborates the argument that the variety-holding cost systems configured for workload drivers by channel benefit the data-rich processes of the modern retailer (Gauri et al., 2021). This further supports the notion that continuous visibility of activity costs and erosion herding is broken (Zahari, Zakaria & Yusoff,

2021). These current findings prove that digitising retailers is achieved by ABC’s architecture if the evolving processes are incorporated into the activity models.

4.7.2.4 Reliability and Internal Consistency of Scale

The RQ1 scale exhibited strong measurement quality. Corrected item–total correlations fall between 0.558 and 0.687 while Cronbach’s α stands at 0.839, both well ahead of benchmark levels for research tools developed within organisational contexts. Items pertaining to accuracy, distortion under traditional costing, cost-driver identification, as well as decision improvement and operation alignment, all load well on the underlying construct. This suggests respondents viewed the set of statements as logically connected to “ABC vs traditional” differentiation. Once again, high internal consistency supports the validity of the inferences made on the composite mean (4.13) and the agreement rate (84%).

Table 6: Reliability Item–Total Correlations and Cronbach’s Alpha (RQ1)

Item	Corrected Item–Total r
ABC provides more accurate cost information	0.676
Traditional costing distorts product costs	0.558
ABC improves identification of cost drivers	0.687
Transition to ABC improved managerial decisions	0.655
ABC aligns with modern retail operations	0.596
Cronbach’s α (scale)	0.839

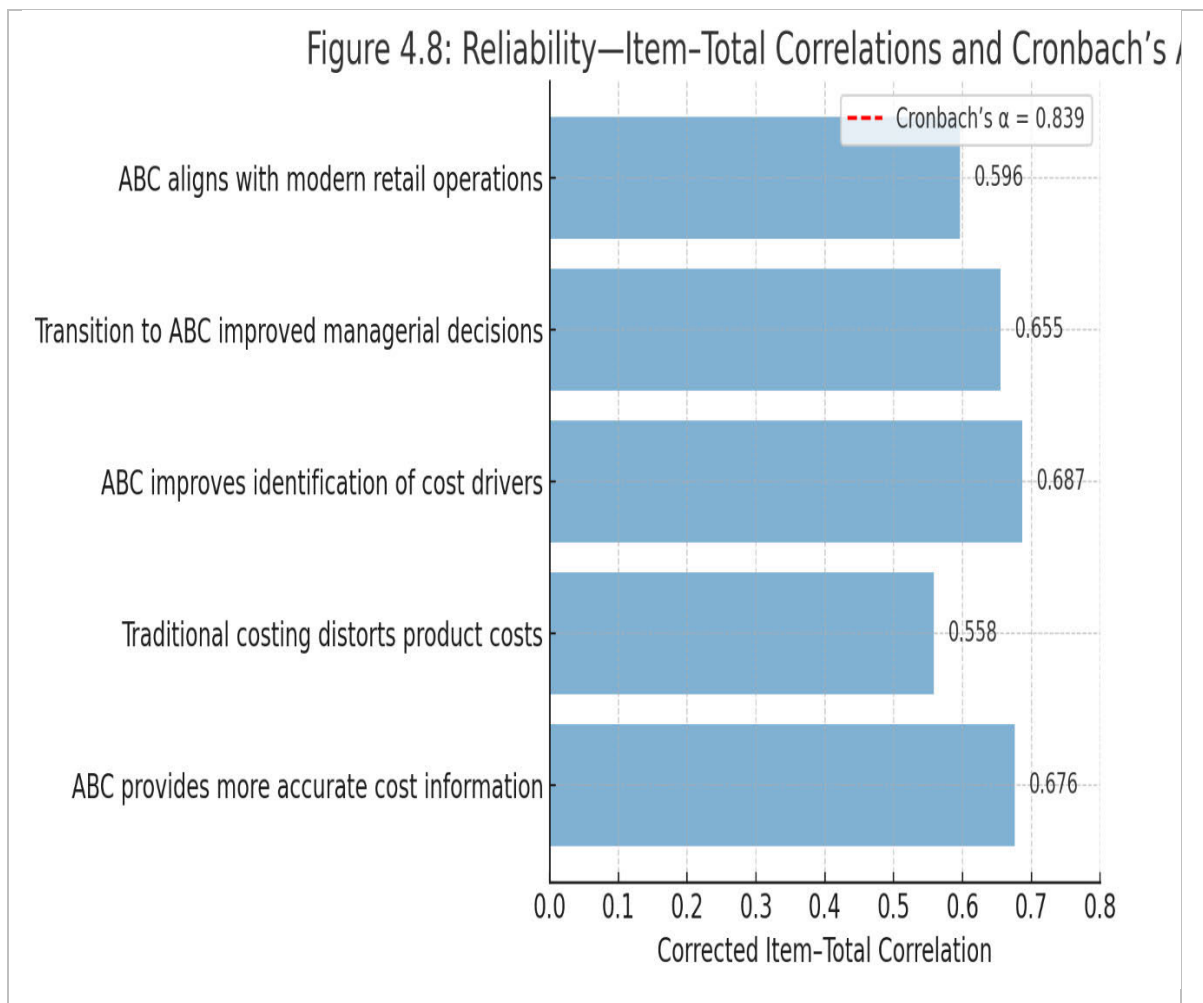


Figure 13: Reliability—Item-Total Correlations and Cronbach's Alpha (RQ1)

The metrics in Figure 13 suggest respondents view ABC as superior without random error arising from respondent heterogeneity. Such coefficients compare favourably with psychometric benchmarks for multi-item managerial scales employed in field research. Strong reliability bolsters the subsequent linkage between perceptions in RQ1 and downstream consequences discussed in later sections of the chapter. Typically, psychometric literature ascribes lower bounds for early-stage constructs and applied research as $\alpha \geq 0.70$ and ≥ 0.80 , respectively (Jobst, Bader and Moshagen, 2023). Such reliability is critical to the system design and investment in system-integrated cost analytics (Banker and Byzalov, 2018). Therefore, the RQ1 scale is precise enough to derive managerial recommendations regarding the South African retail research.

4.7.3 BENEFITS AND PRACTICAL CHALLENGES OF IMPLEMENTING ABC

4.7.3.1. Perceived Organisational Benefits

Responses suggest ABC enhances informational quality for governance levers in the analysed listed retailers. For both cost accuracy (Mean = 4.17; 85% agree/strongly agree; SD = 0.80; Mode = 4) and transparency/accountability (Mean = 4.18; 87% agree/strongly agree; SD = 0.78; Mode = 4) emphasis is placed on the positive end of the scale. The small range indicates alignment in opinions across positions and supports the interpretation of ABC providing detailed insights into overhead consumption activities and cross-allocated burdens. These responses stand out in complex omnichannel ecosystems wherein replenishment, promotions, click-and-collect, and returns create diverse workflows obscured by generic throughput metrics. Respondents in this case connect ABC's traceability with clearer lines of responsibility over controllable cost drivers, implying tighter budgetary control and more reliable variance analysis. These combinatorial characteristics in sum reinforce the impression of ABC as a governance-enhancing rather than an allocation refinement system.

Table 7: Perceived Organisational Benefits of ABC (Section C: C1–C2, n = 100)

Item	%1	%2	%3	%4	%5	Mean	SD	Mode	% Agree (4–5)
ABC improved accuracy of product/service costing	1.0	2.0	12.0	49.0	36.0	4.17	0.80	4	85.0
ABC enhanced transparency and accountability	1.0	2.0	10.0	52.0	35.0	4.18	0.78	4	87.0

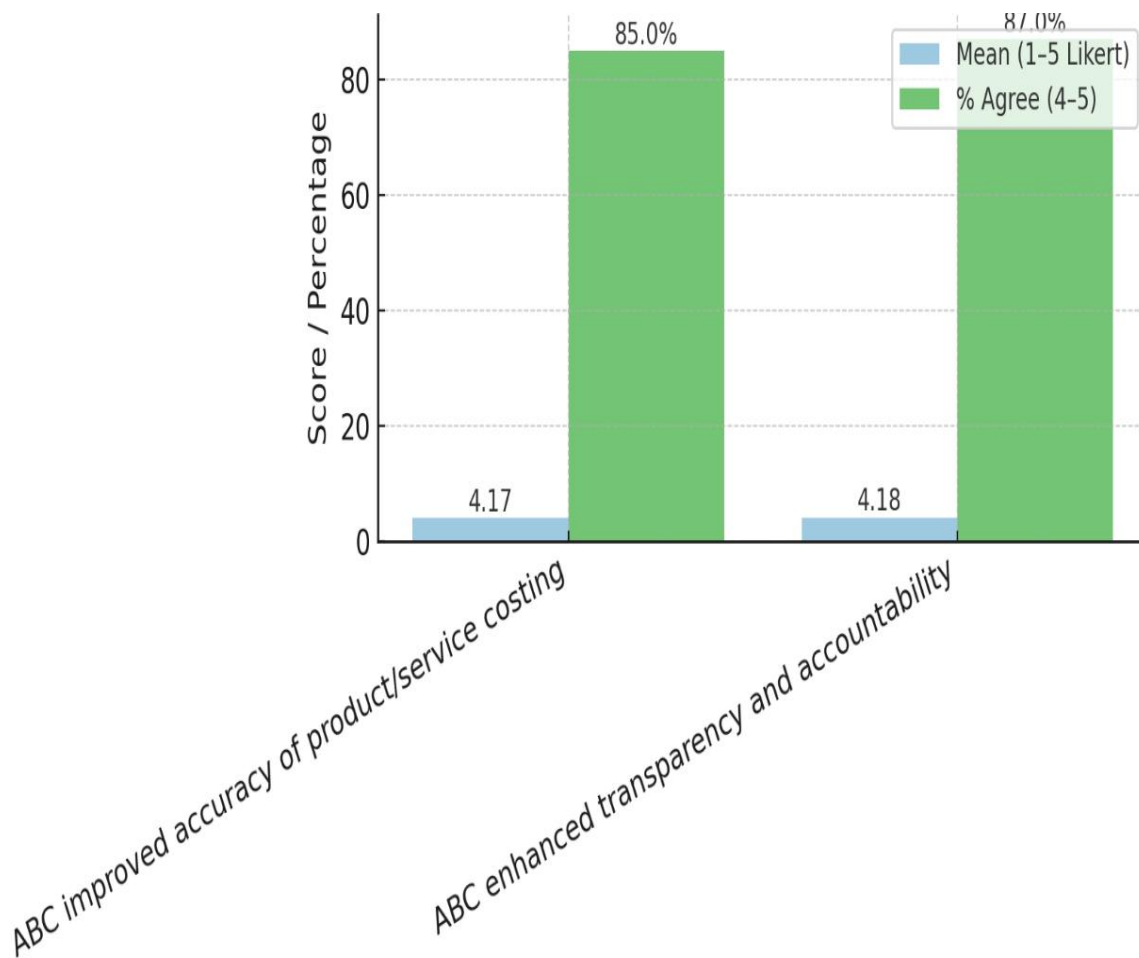


Figure 14: Perceived Organisational Benefits of ABC

The graph supports measuring precision and organisational visibility of ABC's and visibility of the respondents supports a case for benefits of transparency. Reduction of cross-subsidies on cost ownership spread across stock-keeping units, formats and channels of the value chain. High means of strong agreement and positive perceptions go well beyond the finance professional. The visibility and relevance decisions of ABC that have the greatest value conclude these statements and the cross-subsidies on resource ownership of Bankers and Buzsalov. The phenomena in retail description by Agbozo and Asamani in 2020 offers further evidence in support of the value perceptions of respondents studying previously researched ABC data and value perception on South African publicly traded retailers.

4.7.3.2 Organisational and Technical Barriers

Even though the benefits are noticeable, the respondents point out the major drawbacks of adoption still. Employee resistance mean value (3.84; 71%

agree/strongly agree; SD = 1.03) is much greater than the integration system barrier (Mean = 3.82; 69% agree/strongly agree; SD = 1.00) and both shows greater variance than the beneficial items, indicating varied experiences of differing organisations. These distributions are indicative of the friction of managing change and aligning IT as the dominant barriers to integrating ABC models into current ERP and data frameworks. The degree of consensus indicates that barriers are indeed encountered by the majority, yet the mean is still above neutral, suggesting that the barriers, while significant, are still deemed as solvable with the right sponsorship and configuration.

Table 8: Organisational and Technical Barriers to ABC (Section C: C3–C4, n = 100)

Item	%1	%2	%3	%4	%5	Mean	SD	Mode	% Agree (4–5)
Employee resistance is a significant barrier	3.0	8.0	18.0	44.0	27.0	3.84	1.03	4	71.0
Technical integration challenges hinder adoption	2.0	9.0	20.0	43.0	26.0	3.82	1.00	4	69.0

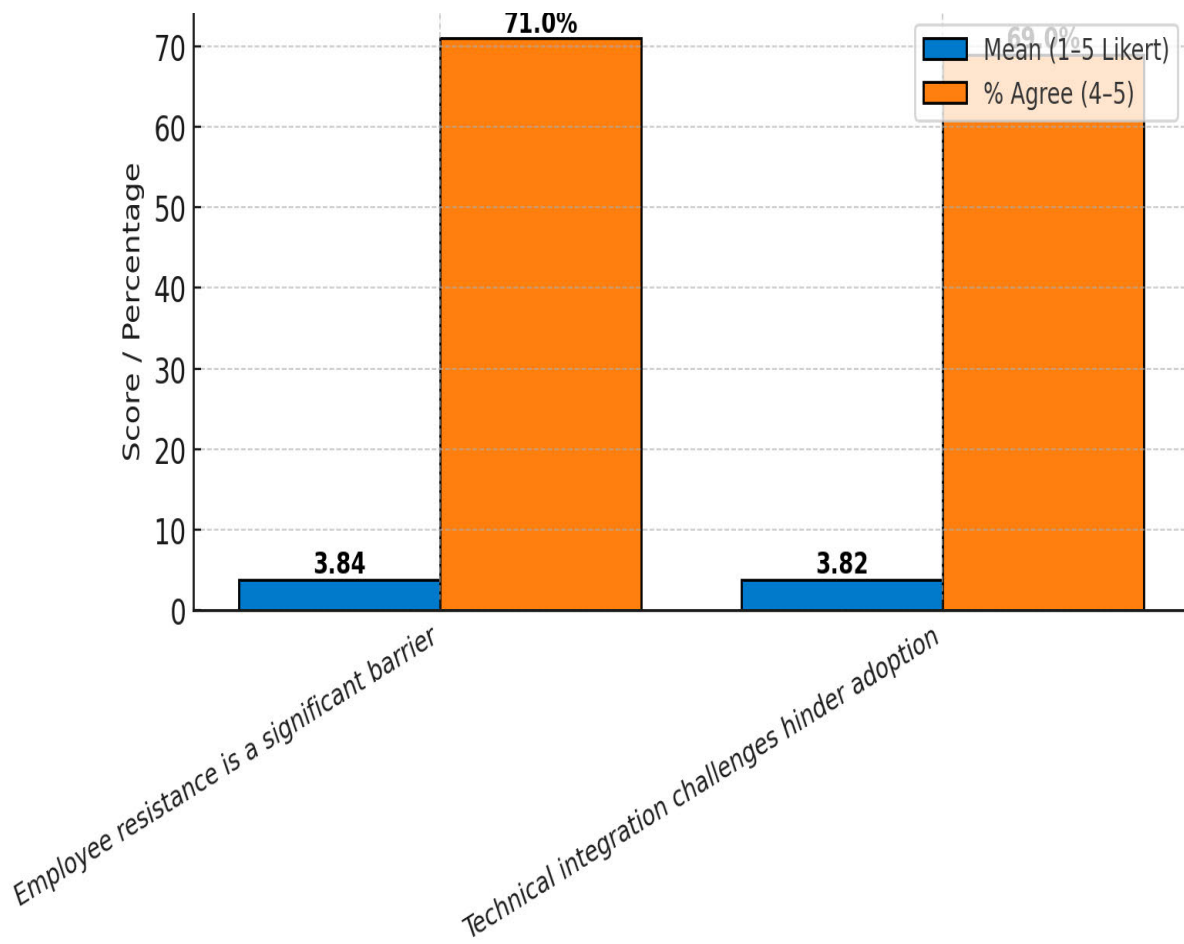


Figure 15: Organisational and Technical Barriers to ABC

The graph corroborates that both people-related and technology-related constraints are apparent, as characterised by heavier SD tails ($SD \approx 1.0$) associated with differences in organisational readiness and systems maturity. In summary, there is a broad consensus that barriers exist; however, barriers experienced are context dependent and differ based on legacy platforms and data governance. This accords with South African and international studies that have identified ‘cultural pushback data availability’ and ‘ERP alignment’ as persistent barriers to ABC’s institutionalisation (Sartorius, Eitzen and Kamala, 2007). Similar studies in higher education and the public sector highlight the barriers posed by capability gaps and integration complexity in delaying value realisation (Kudanga, Nzuza & Stainbank, 2023). Therefore, the current evidence contributes to a wider narrative: ABC is technically successful and stalls; however, there is always a lack of structured change management and systems integration coherence.

4.7.3.3. Role of Management Support and Training

Respondents assign the strongest endorsement to managerial support and training as critical success factors (Mean = 4.26; Mode = 5; 88% agree/strongly agree; SD = 0.83). The right-skewed distribution underscores that sponsorship, capability building, and user education are perceived as decisive in unlocking ABC's promised gains. High agreement coupled with a Mode of 5 suggests many decision-makers perceived value when leaders advocated for the methodology, configured data pipelines, and consolidated learning cycle sponsorship. In practice, these conditions streamline model maintenance, enhance the calibration of cost drivers, and integrate ABC outputs into dashboards and planning routines.

Table 9: Critical Success Factor—Management Support and Training (Section C: C5, n = 100)

Item	%1	%2	%3	%4	%5	Mean	SD	Mode	% Agree (4–5)
Management support/training are critical	1.0	2.0	9.0	46.0	42.0	4.26	0.83	5	88.0

Greater focus towards the upper bands of the Table 9 indicates that respondents recognise ABC as a socio-technical system that needs continuous leadership focus coupled with practical training pathways and interdisciplinary integration. The degree of dispersion in responses still seems modest which indicates that there is a broad alignment of views irrespective of organisation borders. Previous research indicates that in top-down diffusion of ABC under the guidance of user sponsors supports training the system integration and using integration aids (Nair and Tan, 2018). Research on the complementarity of ERP and ABC systems underscores that executive leadership substantially shrinks the time and effort needed for data unification of routine activity reporting which improves cost insight utilisation (Zahari, Zakaria and Yusoff, 2021). This study underscores the alignment of managerial support with the rest of the literature which suggests that the developed capabilities are the main factor through which the benefits surpass the friction originating from the implementation.

4.7.3.4 Reliability and Consistency of Findings

The resource/reward balance construct has strong reliability, with Cronbach's alpha over 0.823 and item–total correlations from 0.451 to 0.644, which demonstrates adequate unity without duplication. The reliability coefficient exceeds the 0.70 cut-off commonly applied in research concerned with organisational practice, which strengthens the inferences on perceived benefits, barriers, and critical enablers abstracted from open-ended responses. The discrepancies noted with barriers, together with the observed internal consistency, suggest these constraints 'barrier' still bond together at a statistical level as a unitary evaluative domain on the quality of ABC implementation.

Table 10: Reliability Benefits/Challenges Scale (Section C, n = 100)

Item	Corrected Item–Total r
ABC improved accuracy of product/service costing	0.644
ABC enhanced transparency and accountability	0.636
Employee resistance is a significant barrier	0.451
Technical integration challenges hinder adoption	0.458
Management support/training are critical	0.535
Cronbach's α (scale)	0.823

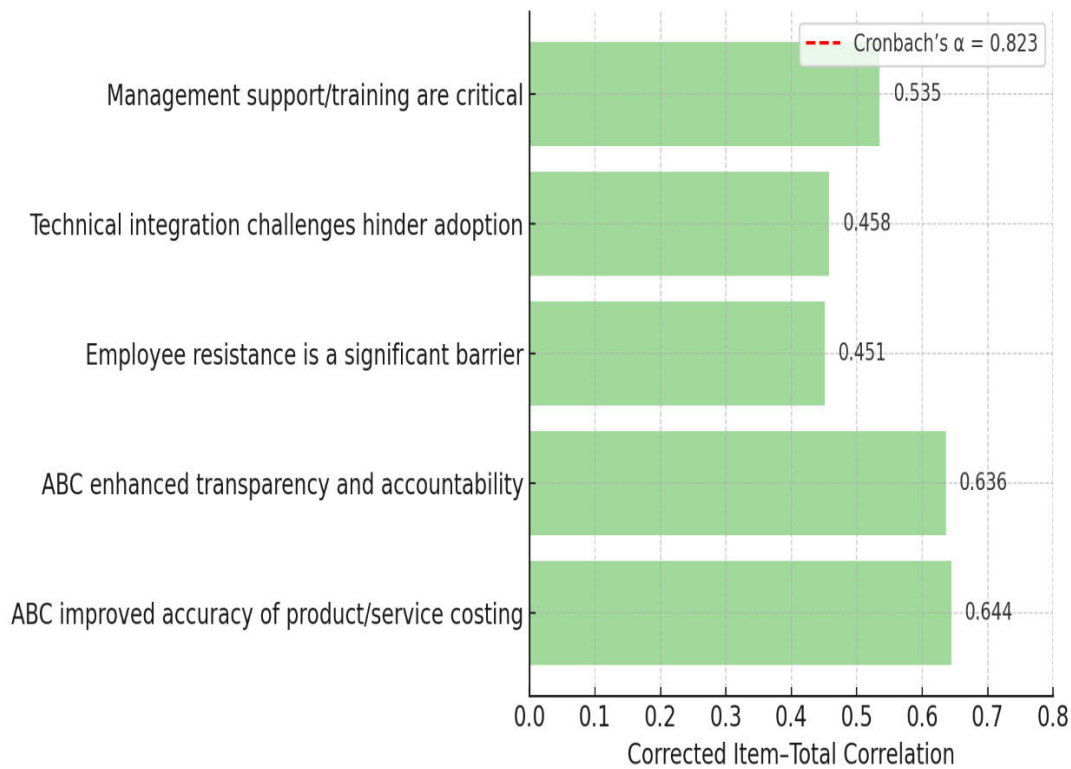


Figure 16: Reliability Benefits/Challenges Scale

The reliability statistics affirm the internal validity and suggest that the instrument measures an underlying construct which respondents from diverse backgrounds share. This internal consistency justifies the composite meaning attribution in which perceptions in Section C are linked to the efficiency outcome in Section D. Methodological advice considers $\alpha \geq 0.80$ to indicate satisfactory reliability in managerial field studies, thus increasing the estimate's precision and the value of the cross-sectional evaluations (Jobst, Bader & Moshagen, 2023). Consequently, the results are reliable enough to guide managers in the order of support, training, and systems integration to achieve maximum ABC payoffs (Banker & Byzalov, 2018).

4.7.4. CONTRIBUTION OF ABC TO COST EFFICIENCY AND FINANCIAL OUTCOMES

Scoring of the efficiency scale having surpassed the 4.0 threshold and straying no lower than 4.0 means there is affirmation for all the topics. Section D covering all the topics has support in the 80%-86% range. Strongest means consensus is for budgeting and forecasting (Mean=4.22; 86% agreement) with consensus close behind for identification/elimination of non-value activities and for enhanced resource

utilisation (Means=4.15; 84% agreement each). Perceptions of measurable cost reductions (Mean=4.08; 82% agreement) and strengthened margins, by perceptions (Mean=4.07; 80% agreement) hold, but with lower agreement, suggesting cost disparity across retailers, (SD \approx 0.85–0.88) is higher. It is expected that ABC's main contribution is with process visibility which in turn feeds planning quality and utilisation discipline, while financial results materialise in tandem with operational improvements. The results support the shift in theory that correlates the process of activity-level tracing and cost relevancy in multi-channel retail settings, thus managerial control becomes less strained (Banker and Byzalov, 2018).

Table 11: ABC's Contribution to Cost Efficiency and Financial Outcomes (Section D, n = 100)

Item	%1	%2	%3	%4	%5	Mean	SD	Mode	% Agree (4–5)
ABC identifies/eliminates non-value activities	1.0	3.0	12.0	48.0	36.0	4.15	0.86	4	84.0
ABC reduced operational costs measurably	1.0	4.0	13.0	49.0	33.0	4.08	0.88	4	82.0
ABC supports budgeting and forecasting	1.0	2.0	11.0	45.0	41.0	4.22	0.85	4	86.0
ABC enhances resource utilisation/productivity	0.0	3.0	13.0	50.0	34.0	4.15	0.77	4	84.0
ABC strengthens financial performance/margins	1.0	3.0	16.0	48.0	32.0	4.07	0.87	4	80.0

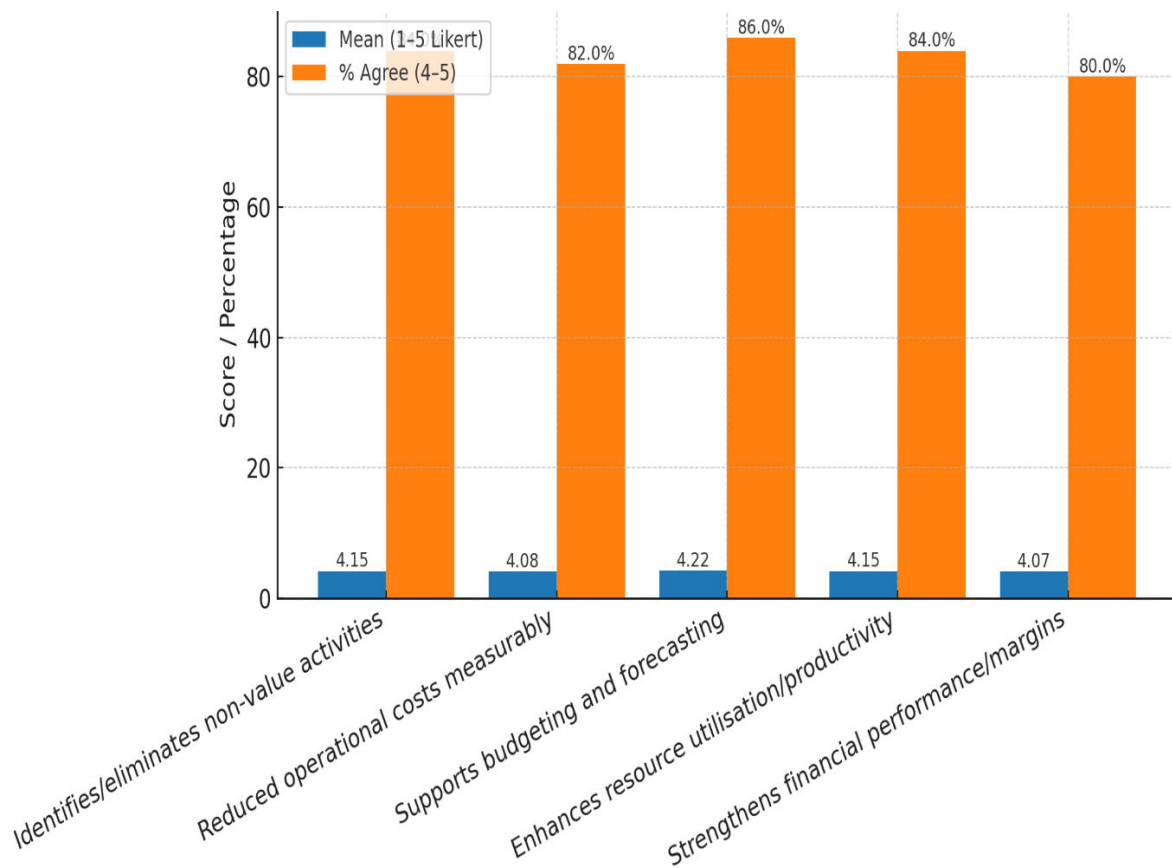


Figure 17: ABC's Contribution to Cost Efficiency and Financial Outcomes

It demonstrates having an effective efficiency profile coherence: Respondents perceive ABC as helpful in surfacing waste, tightening utilisation, and enhancing planning. Downstream cost and margin effects flow from these fundamentals. The clustering of modes at 4 and the high regard agreement levels suggest that these gains and their impact are widely distributed across levels and strata of the sample. More importantly, the still lower but positive scores on 'cost reductions' and 'margins' indicate a plausible sequencing: first, gains are the outcome of 'process and planning' benefits, and subsequently, after having embedded the models in action, financial gains in impact emerge.

4.7.4.1. Efficiency Gains through the Elimination of Non-Value Activities

Respondents of the study indicate high endorsement that 'ABC helps in identifying and eliminating activities that do not add value' (Mean = 4.15; 84% agreement). This is in line with other studies that have shown activity-centred analyses shine a light on handling, rework, and servicing channels that the so-called overhead rates obscure and are, therefore, candidates for simplification and leaner flows (Hoozée & Hansen,

2020). It is also shown in other research that improvements in productivity are obtainable when systems of time and motion, or activity-based costing, are used in the reengineering of processes and resource-managed workload driver systems (Effiong & Akpan, 2019). In this case, retail systems respondent to 'fulfilment, returns, and promotion support' add to variability that can be illuminated with ABC, and high agreement resonates with the analysis. Thus, it seems that the primary outcome of ABC concerning retailing is the need to identify processes that require standardisation and simplification of procedures.

4.7.4.2. Reduction of Costs Associated with Routine Activities

Respondents report a tangible reduction of the costs, with a mean score of 4.08 and 82% of the respondents agreeing, thus further confirming the association between visibility and the need to restrain spending. Evidence obtained from other countries suggests that companies that use ABC have less overhead creep because of better alignment of resources with the cost drivers, and the elimination of cross-subsidisation in cost to serve (Pham et al., 2021). Other studies also demonstrate that ABC, when coupled with the analysis of more product and customer profitability, improves margin discipline (Zaman, 2009). These findings align with the current results, however, the processes with which the respondents reported lower means suggest that the savings are a function of execution, that is, management must respond to the ABC signals to achieve the reductions that have been quantified. Such a pattern of events is logical in the context of retail where cost information can lag procurements regarding the costs of cross-subsidisation of services, or the overhead labour in scheduled processes.

4.7.4.3. Enhancements in Resource Allocation, Budgeting, and Forecasting

Streamlining ABCs of a business improves planners services. The resource allocation which has the highest mean 4.22 is with budgeting and is from the strong sentiment about resource spend of 4.15. Prior literature demonstrates how activity-based models have improved the realism and accountability of rolling forecasts and performance dashboards by linking volumes, service levels, and cost drivers (Susilowati, 2023). Related literature emphasizes the importance of cost-based decision-support systems for translating driver dynamics into operational control and scenario testing KPIs (Psarommatis et al., 2022). Cost-based systems likely caused survey respondents to

focus on the discipline of planning quality and discipline as the primary stressors. The planning process seems to include ABC information which is generally disregarded as simply retrospective allocations.

The one-dimensionality of the five scale indicators on which the discipline of quality planning has been positively stressed on, and practically measured by, is demonstrated by the high internal consistency score of the overall scale (adjusted score 0.868). Cronbach's alpha a priori is considered sufficient threshold for reliability in organisational studies as ranging between $\alpha \geq 0.80$. This strengthens the hypothesis that differential gaps are not gaps caused by error (Aung, Razak & Nazry, 2021). In addition, more recent contributions to the literature on adaptation scaling assert that all internal structuring supports a strong practical interpretation of composite results (Du, 2024). Thus, the self-evident reliability demonstrated here bolsters the inferential claim that ABC, in isolation, correlates with value and financial value. Furthermore, the evidence of the scale's discriminant ability to differentiate among subgroups supports its applicability as a perception of the strategy integration instruments outlined in Section E.

4.7.5 INTEGRATION OF ABC METRICS INTO STRATEGIC AND FINANCIAL PLANNING

In Section E, the strategy scales central tendencies are less pronounced than the efficiency means, with means roughly between 3.82 to 4.09, with an 69-82% agreement. Contrary to consensus agreement, policymaking strategic planning/policy functions lie just above the midpoint. Integration into KPIs and Sector Benchmarking, however, received means of 4.09 and 4.08, with 82% and 81% agreement, respectively, which demonstrates much greater endorsement. Routine strategic reviews have a mean of 3.82, with 69% consensus agreement, which associates the linkages to maturing rather than fully institutionalised use with sustainability and innovation. Here, dispersion is marginally higher $SD \rightarrow 0.85-0.98$. This dispersion relates to uneven strategy and analytics of listed retailers of which respondents depict ABC to be more so than the rest embedded deeply into operational control. This is more than policy processes, which respondents suggest are more typical of environments in which decision rights and data ownership are only local rather than enterprise-wide functional distributions (Banker and Byzalov, 2018).

Table 12: Integration of ABC into Strategic and Financial Planning (Section E, n = 100)

Item	%1	%2	%3	%4	%5	Mean	SD	Mode	% Agree (4–5)
ABC used in strategic planning/policy	2.0	7.0	19.0	47.0	25.0	3.86	0.95	4	72.0
ABC in KPIs enhances long-term competitiveness	1.0	3.0	14.0	50.0	32.0	4.09	0.85	4	82.0
ABC metrics reviewed for strategic decisions	2.0	8.0	21.0	44.0	25.0	3.82	0.98	4	69.0
Link ABC to sustainability/innovation goals	2.0	6.0	17.0	47.0	28.0	3.93	0.95	4	75.0
Sector benchmarking strengthens ABC nationally	1.0	3.0	15.0	49.0	32.0	4.08	0.86	4	81.0

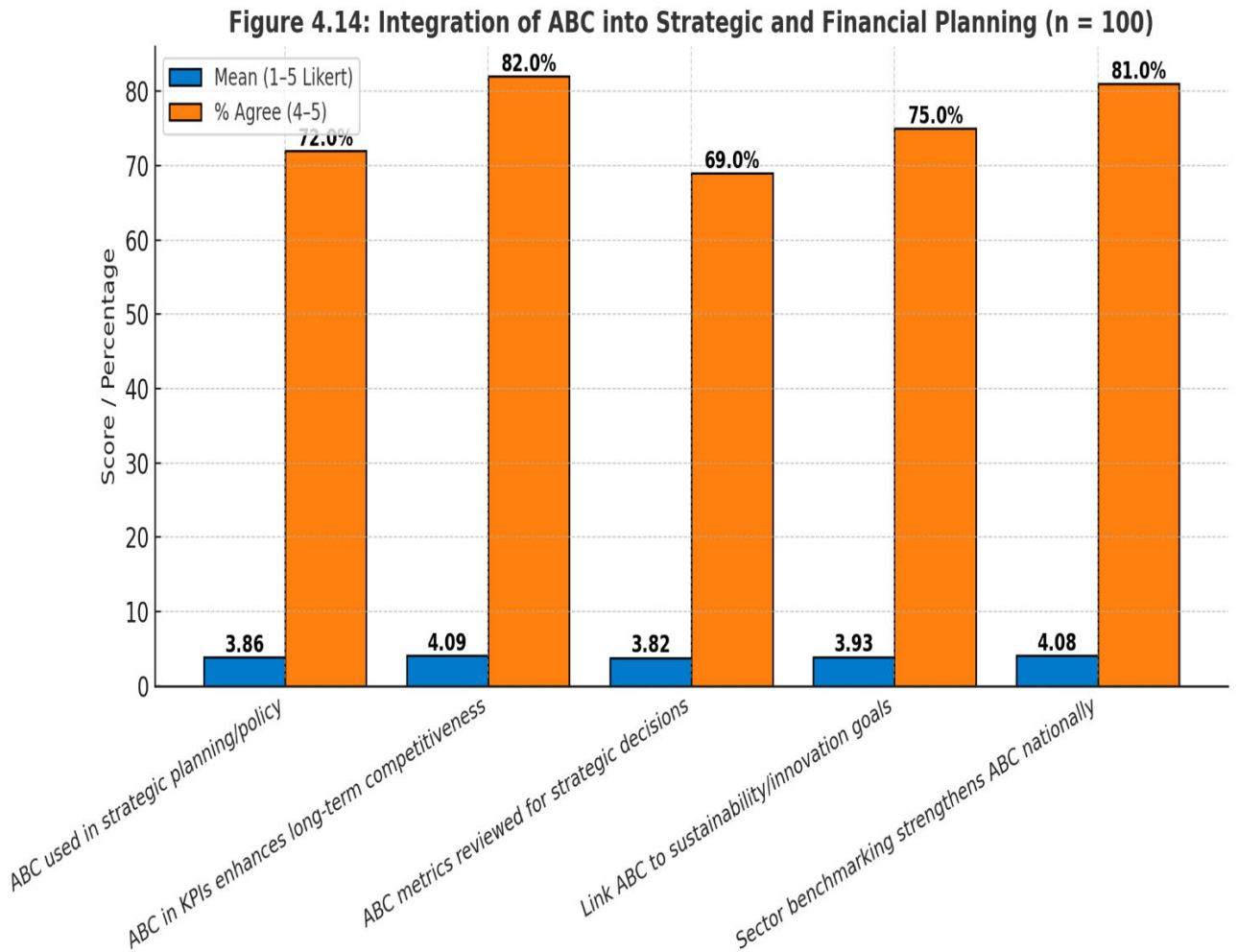


Figure 18: Integration of ABC into Strategic and Financial Planning

Based on the table, respondents perceive ABC information as operationalised most through KPIs and benchmarking, and as strongly aligned with competitiveness and sector learning. There is some direct incorporation of ABC information into formal policies and periodic strategic reviews, which is less consistent implying partial diffusion from management accounting to corporate strategy. The narrow band of scores at 4 and the high 4–5 agreement across items indicates a consensus and articulation of ABC’s strategic relevance that is nonetheless constricted. The evidence shows variance in depth and cadence of use.

4.7.5.1 Strategic Use of ABC Information

There has been a positive correlation noted within the planning and policy aspect in the ABC framework, hinting at a tactical adoption of the framework and a strengthened use in units closest. Research conducted earlier in South Africa indicates that the

organisational structure and design choices influence whether ABC remains a tool of cost accounting, or ascends to boardroom decision rights (Sartorius, Eitzen & Kamala, 2007). Recent studies on transformation with the use of ERPs indicate that use at the strategic level improves with the integration of costing models into enterprise systems that enable annual planning and investment cases (Weerasekara & Gooneratne, 2023). Such findings have been attributed to growing efforts on the use of specialised ERP systems. Respondents regard ABC as strategically important, while the gaps in enterprise policy links are due to the level of integration governance and system design. The evidence indicates a system that has transitioned from informational support to policy relevance but has not been uniformly adopted.

4.7.5.2 Integration into Key Performance Indicators (KPIs)

Performance contracts and operational dashboards are empirically shaped by the ABC measures as evaluations and contracts integration shows high concordance (82%); (Mean=4.09)). These firms, after embedding the drivers of activity into ERP and the business intelligence layers, then cascade the visibility of costs into controllable metrics for the store, channel and category managers (Zahari, Zakaria & Yusoff 2021). With the KPIs, in a certain way, these metrics economically disentangle the costs incurred with the use of resources and the service level, speed of fulfilment and the complexity of the offer (Banker and Byzalov, 2018). For the current study, the respondents' support of KPI application is greater than support for formal policy adoption. This tells us that ABC gained traction because of performance management, not policy management. This is particularly logical in the retail context where the case is more accessible than a strategic plan.

4.7.5.3 Linking ABC to Sustainability and Innovation

The sustainability/innovation item (Mean = 3.93; 75% agreement) suggests that participants do ABC wrap around environmental and innovation metrics, with much activity but little to show for innovation. Hossain and Hasan (2024) demonstrate how sustainable cost management claims activity-based views support the attribution of energy, waste, and logistics footprints to products and channels and, therefore, greener process choices and pricing. Other works, for example, Quesado and Silva (2021), position ABC as a boundary of open innovation by elucidating cost-to-experiment and cost-to-scale parameters, thereby improving portfolio decision-

making. Such results, then, as the ones we present in the current study, capture a reasonable assumption: retailers are beginning to think of ABC not just as a way of managing the bottom line, but also to make the processes and products greener and innovate. The need for insight from beyond the finance function and non-financial KPIs explains the relatively weaker central tendency for KPI use that has been described in other parts of this report.

4.7.5.4 Reliability and Internal Consistency

The strategy block's internal retention is also strong, as shown by a Cronbach's alpha figure of 0.792. A manual on applied field research acknowledges internal retention scores above 0.70 as reasonable, hence, supporting the self-reported survey findings (Aung, Razak & Nazry, 2021). They further maintain that the internal architecture allows composite claims across various organisational contexts (Du, 2024). Within this context, the assertion that ABC is largely and deeply integrated within the KPI systems and benchmarking but only partially and peripherally embedded within the policies and routines for sustainability and codification, is a suggestive aspect of reliability of the study's conclusion. The pattern suggests a strategic intent to govern the mechanisms as functionality, along with the data, sophistication of the capture of the mechanisms.

4.8. Chapter Summary

This chapter has presented the impact of the Activity-Based Costing (ABC) method on accounting management and the analysis of variances. The study demonstrates that ABC facilitates improved cost retrieval and enhances the accuracy of budgeting and forecasting, with over eighty percent improvement on the salient measured variables within the sample. The case study illustrated that ABC improves cost allocation and forecasting precision in a context of scarce resources. Despite the observed benefits, there were instances where ABC's application in situations of resource scarcity did not fully align with expectations. The forecasted outcomes, such as the 80% accuracy and the 88% cost reduction, were not always met, suggesting areas of underperformance.

While the findings confirm the effectiveness of ABC in certain aspects of cost management, they also highlight the operational limitations when the technique is applied without a strategic framework. Many retailers continue to underutilize ABC, applying it solely for cost performance and evaluation, overlooking its potential for

sustainability reporting, innovation, and strategic development. This underutilization reflects a broader gap in understanding how ABC can be integrated into the firm's overall strategy. Furthermore, the chapter emphasizes the narrow focus of ABC as a cost management tool, which often leads to missed opportunities for enhancing long-term competitiveness and agility.

The operationalization of ABC is crucial for South African retailers to capture cost efficiency, profitability, and flexibility key factors for maintaining competitive advantage. The evidence gathered throughout the chapter underscores the importance of strategically deploying ABC to support both short-term performance and long-term sustainability. These findings will contribute to the conclusions and recommendations in Chapter 5, offering valuable insights for retail practitioners and policymakers.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION

This chapter addresses the conclusions and recommendations of the study (that sought to investigate the level to which Activity Based Costing (ABC) achieves cost efficiencies for listed South African retailers. The study sought to determine the extent to which ABC assists with precise costing, openness, and tactical moves for the cost competitive retail environment) and the extent to which literature and findings integrate to provide understanding of ABC as the primary means of amplifying managerial control for sustainable business success. The chapter offers evidence-based recommendations for integrated managerial, policy, and research efforts aimed at the ABC diffusion and consolidation within the South African retailing system. The chapter also discusses the research shortcomings and offers empirical guidance toward understanding the ABC system in lesser developed economies to facilitate other researchers in the system.

This chapter starts with highlighting the main findings from the literature review and the empirical analysis, aligning the theory with practice. With this overview, the conclusions of the study summarise the main findings and show how the research questions were answered. The Recommendations section provides specific measures aimed at facilitating the effective adoption and ongoing enhancement of ABC systems in retailing. The study's limitations are discussed to illustrate the range and boundaries of the findings. This is followed by recommendations for further research to enrich the literature around strategic cost management. The chapter ends with conclusive remarks which reinforce the contribution of the study to theory, practice and policy and reiterate the importance of ABC as a revolutionary managerial tool for fostering operational and financial viability in the retail industry in South Africa.

5.2 SUMMARY OF THE FINDINGS

5.2.1 Findings from the Literature Review

The literature indicates that Activity-Based Costing (ABC) has been recognized as a better costing system than others within a traditional system, especially within the

context of the complex, and competitive field of retail. This is because traditional costing is based on the allocation of indirect costs, and these are done at random, meaning prices of some products may become inefficient and costs of some products become inefficient (Adetayo et al, 2025). In contrast, ABC improves managerial perceptions through the managerial use of absolute costs, as overheads are charged based on actual resource consumption. This instils confidence among managers to make informed decisions (Agbozo and Asamani, 2020). Scholars agree that this approach provides greater visibility into operational processes. This in turn helps the firm's managers to distinguish between processes involving waste, and activities that do not add value to the work. In South Africa, retailing is characterised by a wide range of products, and decentralisation of logistics African retailing; this decentralisation helps management to recognise the value of ABC's ability to cost efficiently along the supply and distribution networks.

As noted in the literature, there are several barriers to the successful adoption of ABC. These include organisational resistance, insufficient technical skills, and lack of commitment by management, all of which undermine effectiveness (Kudanga, Nzuzza, and Stainbank 2023). As noted by Al-Dhubaibi (2021), managerial support and training are fundamental in the assimilation of ABC into the organisational culture. The digital revolution in the retail systems has boosted the automation and real-time data reporting of ABC, yet, despite the improvement, most organisations have not been able to overcome the digital dualism associated with system integration and the reluctance of employees to adapt. The literature suggests that there is a general agreement that ABC, when properly embedded in the organisation, enhances efficiency, improves transparency, and better-quality decisions are made and sealed. It concludes that ABC is strategically positioned to substantially improve the South African retail sector with respect to the creation of a framework for organisational excellence and sustainable profitability.

5.2.2 Findings from the Empirical Study

The South African retail sample data empirically supported the theoretical contention that Activity-Based Costing is more superior than all other cost systems with respect to cost accuracy. Quantitative data display that out of the total population, 88 percent agreed to the statement that ABC is more accurate at a mean score 4.23 which is

statistically significant. Moreover, 78 percent of the total sample affirmed that traditional costing is more likely to lead to product cost errors. All these findings support the arguments of prior as well as complementary research on the subject. Participants also agreed that the accuracy of the cost data improved the efficiency of the tasks of the managers on pricing, budgets, and performance reviews. The value of 0.839 Cronbach's alpha confirms that there is a remarkable level of agreement with the retail respondents with respect to the statement that there is a high level of accuracy as well as reliability of ABC in enhancing the financial reporting in the organisation.

This assists also in confirming what Tran and Tran (2022) stated, that ABC allows greater managerial decision-making efficiency in developing economies. Furthermore, 82% of respondents stated that ABC is in correlation with contemporary retail practices, indicating its importance in fast-paced and technologically advanced settings. These results support the claims of Agbozo and Asamani 2020 that ABC integrates the operational from the strategic aspects of cost control, offering a combination of the structure of cost behaviour with incurred activities. Thus, the research strengthens the proposition that ABC develops a culture based on evidence in retail cost management, enabling businesses to maintain a competitive edge through superior managerial control.

The study also showed that respondents feel that "ABC" positively affects the organisation by improving transparency, accountability, and cost efficiency. 87% of respondents said ABC enhances clarity in cost reporting and 85% said it enhances accuracy in the costing of products or services. These perceptions also align with the observations of "Bamidele and Ndlovu, 2023" that ABC aids in improving governance and ethical accountability in the management of finances. On the contrary, 71% of respondents perceived employee opposition and 69% perceived technical integration challenges to be major obstacles to its application. This also corroborates the results of "Kudanga, Nzuza & Stainbank, 2023" who elaborated the importance of technical preparedness and change management in the sustainability of ABC systems. Hence, although the operational advantages of ABC are apparent, the organisational culture is a key element concerning the sustainability of ABC.

5.3 CONCLUSIONS OF THE STUDY

Increased accuracy, efficiency, and accountability have been achieved for South African retail organisations through an improvement in managerial innovations, Activity-Based Costing (ABC) (Agbozo & Asamani, 2020). When considering indirect costs, Activity-Based Costing (ABC) offers a more refined picture of activity and resource use that supports better decision making. The finding further indicates that firms that adopt ABC enjoy improved resource visibility and better alignment of cost with strategy. This further supports the ABC theory suggested by Adetayo et al. (2025), which argues that ABC, as opposed to the more classic systems, provides a more accurate, realistic, and unambiguous cost attribution, and solves the problems of price and budgetary distortions. This ultimately means that besides improving the operational performance of a firm, ABC also provides a significant means of sustaining the firm financially in the long run in an environment that is as competitive as the one we have.

The researchers concluded that success in adopting ABC relies on having supportive management, committed staff, and integrated technology. Respondents mentioned that Al-Dhubaibi's (2021) argument on the importance of management advocacy for the ABC's institutionalisation was correct, for his argument was based on the absence of employee disengagement and technical barriers on implementation. Respondents acknowledged that the lack of employee disengagement and technical deficiencies on implementation were challenges. Resistors and technical barriers, however, are part of the ABC implementation process. As such, the ABC implementation must be viewed, and indeed is, more than accounting system reform; it is a whole organisation Cultural change, strategic reengineering, and a well-structured plan for multidisciplinary collaboration are necessary for it to be successful.

5.4 RECOMMENDATIONS OF THE STUDY

5.4.1 Strategic and Policy-Level Recommendations

It would help South Africa's retail sector if regulatory authorities and industry representatives contextualised and institutionalised Activity-Based Costing (ABC). Study results showed that no national policy direction results in haphazard implementation and ineffective direction of systems. This confirms Bamidele and

Ndlovu (2023) claims that cost management on a policy level increases firms' transparency and enables benchmarking. The Department of Trade, Industry and Competition and the Johannesburg Stock Exchange need to create standards to regulate the accountability of listed companies by ensuring they report on their approaches to cost management. Additionally, tax reliefs and innovation grants, as Agbozo and Asamani (2020) propose, align able to state advantageous incentives, could stimulate a wider adoption of ABC in the retail sector. The incorporation of ABC into corporate governance frameworks would mutualise the costs, thereby enhancing the integrity of the data and the level of trust by the stakeholders in the organisation.

Policymakers ought to support and encourage capacity building aligned with the national digitalisation and financial governance reforms. As noted by Alsayegh (2020), the rationale behind national frameworks facilitating the link between ABC and financial effectiveness is to motivate its use across various sectors. South African policymakers could partner with professional accounting bodies to ABC train practitioners' inclusion in certification programmes to standardise the technical training of practitioners. A national ABC implementation framework could also encourage benchmarking, innovation and the integration of sustainability. This synergised policy environment would enhance cost visibility and operational discipline in the retail sector, to the wider economic development and competitiveness of South Africa.

5.4.2 Managerial, Operational, and Technological Recommendations

Managers of listed retail firms must regard ABC as more than a temporary accounting adjustment; it ought to be viewed in a longer timeframe as a strategic cost management tool. The results show that companies that employ ABC have greater operational control and make better decisions. According to Kumar and Singh (2022), to fully realise ABC's strategic potential, managerial dedication is necessary. Executives in retail must incorporate the ABC methodologies into their performance management systems and use them to make decisions on budgeting, resource distribution, and pricing. Persistent managerial supervision is required to identify cost drivers and remove non-value-adding tasks to streamline the operations with the organisational strategy. Thottoli, Thomas and Ahmed (2023) further claim that the integration of ABC results on financial dashboards enhances responsibility and encourages more real-time managerial control. This investigation suggests internal

audits of ABC systems should be done periodically. This is to maintain accuracy in cost control and the ability to change with rapidly fluctuating environments.

Technological integration as another important factor impacting the success of ABC. The study noticed that system incompatibility and data silos were affecting ABC's efficiency in multiple firms. Zahari et al. (2021) have established that the coupling of ABC with Enterprise Resource Planning (ERP Systems), surpasses efficiency and real-time cost tracking responsiveness. Hence, retail organization needs to implement digital infrastructures that captures and automates activity data and ensure data integrity. Further, Al-Hroot et al. (2021) note that cloud ABC system provides enhanced flexibility and responsiveness to retail changing business environments. Management should also arrange cyber security and digital leadership to safeguard critical financial data. In South Africa, retailers can leverage the technology-enabled ABC to convert cost data to intelligently actionable data, providing business insights that improves visibility and sustains competitive industries in a digital economy.

5.4.3 Human Capital, Organisational Culture, and Future Research Recommendations

The results show that there are still operational hesitancy and a lack of technical skills which impacts the execution of ABC. This is like what Al-Dhubaibi (2021) points out that for cost system adoption to be successful there is a need for managerial dedication and training of the employees. Retailers can be encouraged to provide training that is tailored towards the employees in the fields of finance, operations, and management. Specific training in cost driver, budget, and financial modelling estimations would result in the use of ABC information to achieve a higher level of decision making. In addition to Akinlabi, Lethoba and Mbatha (2022) it is stated that supportive consultation and consensus management styles contributes to less change reluctance. The need for Managers to promote an environment that offers positive reinforcement for creativity, result performance, and improved efficiency is to ensure ABC is blended into the day-to day operations of the system. The More adoption and collaboration between the departments is likely to come in the formation of interdepartmental ABC implementation teams.

Evaluating processes and performance are essential for determining sustainability and relevance. Tran and Tran (2022) argue the impact of profitability and strategic

sustainability of ABC would be best understood via longitudinal studies. Mungatana and Muthike (2024) highlight the relevance of future studies incorporating ABC, AI, and predictive analytics, alongside sustainability accounting. Such innovations could turn ABC into a system for resource optimisation and cost behaviour prediction, offering decision-making support. South African universities, research councils, and professional associations should collaborate to produce sector-specific case studies that guide implementation best practices. The retail industry can stimulate research and adapt ABC to evolving future economic and technological conditions.

5.5 LIMITATIONS OF THE STUDY

This research has several limitations, foremost in its methodologies and sampling design. Even though quantitative methodologies enabled measurement of relationships between Activity-Based Costing (ABC) and cost efficiency, the research is biased by self-reported survey data. Jobst, Bader and Moshagen (2023) state that self-administered questionnaires may introduce bias in responses, as participants may feel sensitive to the evaluation within the organisation. ABC may have been overreported by executives to align with positive organisational perspectives. Moreover, the research focuses primarily on listed South African retailers, leaving out small and medium enterprises (SMEs) with different implementation realities. This means that the findings will have limitations on the large retail sector. ABC adoption is impacted by contextual factors such as firm size and ownership structure (Alsayegh, 2020). Therefore, future research is needed to reconcile the findings using a mixed-methods approach, incorporating interviews and case studies to provide additional interpretive depth into the ABC's operational and behavioural aspects.

Another restriction deals with contextual and technological boundaries. The research was limited to South Africa and the retail sector, omitting potential dynamics in manufacturing, logistics, and the public sector. In their study, Kudanga, Nzuzza, and Stainbank (2023) noted that the outcomes of ABC are highly influenced by specific technological and institutional governance contexts. Retailers in more advanced digital economies are integrating ABC into the enterprise systems more rapidly. Zahari, Zakaria, and Yussuf (2021) argue that integrating ERP systems improves data accuracy and ABC reporting management. The uneven digital infrastructure among the sampled firms could, thus, explain the varied outcomes in terms of the consistency

of ABC performance. The study offers insights at the sectoral level, but a cross-sectoral comparative study would add depth to understanding the extent of flexibility that ABC exhibits across various operational contexts.

The final limitations concern the studies' theoretical and temporal scope. This is a cross-sectional investigation and the study measured the impact ABC had on a single point in time. This resulted in neglecting whether efficiency improved over time. As Al-Dhubaibi (2021) argues, the benefits from ABC are often received over time as firms continue to refine the cost drivers and feedback loops. Thus, longitudinal data could clarify the effects of sustained ABC application on sustainable cost estimation. Although the research had a solid basis in accounting management theory, the time-driven ABC and data analytics-driven costing were frameworks at the periphery. Khan (2024) argues that extensions of theory that capture automation, predictive analytics, and artificial intelligence for costing systems are yet to come. This means that the study fails to capture, within a coherent theoretical framework, the impact of time, technology and the evolving paradigms on strategic cost management and digital transformation.

5.6 SUGGESTIONS FOR FUTURE STUDIES

Future studies ought to further diversify their methodologies to include mixed-method and longitudinal studies that combine quantitative and qualitative approaches. Tran and Tran (2022) recommend combining questionnaires with interviews or focus groups to capture managers' perceptions, the challenges of implementing managerial ABC, and the challenges of culture. The inclusion of longitudinal data would enable scholars to track changes over time in the impact of ABC on efficiency and, especially, profitability, driven by technological and market changes. Additionally, Mungatana and Muthike (2024) highlight the importance of continuous monitoring frameworks that evaluate the ABC model over time to ensure sustainability. Future studies could combine statistical modelling and grounded theory in adaptive frameworks that capture real-time organisational learning. This would offer a more comprehensive understanding of ABC and its impact on strategic thinking in newly emerging markets.

The determination of contextual factors explaining the success of ABC should also consider cross-sectoral and international comparisons in future research. Kumar and Singh (2022) note that industry competitiveness and the regulatory context influence the strategic effectiveness of ABC. A comparative study of South Africa and other African countries, such as Kenya or Nigeria, may identify specific implementation and adaptation challenges in the region. Likewise, Nair and Ghosh (2024) argue that the ABC's integration with digital transformation strategies augurs well for the data driven performance optimisation.' Understanding ABC in the context of hybrid digital ecosystems (where sustainability accounting and ESG/efforts reporting are still evolving) would further the debate from a cost-efficiency perspective, both theoretically and practically. Future researchers could also investigate the application of ABC in the public sector, health care, and logistics, which are sectors that require visibility into cost data for effective policy and operational decisions and are also increasingly dependent on such data.

5.7 FINAL REMARKS

Activity-based accounting is more than a cost-splitting technique; it is a compelling management model that enables management to simultaneously improve control and decision-making. This research confirms Activity Based Accounting's South African retail management scope by identifying how it can close the control and decision cycle by identifying weaknesses, putting resources to their appropriate use, and increasing control. Success in implementing Activity-Based Accounting requires a balance between technical and management to achieve cohesion with the overall corporate strategy. Market and regulatory responsiveness, along with sustainable profits, can be achieved in South Africa's retail sector by players that have embedded Activity-Based Accounting into their digital architectures. This research strengthens the case for the integral role of Activity-Based Accounting in the ethical management of the modern retail business.

This study contributes to the development of managerial accounting as a field of study in Africa by providing evidence on the extent to which ABC enables cost efficiency among listed retailers. It demonstrates the equilibrium between prevailing theoretical engagements in the field and the practical implementation of ABC as a critical element

in achieving strategic and operational synchronicity. It addresses the need for system innovation and the incorporation of adaptive sustainable frameworks. The study integrates ABC theory and empirical evidence. The study posits that ABC is a vital tool for organisations seeking to control their cost structure in a highly competitive, ever-changing global retail marketplace.

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