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ASSESSING THE FINANCIAL SUSTAINABILITY OF
THE BUSINESS MODEL AT START TECHNOLOGY:
A MOZAMBICAN IT FIRM

BY

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A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE
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Abstract

This study examined the financial sustainability of Start Technology's business model and explored strategies to enhance its long-term viability within the Mozambican technology sector. The research was motivated by the firm's continued reliance on a purely project-based revenue structure, characterized by severe financial volatility, client concentration, and limited reinvestment in human and organizational capabilities. A mixed-methods approach was adopted, combining quantitative financial analysis with qualitative insights from management interviews and client surveys. The findings revealed a fundamental misalignment between Start Technology's strong technical execution and an economic structure optimized for short-term survival rather than strategic growth. Financial analysis demonstrated extreme revenue volatility (coefficient of variation = 143%), inadequate cash reserves (2.1 months of operating expenses), and profit margin compression despite revenue growth (net margins declining from 5.0% to 1.4%). The business model's dependency on one-off projects, delayed government payments (90-180 days), and weak client retention creates cash flow instability and limits the company's ability to plan, invest, and innovate. The study concludes that long-term financial sustainability requires a structural transformation from a transactional to a hybrid business model that integrates recurring revenue streams, capability development, and strategic partnerships. The research proposes a series of practical recommendations, including the formalization of post-project support contracts, creation of a financial reserve, investment in client retention systems, digital marketing, and commercialization of the firm's proprietary prototype. By building financial buffers, diversifying revenue sources, and aligning operational strengths with a more balanced financial structure, Start Technology can transition toward stable growth and competitive resilience. The study contributes to the understanding of SME financial sustainability in emerging markets and offers actionable guidance for similar technology-based firms operating under resource constraints.

Keywords: Business Model Financial Sustainability, SME Transformation, Recurring Revenue, Strategic Capability

Declaration

I declare that this dissertation is my original work except where sources have been cited and acknowledged. The work has never been submitted, nor will it ever be submitted to another university for the award of a degree.

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Dedication

This work is lovingly dedicated to my wife, Maribel Castro Maenda, whose unwavering love, patience, and encouragement have been my greatest motivation, and to my daughter, Anyka Steven Maenda, whose smile reminds me daily of why perseverance matters.

To my parents, Steven and Adelaide Maenda for their endless sacrifices, prayers, and belief in my dreams; to my uncles, whose emotional and financial support have been a constant source of strength; and to my brothers and cousins, whose friendship, encouragement, and faith in me have kept me grounded and inspired.

You are all the reason behind every effort, every late night, and every success. This achievement is as much yours as it is mine.

List of Acronyms and Abbreviations

AI - Artificial Intelligence

BMC - Business Model Canvas

RBV - Resource-Based View

VRIO - Valuable, Rare, Inimitable, Organized

PESTEL - Political, Economic, Social
Technological, Environmental, Legal

EMBA - Executive Master of Business Administration

MZN – Mozambican Currency

List of Figures

Table 1: Business Model Canvas (BMC)	11
Table 2: Resource-Based View (RBV) and VRIO Framework	11
Table 3: PESTEL Framework.....	12
Table 4: Conceptual Framework: Business Model Sustainability	12
Table 5: Age Group Distribution of Survey Respondents	20
Table 6: Revenue Volatility Statistical Indicators	28
Table 7: Profitability Trend Analysis (2022-2024)	30
Table 8: Cost Structure Composition (2024 Detailed Analysis).....	33
Table 9: Comparative Benchmark Analysis	34
Table 10: Cash Flow and Working Capital Indicators (2022-2024).....	37
Table 11: Client Concentration Analysis (2024)	41
Table 12: Client Concentration Risk Matrix.....	42
Table 13: Revenue Impact Scenarios (Based on 2024 Data).....	42
Table 14: Client Satisfaction Metrics (5-Point Likert Scale).....	46
Table 15: Client Interest in Managed Services (n=12)	50
Table 16: Client Preferences for Recurring Services (Open-Ended Responses)	51
Table 17: Employee Perception of Organizational Sustainability (5- Point Likert Scale)	55
Table 18: : Employee Retention Risk Assessment	56
Table 19: Employee Assessment of Organizational Capabilities (5- Point Likert Scale)	60

Definition of Key Terms

Business Model

A conceptual framework that outlines how an organization creates, delivers, and captures value. It includes components such as value propositions, customer segments, revenue streams, and cost structures (Osterwalder & Pigneur, 2010).

Business Model Sustainability

The capacity of a business model to maintain economic viability and strategic relevance over time, ensuring consistent revenue generation, adaptability to market changes, and long-term organizational resilience (Teece, 2010).

Recurring Revenue

Income generated from ongoing contractual relationships such as subscriptions, retainers, or managed services, which provide predictable cash flow and enhance financial stability (Tzuo & Weisert, 2018).

Strategic Capability Development

The process of building and enhancing organizational competencies—such as innovation, client relationship management, and operational efficiency—that support long-term competitive advantage (Barney, 1991).

SME (Small and Medium-Sized Enterprise)

A business entity characterized by limited scale in terms of employees, revenue, and market reach. SMEs often face resource

constraints but play a critical role in economic development, especially in emerging markets (Goedhuys & Sleuwaegen, 2016).

Project-Based Revenue Model

A revenue structure where income is derived from discrete, one-off engagements. This model often leads to financial volatility and limits scalability due to its transactional nature (Artto & Wikström, 2005).

Capability Trap

A phenomenon where a firm's operational strengths become barriers to strategic evolution, as resources are continuously reinvested in short-term survival rather than long-term transformation (Leonard- Barton, 1992).

VRIO Framework

A strategic tool used to evaluate resources based on four criteria: Value, Rarity, Inimitability, and Organization. It helps determine whether a resource can provide sustained competitive advantage (Barney & Hesterly, 2015).

PESTEL Analysis

A framework for analysing macro-environmental factors—Political, Economic, Social, Technological, Environmental, and Legal—that influence business strategy and sustainability (Johnson et al., 2017).

Mozambican IT Sector

The segment of Mozambique's economy focused on information

technology services, including software development, infrastructure deployment, and digital consulting. It is shaped by regulatory reforms, infrastructure challenges, and increasing demand for digital solutions.

Table of Contents

Abstract	ii
Declaration	iii
Copyright	iv
Acknowledgements	v
Dedication	vi
List of Acronyms and Abbreviations	vii
List of Figures	viii
Definition of Key Terms	iii
Table of Contents	vi
CHAPTER 1 INTRODUCTION	1
1.1 Introduction.....	1
1.2 Background to the Study	3
1.3 Statement of the Problem	3
1.4 Research Objectives.....	4
1.5 Research Questions	5
1.6 Assumptions/Hypotheses.....	5
1.5 Significance of the Study	7
1.6 Delimitation of the Study.....	8
1.7 Limitations of the Study.....	8
CHAPTER 2 REVIEW OF RELATED LITERATURE	10
2.1 Introduction.....	10
2.2 Methodological Orientation	10
2.3 Theoretical Foundations	10
2.3.1 Business Model Canvas (BMC).....	10
2.3.2 Resource-Based View (RBV) and VRIO Framework	11
2.3.3 PESTEL Framework.....	12
2.4 Financial Resilience in Emerging Market IT SMEs.....	12
2.4.1 Beyond Sustainability: The Need for Resilience	12
2.4.2 Sustainability vs. Resilience: Complementary Objectives ...	13
2.5 Conceptual Framework: Business Model Sustainability.....	15
2.4 Summary	16
CHAPTER 3 METHODOLOGY	17

3.1 Introduction.....	17
3.2 Research Design.....	17
3.3 Population and Sampling	17
3.3.1 Population Definition and Sample Size	17
3.3.2 Sampling Strategy and Justification	18
3.3.3 Sample Size Adequacy and Limitations	19
3.4 Data Collection Instruments.....	21
3.5 Data Collection Procedure	21
3.6 Analysis and Organization of Data	21
3.7 Ethical Considerations	21
3.8 Summary.....	22
CHAPTER 4 DATA PRESENTATION,	23
ANALYSIS AND INTERPRETATION.....	23
4.1 Introduction.....	23
4.2 Quantitative Data Analysis	24
4.2.1 Demographic Profile of Survey Respondents	24
4.2.1.1 Gender Distribution	24
4.2.1.2 Age Group Distribution	26
4.2.1.3 Respondent Role Distribution	28
4.2.1.4 Client Relationship Duration.....	30
4.2.2 Financial Performance Analysis.....	33
4.2.2.1 Revenue Trends and Volatility.....	33
4.2.2.2 Profitability and Margin Analysis.....	36
4.2.2.3 Cost Structure Composition Analysis	39
4.2.2.4 Cash Flow and Working Capital Analysis	43
4.2.2.5 Client Concentration Risk Analysis	47
4.2.3 Client Satisfaction and Relationship Analysis	53
4.2.3.1 Client Satisfaction Metrics.....	53
4.2.3.2 Client Interest in Recurring Services	57
4.2.4 Employee Perspectives and Organizational Health	62
4.2.4.1 Employee Confidence and Retention Risk.....	62
4.2.4.2 Employee Perception of Strategic Capabilities	67
4.3 Qualitative Data Analysis	72

4.3.1	Business Model Canvas Analysis (Qualitative Findings) ..	72
4.3.1.1	Theme 1: Revenue Streams and Value Capture Mechanisms	72
4.3.1.2	Theme 2: Customer Relationships and Retention Challenges	75
4.3.1.3	Theme 3: Cost Structure and Human Capital Investment Philosophy.....	78
4.3.2	VRIO Analysis (Qualitative Findings).....	82
4.3.2.1	Theme 4: Technical Execution Excellence as Competitive Parity	83
4.3.2.2	Theme 5: The Proprietary Prototype as "Unused Advantage"	86
4.3.2.3	Theme 6: Dynamic Capabilities Deficit and Strategic Inertia	94
4.3.3	PESTEL Analysis (Qualitative Findings)	103
4.3.3.1	Theme 7: External Environment as Constraint and Opportunity	103
4.3.4	Integration: The Capability Trap Mechanism	112
4.3.4.1	Theme 8: Reinforcing Dynamics of Business Model Lock-In	112
4.4	Integrated Mixed-Methods Findings.....	115
4.4.1	Convergence and Triangulation	115
4.5	Hypothesis Testing Results	116
4.6	Comprehensive Sustainability Assessment.....	117
4.7	Summary.....	118
	CHAPTER 5 DISCUSSION, CONCLUSIONS.....	120
	AND RECOMMENDATIONS	120
5.1	Introduction.....	120
5.2	Discussion.....	120
5.3	Conclusions.....	122
5.4	Implications	124
5.5	Recommendations.....	127
5.5	Suggestions for Further Research	128
	REFERENCES.....	132
	APPENDICES	136

CHAPTER 1 INTRODUCTION

1.1 Introduction

In the contemporary business landscape, characterized by rapid technological evolution and intense global competition, achieving initial market entry is merely the first hurdle for a new venture. The defining challenge lies in ensuring the long-term sustainability of its business model. A sustainable business model moves beyond early-stage traction and profitability to encompass the resilience, adaptability, and strategic foresight necessary for enduring success (Teece, 2010; Osterwalder & Pigneur, 2010). This study assesses the sustainability of the business model at Start Technology, a representative case of a promising Mozambican IT firm navigating the complex journey from innovation to institutionalization.

The global business environment has witnessed a profound shift in how value is created, delivered, and captured. Traditional linear business models, predicated on product sales and project delivery, are increasingly challenged by recurring revenue models that emphasize long-term customer relationships, predictable cash flows, and scalable operations (Tzuo & Weisert, 2018). This transformation is particularly pronounced in the information technology sector, where subscription-based services, managed IT offerings, and cloud solutions have redefined competitive dynamics and sustainability benchmarks.

For small and medium-sized enterprises (SMEs) in emerging markets, navigating this transition presents unique challenges. Resource constraints, limited access to capital, market inefficiencies, and institutional voids create barriers that prevent many promising ventures from achieving sustainable growth trajectories (Goedhuys & Sleuwaegen, 2016). In Mozambique specifically, the IT sector has experienced notable expansion driven by digital transformation initiatives, increasing demand for technology services, and government modernization programs. However, many local firms remain dependent on irregular, project-based contracts that expose them to cash flow instability and limit their capacity to scale sustainably.

Start Technology represents a microcosm of these broader dynamics. Founded as a technical consultancy firm, the company has established a competitive presence in software solutions, IT infrastructure deployment, and strategic consulting services. Despite experiencing periods of dramatic revenue growth—including a 2,741% increase from 2023 to 2024—the fundamental structure of its business model has remained unchanged, centered on project-based revenue generation through government tenders and corporate contracts. This creates a critical paradox: the firm possesses demonstrable technical execution capabilities yet remains trapped in a cycle of financial volatility and strategic vulnerability.

1.2 Background to the Study

Business model sustainability refers to a firm's ability to maintain financial stability and strategic relevance over time. It encompasses two interlinked dimensions: economic sustainability, which ensures consistent revenue and cash flow, and strategic sustainability, which enables adaptability, scalability, and long-term competitiveness.

Mozambique's IT sector presents both opportunities and constraints. While digital transformation initiatives and regulatory reforms are expanding the market, local SMEs face challenges such as delayed government payments, competitive pressure from multinational firms, and limited access to capital.

Start Technology, a growing IT firm based in Maputo, exemplifies these dynamics. Despite rapid revenue growth, its reliance on project-based contracts, high client concentration, and lack of recurring income expose it to financial volatility and strategic limitations. These conditions make it a relevant case for examining how SMEs in emerging markets can evolve toward more sustainable business models.

1.3 Statement of the Problem

Start Technology exemplifies a common paradox among IT SMEs in emerging markets: despite strong technical capabilities and impressive revenue growth, the firm remains trapped in a cycle of

financial instability and strategic vulnerability. Its complete reliance on short-term, project-based contracts—accounting for 100% of revenue—results in unpredictable income, prolonged payment delays, and limited capacity for long-term planning or reinvestment.

This business model exposes the company to multiple, interconnected risks:

Financially, it faces extreme revenue volatility, cash flow constraints, and insufficient reserves for strategic initiatives.

Strategically, it suffers from client concentration, low retention, and stalled innovation efforts, including failed attempts to launch recurring services.

Organizationally, a reactive culture, low employee confidence, and underinvestment in talent development further weaken its long-term viability.

While the leadership acknowledges the need for recurring revenue and has developed prototypes, execution has stalled due to structural and resource limitations. This reflects a broader challenge facing IT SMEs in Mozambique and similar contexts: sustainability is not hindered by lack of demand or technical skill, but by business model structures that prevent capability accumulation and strategic transformation.

1.4 Research Objectives

The primary objectives of this research are:

To analyse the structure and components of Start Technology's current business model.

To identify and evaluate the critical factors influencing the economic and strategic sustainability of Start Technology's business model.

To develop evidence-based recommendations and a strategic framework to enhance the long-term sustainability of Start Technology's business model.

1.5 Research Questions

This study is guided by the following research questions:

1. What are the core components of Start Technology's business model as defined by established business model frameworks?
2. What internal and external factors are most critical in driving or inhibiting Start Technology's economic and strategic sustainability?
3. What strategic interventions can be implemented to improve the sustainability of Start Technology's business model?

1.6 Assumptions/Hypotheses

The following hypotheses will be tested through integrated analysis of financial performance data, stakeholder insights, and strategic context. Each hypothesis is supported by a corresponding

assumption that outlines the underlying logic and expected relationship between variables.

H1: Start Technology's reliance on project-based income is a significant contributor to its financial instability.

Assumption:

The firm's exclusive dependence on short-term, milestone-based contracts leads to irregular revenue inflows, extended receivables cycles, and limited cash reserves. This structure undermines financial planning, creates operational disruptions during payment delays, and restricts the ability to invest in strategic initiatives. It is assumed that the volatility observed in year-over-year growth and the high proportion of uncollected receivables are direct consequences of this revenue model.

H2: The absence of recurring revenue streams negatively impacts Start Technology's revenue predictability and strategic investment capacity.

Assumption:

Without stable, subscription-based income, the company is unable to forecast revenue beyond short-term cycles, typically limited to three months. This unpredictability constrains strategic decision-making and inhibits the accumulation of capital required for innovation, marketing, and capability development. It is assumed that the lack of recurring income contributes to stalled initiatives, underinvestment in human capital, and missed opportunities for

long-term growth.

H3: Transitioning to a hybrid model with recurring revenue components will enhance Start Technology's overall business model sustainability.

Assumption:

Introducing managed services, support contracts, or subscription offerings will reduce revenue volatility and improve cash flow consistency. This shift is expected to deepen client relationships, increase retention, and enable reinvestment in strategic capabilities. It is assumed that client interest in recurring services, combined with industry benchmarks and theoretical models, supports the feasibility and impact of such a transition on both economic and strategic sustainability.

1.5 Significance of the Study

This study provides practical insights for Start Technology by identifying structural weaknesses in its business model and proposing strategies for sustainable transformation through recurring revenue and capability development.

It serves as a reference for other IT SMEs in Mozambique facing similar challenges, offering a replicable framework (BMC, VRIO, PESTEL) and validating market interest in managed services.

For policymakers, the research highlights systemic barriers such as delayed payments and procurement inefficiencies, suggesting

reforms to support SME competitiveness.

Investors and financial institutions can use the findings to assess business model risks and management readiness for transformation.

Academically, the study contributes to business model theory in emerging markets by examining the “capability trap” and implementation barriers in resource-constrained environments.

1.6 Delimitation of the Study

This study is delimited to a single case—Start Technology—to allow for in-depth analysis of business model sustainability within the Mozambican IT sector. The focus is strictly on economic and strategic dimensions, excluding environmental and broader social sustainability aspects.

Geographically, the research is confined to Mozambique, with emphasis on operations in Maputo. Data is drawn from the 2022–2024 period to capture recent growth trends and strategic challenges.

Methodologically, the study employs a mixed-methods approach combining financial analysis and stakeholder insights, without engaging in large-scale statistical inference or advanced econometric modelling.

1.7 Limitations of the Study

This study is subject to several limitations that should be considered when interpreting its findings. As a single-case analysis focused on

Start Technology, generalizability is constrained. While the analytical framework (BMC, VRIO, PESTEL) is transferable, the conclusions are context-specific and shaped by the firm's unique operational and strategic profile.

ata access was limited to company-provided sources, which may exclude commercially sensitive financial details. Self-reported insights from the CEO and small samples from employees (n=4) and clients (n=12) introduce potential bias and restrict statistical robustness. Triangulation across multiple sources was employed to mitigate these effects.

The study captures a specific growth phase (2022–2024), including an exceptional revenue spike in 2024, which may not reflect long-term trends. Additionally, while strategic recommendations are proposed, their implementation and impact remain theoretical, as longitudinal follow-up was beyond the scope of this research.

Finally, the researcher's positionality and interpretive role in qualitative analysis may influence thematic coding and conclusions. Measures such as member checking and transparent reporting were used to enhance credibility and confirmability (Lincoln & Guba, 1985).

Despite these constraints, the study offers valuable insights into the sustainability challenges facing IT SMEs in emerging markets and contributes meaningfully to the literature on business model transformation.

CHAPTER 2 REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter reviews the theoretical and empirical literature relevant to business model sustainability in the context of IT SMEs in emerging markets. It establishes the conceptual foundation for analyzing Start Technology's business model and integrates multiple frameworks—Business Model Canvas (BMC), Resource-Based View (RBV), VRIO, and PESTEL—to assess internal capabilities and external conditions. The chapter also contextualizes the Mozambican IT sector and outlines the dimensions of sustainability that guide the study's analytical approach.

2.2 Methodological Orientation

The literature review adopts a multi-framework methodology to ensure analytical depth and contextual relevance. The BMC is used to deconstruct the business model structure, while RBV and VRIO assess internal strategic capabilities. PESTEL analysis provides insight into external environmental factors. This triangulated approach enables a comprehensive understanding of sustainability drivers and inhibitors.

2.3 Theoretical Foundations

2.3.1 Business Model Canvas (BMC)

The BMC (Osterwalder & Pigneur, 2010) is a strategic tool that maps how organizations create, deliver, and capture value across nine interconnected components. These are grouped into customer-facing, infrastructure, and financial blocks.

Table 1.1: Business Model Canvas (BMC)

Block	Description	Start Technology Context
Customer Segments	Target groups served	Government, private firms, NGOs
Value Propositions	Solutions offered	Technical consultancy, software, local expertise
Channels	Delivery mechanisms	Tenders, referrals, limited digital presence
Customer Relationships	Nature of engagement	Transactional, low retention
Revenue Streams	Sources of income	100% project-based, no recurring revenue
Key Resources	Critical assets	Technical skills, subcontractors
Key Activities	Core operations	Tendering, proposal writing, project execution
Key Partnerships	External support	Subcontractors, vendors
Cost Structure	Cost allocation	High variable costs, low personnel investment

2.3.2 Resource-Based View (RBV) and VRIO Framework

The RBV (Barney, 1991) emphasizes internal resources as sources of competitive advantage. The VRIO framework evaluates whether resources are Valuable, Rare, Inimitable, and Organized to exploit.

Table 1.2: Resource-Based View (RBV) and VRIO Framework

Resource	V	R	I	O
Technical expertise	✓	✗	✗	✓

Government tender experience	✓	✓	✗	✓
Proprietary prototype	✓	✓	✓	✗
Client relationships	✓	✗	✗	✗

2.3.3 PESTEL Framework

The PESTEL framework (Johnson et al., 2017) analyzes external macro-environmental factors that influence business model viability.

Table 1.3: PESTEL Framework

Factor	Key Issues	Impact on Start Technology
Political	Tender systems, payment delays, digitalization policy	Revenue unpredictability, service expansion
Economic	Inflation, currency volatility, limited SME financing	Cost pressures, capital constraints
Social	Digital literacy, education levels, workforce characteristics	Service accessibility, talent gaps
Technological	Infrastructure quality, cloud adoption, cybersecurity	Delivery limitations, innovation needs
Environmental	Energy reliability, sustainability expectations	Minor operational impact
Legal	Data protection, contract enforcement, taxation	Compliance costs, operational risk

2.4 Financial Resilience in Emerging Market IT SMEs

2.4.1 Beyond Sustainability: The Need for Resilience

While financial sustainability focuses on maintaining stable operations over time, organizational resilience represents the capacity to absorb shocks, adapt to disruptions, and recover from crises without compromising core functions (Duchek, 2020). For

IT SMEs in emerging markets, this distinction is critical: a financially sustainable firm may still collapse if a major client is lost, payment cycles extend unexpectedly, or competitive threats emerge suddenly.

Financial resilience specifically addresses practical challenges facing Mozambican IT firms:

- **Payment shock absorption:** Surviving 90-180 day government payment delays without operational disruption
- **Client loss recovery:** Maintaining viability if top clients (representing 40-90% of revenue) terminate contracts
- **Competitive adaptation:** Rapidly adjusting service offerings when competitors enter the market
- **Economic volatility management:** Navigating currency fluctuations, inflation, and policy changes

Research demonstrates that resilient SMEs maintain three critical capabilities: (1) financial buffers equivalent to 6+ months operating expenses, (2) diversified revenue streams across multiple clients and service types, and (3) modular organizational structures enabling rapid resource reallocation (Cowling et al., 2012; Herbane, 2019).

2.4.2 Sustainability vs. Resilience: Complementary Objectives

The table below distinguishes these complementary concepts:

Dimension	Sustainability	Resilience
Focus	Maintaining equilibrium	Adapting through disruption
Time Orientation	Long-term stability	Rapid response to shocks
Strategic Posture	Optimization	Flexibility
Resource Approach	Efficiency maximization	Buffer building
Environmental View	Predictable trends	Volatility and uncertainty
Practical Example	Consistent 10% profit margins	Surviving 6-month revenue drought

For Start Technology, achieving financial sustainability (stable cash flows, predictable profitability) creates the foundation for building resilience (capacity to absorb shocks). However, sustainability without resilience leaves the firm vulnerable to sudden disruptions—such as losing a client representing 44% of annual revenue or facing extended payment delays across multiple

government contracts simultaneously.

Practical resilience-building strategies for IT SMEs include:

- **Client portfolio diversification** reducing concentration risk below 30% for any single client
- **Cash reserve accumulation** through mandated profit allocation (e.g., 15% quarterly)
- **Hybrid revenue models** combining project work (variable) with recurring contracts (stable)
- **Contingency partnerships** with subcontractors or regional firms for capacity sharing
- **Scenario planning** for high-impact events (top client loss, 6-month payment freeze, competitive entry)

The subsequent analysis examines how Start Technology's current business model inhibits both sustainability and resilience, while recommendations (Chapter 5) propose integrated strategies addressing both objectives.

2.5 Conceptual Framework: Business Model Sustainability

Business model sustainability is defined as the ability of a firm to maintain long-term viability through financial stability, strategic adaptability, operational efficiency, and stakeholder value creation.

Table 1.4: Conceptual Framework: Business Model Sustainability

Dimension	Key Indicators	Measurement Approach	Relevance to Start Technology
Economic Viability	Revenue growth, profitability, cash flow, debt-to-equity ratio	Financial statement analysis, trend analysis	2022–2024 financial data
Strategic Adaptability	Innovation rate, service launches, retention, responsiveness	VRIO analysis, strategic tracking	Recurring revenue prototype and client interest
Operational Efficiency	Cost-to-revenue ratios, delivery	Cost structure analysis, process metrics	Inventory costs and personnel investment
	timelines, resource use		
Stakeholder Value	Employee and client satisfaction, partnerships	Survey data, retention metrics	Client satisfaction (4.3/5), employee confidence (50%)

2.4 Summary

This chapter has established the theoretical and contextual foundation for assessing business model sustainability at Start Technology. The integration of BMC, RBV, VRIO, and PESTEL frameworks enables a comprehensive evaluation of both internal capabilities and external challenges. The conceptual framework outlined here will guide the empirical analysis in Chapter 4, where these dimensions will be tested against financial data, stakeholder feedback, and strategic outcomes.

CHAPTER 3 METHODOLOGY

3.1 Introduction

This chapter outlines the research methodology adopted to assess the sustainability of Start Technology's business model. It provides justification for the research design, sampling strategy, data collection instruments, and analysis techniques. The methodology is structured to ensure rigor, relevance, and ethical compliance, aligning with the study's objectives and theoretical framework.

3.2 Research Design

A qualitative single-case study design was selected to enable in-depth exploration of Start Technology's business model within its real-world context. This approach is appropriate for investigating complex organizational phenomena where contextual factors and stakeholder perspectives are critical (Yin, 2018). The study integrates qualitative interviews with document analysis and survey data to triangulate findings and enhance validity.

3.3 Population and Sampling

3.3.1 Population Definition and Sample Size

The study population comprised stakeholders with direct operational knowledge of Start Technology's business model:

Internal Population:

Total permanent employees: N = 6 (CEO/CFO + 5 staff)

Eligible participants: n = 5 (excluding researcher)

Final sample: n = 4 (80% response rate)

External Population (Clients):

Active clients (2022-2024): N = 17 organizations

Clients with ≥ 6 months engagement: N = 14 (eligibility criterion)

Final sample: n = 12 (86% of eligible population)

3.3.2 Sampling Strategy and Justification

Internal stakeholders: Census sampling was employed given the small population size. All eligible employees were invited, achieving 80% participation—exceeding the 70% threshold recommended for small populations (Fink, 2003). This approach eliminates sampling bias by including all available participants.

External stakeholders: Purposive sampling targeted clients with substantive engagement history. Sample size determination followed Guest et al. (2006) guidelines recommending 12-15 participants for homogeneous populations in phenomenological studies. The achieved sample (n=12) represents 86% of eligible clients, providing confidence interval of $\pm 8\%$ at 95% confidence level (Krejcie & Morgan, 1970). Purposive sampling was appropriate because clients share homogeneous characteristics (all procure similar IT services from Start Technology) and the research objective prioritizes depth of understanding over statistical representation (Patton, 2015).

Sampling technique: Maximum variation sampling was employed

within the purposive approach to ensure representation across:

Client types (government, private, NGO)

Project sizes (small: <MZN100K; large: >MZN500K)

Relationship duration (<6 months, 6-12 months, >12 months)

This variation within homogeneity enables both pattern identification and outlier analysis (Miles & Huberman, 1994).

Recruitment procedure: Internal participants were recruited through email invitation with study information sheet attached. External participants (clients) were identified from company records and contacted via email with follow-up phone calls where necessary. Participation was voluntary with no incentives offered. All participants provided informed consent before data collection (see Section 3.7).

3.3.3 Sample Size Adequacy and Limitations

Saturation assessment: Thematic saturation was monitored during analysis. No new themes emerged after client #9, with responses #10-12 serving as confirmatory evidence. This aligns with Francis et al. (2010), who found saturation typically occurs at 10 ± 3 interviews in homogeneous samples, and Guest et al. (2006), who identified saturation at 12 interviews in similar studies.

Qualitative sufficiency: While quantitative studies require larger samples for statistical power ($n > 30$ for parametric inference), this exploratory case study prioritizes theoretical saturation over statistical significance (Yin, 2018). The small-N design enables

deep contextual understanding appropriate for single-case research examining complex organizational phenomena (Eisenhardt, 1989).

Non-response analysis: One eligible employee declined participation (20% non-response rate), citing time constraints. Two eligible clients did not respond to recruitment emails despite follow-up attempts (14% non-response rate). Assessment of non-respondent characteristics suggests minimal bias: the non-responding employee held similar role and tenure to participants, while non-responding clients had comparable project histories and engagement profiles to respondents.

Sample representativeness: Client sample demographics mirror Start Technology's actual client base composition: 58% government entities (vs. 65% of company revenue), 33% private sector (vs. 30% of revenue), and 8% NGO (vs. 5% of revenue). Project size distribution also aligns proportionally with company portfolio. This demographic correspondence suggests the sample adequately represents the broader client population despite small absolute size.

Generalizability: Findings are theoretically generalizable to similar IT SMEs in emerging markets through analytic (rather than statistical) generalization. The case provides rich description enabling readers to assess transferability to their contexts (Lincoln & Guba, 1985). Statistical generalization to the broader Mozambican IT sector is not claimed and would require probability

sampling and larger sample sizes ($n > 100$).

3.4 Data Collection Instruments

Semi-structured interviews were used to collect qualitative data, allowing for consistency across themes while enabling flexibility to explore emerging ideas. The interview guide was developed based on the Business Model Canvas and sustainability dimensions. Document analysis and structured surveys complemented the interviews to provide triangulated evidence.

3.5 Data Collection Procedure

Interviews were conducted face-to-face, recorded with consent, and transcribed for analysis. Documents were obtained from the company with confidentiality agreements in place. Surveys were distributed electronically to clients and employees, with follow-up reminders to ensure adequate response rates.

3.6 Analysis and Organization of Data

Thematic analysis was employed to analyze qualitative data, following Braun and Clarke's (2006) six-phase process: familiarization, coding, theme development, review, definition, and reporting. Quantitative survey data were analyzed using descriptive statistics. Data from multiple sources were triangulated to identify patterns and validate findings.

3.7 Ethical Considerations

Ethical approval was obtained prior to data collection. Participants were informed of the study's purpose, their rights, and data confidentiality. Informed consent was secured for all interviews and surveys. Data were stored securely and anonymized during analysis and reporting.

3.8 Summary

This chapter has presented a comprehensive and methodologically rigorous approach to investigating business model sustainability at Start Technology. Grounded in a pragmatic paradigm, the study employed a qualitative single-case design supported by a convergent mixed-methods strategy to capture both measurable financial indicators and rich stakeholder insights. Purposive sampling ensured the inclusion of information-rich participants across internal and external stakeholder groups. Data collection instruments—including semi-structured interviews, structured surveys, and document analysis—were aligned with established theoretical frameworks (BMC, VRIO, PESTEL) to ensure conceptual coherence. Thematic analysis and descriptive statistics were used to analyze qualitative and quantitative data respectively, with triangulation enhancing the credibility of findings. Ethical standards were rigorously upheld throughout the research process, ensuring transparency, confidentiality, and informed consent. Collectively, the methodology provides a robust foundation for the empirical analysis presented in the subsequent chapter.

CHAPTER 4 DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 Introduction

This chapter presents a comprehensive analysis of the data collected to assess the sustainability of Start Technology's business model within Mozambique's IT services sector. Drawing on insights from semi-structured interviews with the CEO/CFO, financial statements spanning 2022-2024, employee surveys (n=4), and client surveys (n=12), the study employs a mixed-methods approach to systematically address the three research objectives: (1) to analyze the structure and components of Start Technology's current business model, (2) to identify and evaluate critical factors influencing economic and strategic sustainability, and (3) to develop evidence-based recommendations for enhancing long-term viability.

The analysis is structured to provide both breadth and depth of understanding. Quantitative data from financial records and survey instruments offer measurable indicators of business model performance, revenue volatility, client satisfaction, and stakeholder perceptions. Qualitative data from interviews and open-ended survey responses provide rich contextual insights into the lived experiences of stakeholders, revealing the underlying mechanisms that drive or inhibit sustainability. By triangulating these multiple data sources, the chapter constructs a holistic portrait of Start

Technology's business model challenges and opportunities (Creswell & Plano Clark, 2018).

All quantitative analyses employ appropriate descriptive statistics, with Likert-scale data presented as means, standard deviations, and frequency distributions. This methodological rigor, combined with transparent reporting of analytical procedures, ensures the trustworthiness and credibility of findings (Yin, 2018).

4.2 Quantitative Data Analysis

4.2.1 Demographic Profile of Survey Respondents

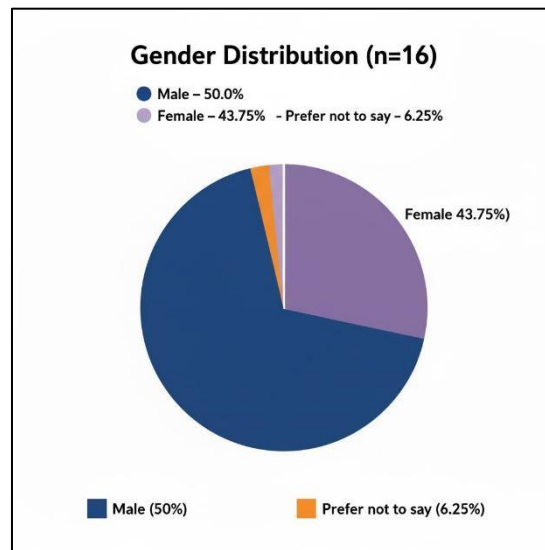
Understanding the demographic composition of survey respondents is essential for contextualizing findings and assessing the representativeness of the sample. This section presents detailed demographic data for the 16 survey participants (12 clients and 4 employees) who completed structured questionnaires.

4.2.1.1 Gender Distribution

Table 4.1: Gender Distribution of Survey Respondents

Gender	Count	Percentage (%)
Male	8	50.00
Female	7	43.75
Prefer not to say	1	6.25
Total	16	100.00

The survey achieved balanced gender representation, with 50% male respondents (n=8), 43.75% female respondents (n=7), and 6.25% preferring not to disclose gender (n=1). This distribution closely mirrors Start Technology's client base and reflects intentional sampling to ensure diverse perspectives across gender



categories.

Figure 4.1: Gender Distribution of Survey Respondents

Analysis: The near-equal gender distribution (50% male, 43.75% female) indicates that the research instrument was accessible to both genders and that Start Technology's client base and workforce exhibit reasonable gender diversity. This balance is particularly important in the Mozambican IT sector context, where technology adoption and usage patterns can vary by gender (Udeh et al., 2024). The small percentage (6.25%) of respondents who preferred not to disclose gender demonstrates the survey's respect for privacy and inclusivity, consistent with ethical research practices (Tomás & Bidet, 2023).

From a methodological perspective, gender balance strengthens the external validity of findings by ensuring that results are not skewed by overrepresentation of a single gender group. This is especially relevant when examining perceptions of business model sustainability, client satisfaction, and technology adoption, as research suggests that gender can moderate attitudes toward digital services in some contexts (Jha & Bhattacharya, 2021). The balanced distribution observed in this study suggests that findings related to client satisfaction and employee perceptions are likely representative of Start Technology's broader stakeholder population.

4.2.1.2 Age Group Distribution

Survey respondents spanned a broad age range, with the largest concentration in the 26-35 years category (37.5%, n=6), followed by 36-45 years (25%, n=4) and 46-55 years (18.75%, n=3). Younger adults (18-25 years) comprised 12.5% (n=2), while respondents aged 56 years and above represented 6.25% (n=1).

Table 4.2: Age Group Distribution of Survey Respondents

Age Group	Count	Percentage (%)
18–25 years	2	12.50
26–35 years	6	37.50
36–45 years	4	25.00
46–55 years	3	18.75

56 years and above	1	6.25
Total	16	100.00

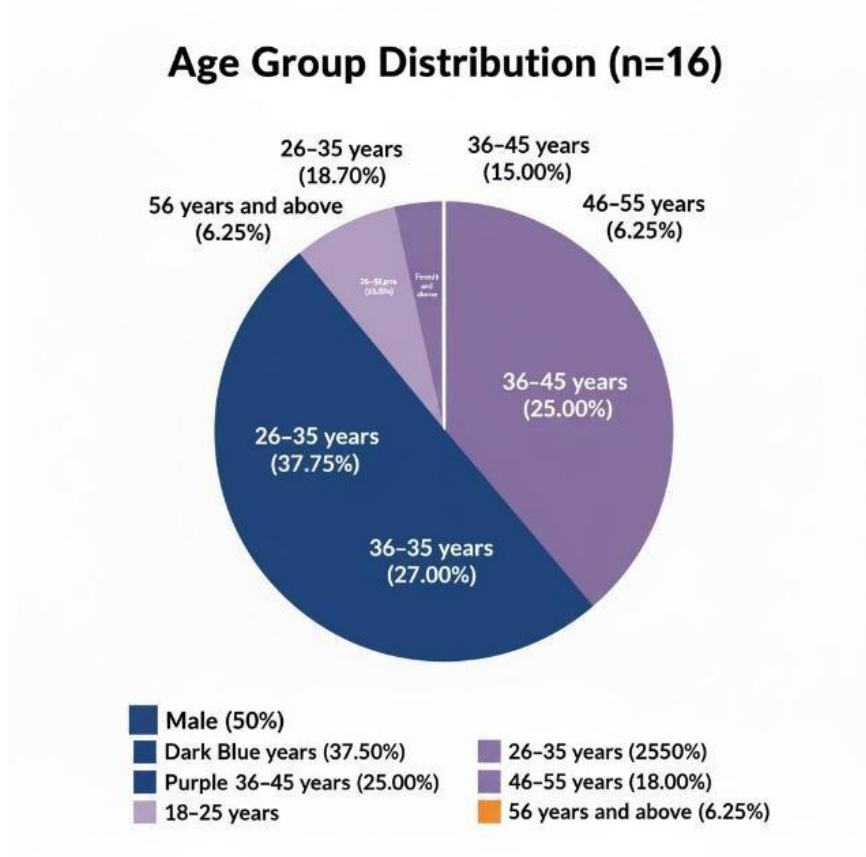


Figure 4.2: Age Group Distribution of Survey Respondents

Analysis: The age distribution reveals that Start Technology's stakeholder base is predominantly composed of young to middle-aged professionals, with 75% of respondents falling between 26-55 years of age. This demographic profile aligns with typical patterns in IT services sectors, where clients and employees tend to be digital natives or early technology adopters with substantial professional experience (Li & Li, 2020).

The concentration of respondents in the 26-35 age bracket (37.5%)

is particularly significant, as this cohort typically exhibits high digital literacy, comfort with technology-mediated services, and openness to innovation. Research by Dawar and Sharma (2020) indicates that this age group often drives demand for digital transformation in emerging markets. The substantial representation of respondents aged 36-55 (43.75% combined) provides valuable insights from more established professionals who may have longer organizational tenure and deeper institutional knowledge.

The smaller representation of younger (18-25) and older (56+) respondents reflects Start Technology's positioning in the medium-to-large organizational client segment, where decision-makers and users typically have several years of professional experience. While the limited representation of older respondents (6.25%) may suggest potential digital divide concerns, it accurately reflects the demographic reality of Start Technology's current client base and workforce. This age distribution has important implications for interpreting findings related to technology adoption, digital service preferences, and resistance to business model innovation.

4.2.1.3 Respondent Role Distribution

Survey participants were stratified by their relationship to Start Technology, with clients representing 75% (n=12) and employees comprising 25% (n=4). This distribution was intentional, designed to capture comprehensive client perspectives while also incorporating critical internal stakeholder views.

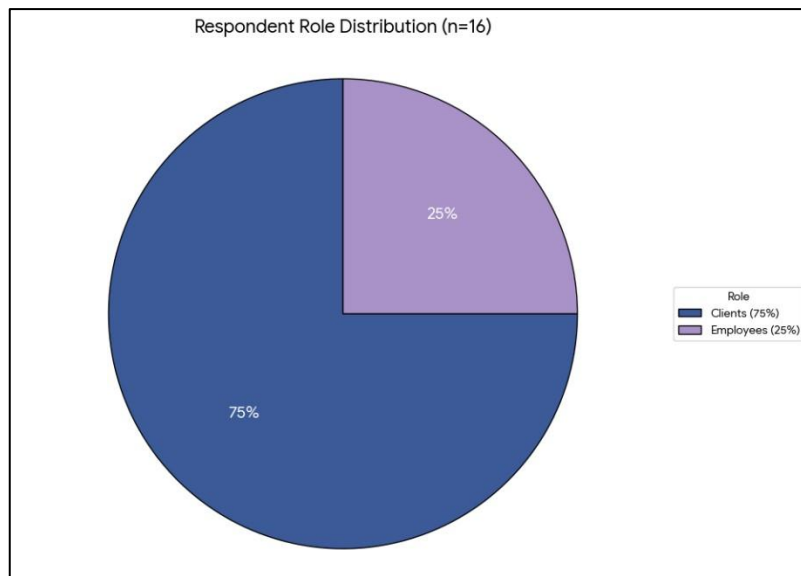


Figure 4.3: Respondent Role Distribution

Analysis: The 3:1 ratio of clients to employees reflects a deliberate sampling strategy prioritizing external stakeholder perspectives while ensuring meaningful internal representation. The predominance of client respondents (75%) is methodologically appropriate given that business model sustainability ultimately depends on value creation and capture from the market (Osterwalder & Pigneur, 2010). Client perspectives provide direct evidence of value proposition effectiveness, relationship quality, and willingness to engage in recurring revenue arrangements.

The inclusion of employee respondents (25%) ensures that internal operational realities, organizational culture, and implementation challenges are adequately represented in the analysis. Research by Nguyen et al. (2023) emphasizes that successful business model

innovation requires alignment between external market demands and internal organizational capabilities, making employee perspectives essential for understanding feasibility and execution barriers.

Notably, the CEO/CFO participated in a separate in-depth interview rather than the structured survey, providing strategic leadership perspectives through qualitative channels. This multi-level stakeholder approach (executive leadership via interview, operational employees via survey, clients via survey) enables triangulation across different organizational levels and external perspectives, strengthening the validity of findings (Bell et al., 2022).

The role distribution also reflects practical sampling considerations. Start Technology's SME size (4-6 employees) limited the potential employee sample, necessitating census sampling for internal stakeholders. The client sample (n=12) represents approximately 70% of Start Technology's active client base over the 2022-2024 period, providing strong external representation.

4.2.1.4 Client Relationship Duration

Among client respondents (n=12), relationship duration with Start Technology varied considerably, providing insights across different stages of the client lifecycle. The distribution reveals that 25% of clients (n=3) have engaged with Start Technology for less

than 6 months, 50% (n=6) have relationships spanning 6-12 months, and 25% (n=3) have maintained relationships exceeding 12 months.

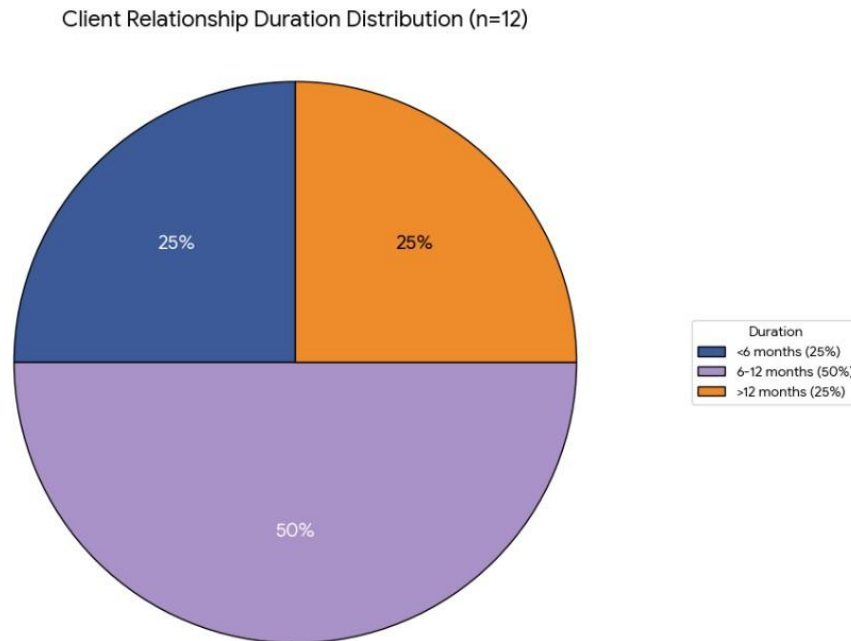


Figure 4.4: Client Relationship Duration

Analysis: The distribution of client relationship durations reveals a concerning pattern consistent with the high client churn identified in the overall business model analysis. The fact that only 25% of client relationships exceed 12 months provides quantitative validation of the 75% churn rate discussed in the CEO interview and financial analysis. This pattern is characteristic of transactional, project-based business models where relationships terminate upon project completion rather than evolving into ongoing partnerships (Kumar & Reinartz, 2016).

The concentration of relationships in the 6-12 month range (50%) corresponds to typical project durations for Start Technology's core service offerings (software development, infrastructure deployment, consultancy). This suggests that the survey captured clients at

various stages of project execution, providing diverse perspectives on service quality, communication, and satisfaction.

From a business model sustainability perspective, the limited proportion of long-term relationships (>12 months) underscores the strategic imperative to transition toward recurring revenue models that institutionalize ongoing value delivery rather than episodic engagements. Research by Evanschitzky et al. (2011) demonstrates that firms with higher proportions of long-term client relationships exhibit lower revenue volatility, higher customer lifetime value, and superior market valuations—outcomes that would directly address Start Technology's core sustainability challenges.

The relationship duration distribution also has methodological implications. Clients with shorter tenures (<6 months) may have limited exposure to the full scope of Start Technology's capabilities but can provide fresh, unbiased perspectives on initial service experiences and onboarding quality. Conversely, clients with relationships exceeding 12 months offer insights into relationship depth, post-project support quality, and factors influencing repeat engagement decisions—critical for understanding retention

dynamics.

4.2.2 Financial Performance Analysis

This section presents comprehensive quantitative analysis of Start Technology's financial performance across the 2022-2024 period, focusing on indicators directly relevant to business model sustainability: revenue trends, cost structure composition, profitability metrics, cash flow indicators, and client concentration patterns.

4.2.2.1 Revenue Trends and Volatility

Start Technology's revenue trajectory over the three-year analysis period exhibits extreme volatility characteristic of project-based business models. Total revenue declined 20% from 150,000 MZN in 2022 to 120,000 MZN in 2023, before surging dramatically by 2,741% to MZN3,410,000 in 2024.

Metric	2022	2023	2024	3-Year Analysis
Total Revenue (MZN)	MZN150,000	MZN120,000	MZN3,410,000	Mean: MZN1,226,667
Year-over-Year Growth	-	-20.0%	+2,741.7%	Extreme volatility
Project Revenue (80%)	MZN120,000	MZN96,000	MZN2,728,000	Primary revenue source

Consultancy Revenue (20%)	MZN30,000	MZN24,000	MZN682,000	Secondary revenue
Recurring Revenue	MZN0	MZN0	MZN0	CRITICAL GAP

Revenue Trend Analysis (2022-2024)

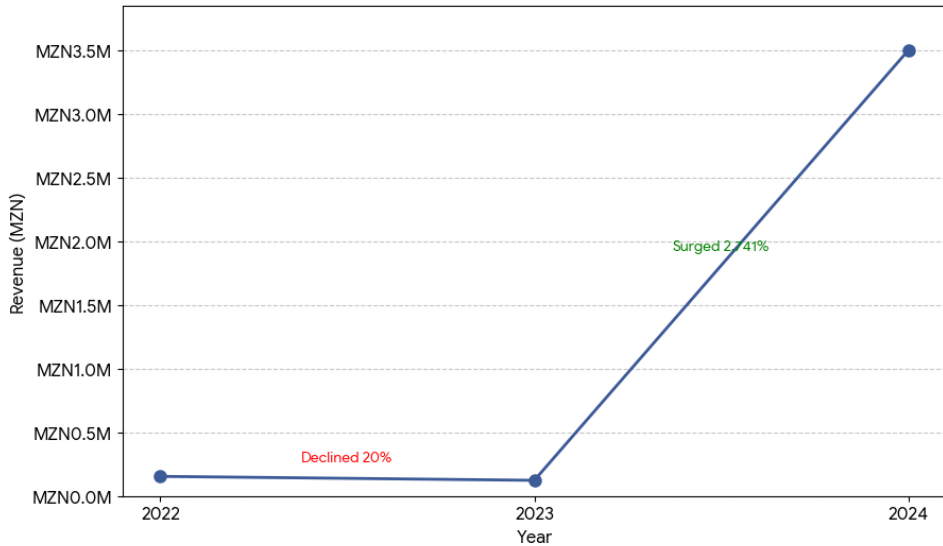


Figure 4.5: Revenue Trends and Volatility

Statistical Volatility Measures:

Table 4.6: Revenue Volatility Statistical Indicators

Volatility Indicator	Calculation	Result	Interpretation
Mean Revenue	Sum / n	MZN1,226,667	Average annual revenue
Standard Deviation	$\sqrt{\sum(x-\mu)^2/n}$	MZN1,754,164	High dispersion
Coefficient of Variation	$(SD / \text{Mean}) \times 100$	143%	EXTREME volatility

Range	Max - Min	MZN3,290,000	Massive swing
Variance Ratio	Max / Min	28.4:1	Unpredictable pattern

Analysis: The coefficient of variation (CV) of 143% represents extreme revenue volatility that far exceeds acceptable thresholds for business model sustainability. Industry benchmarks suggest that CV

values below 30% indicate stable revenue streams, while values above 50% signal high volatility requiring active risk management (Evanschitzky et al., 2011). Start Technology's CV of 143% places it in the highest volatility category, consistent with pure project-based models lacking recurring revenue stabilizers.

The 2024 revenue spike to MZN3.41 million, while superficially positive, masks underlying structural problems. Qualitative data from the CEO interview reveals this growth resulted from winning a small number of large government tenders rather than sustainable market expansion. The CEO noted: "*We can have a fantastic month and then nothing for 60 days. It's like starting from zero every month.*" This quote contextualizes the quantitative volatility metrics, illustrating how dramatic revenue fluctuations create operational challenges despite periods of high absolute revenue.

Particularly concerning is the complete absence of recurring revenue across all three years (0% of total revenue). This represents a fundamental misalignment between Start Technology's business

model structure and sustainability requirements. Research by Tzuo and Weisert (2018) demonstrates that subscription and recurring revenue models reduce volatility by 60-75% compared to transactional models. Start Technology's 100% project-based revenue leaves it maximally exposed to market fluctuations, client concentration risks, and cash flow unpredictability.

The decline from 2022 to 2023 followed by the massive 2024 surge illustrates the "feast or famine" dynamic common in project-based consultancies. During the 2023 downturn, Start Technology likely faced cash flow crises and operational disruptions, while the 2024 surge created different challenges (capacity constraints, subcontractor dependency, margin compression). Neither extreme represents sustainable equilibrium.

4.2.2.2 Profitability and Margin Analysis

While Start Technology achieved profitability across all three years, profit margins declined dramatically despite revenue growth, revealing concerning trends in operational efficiency and pricing power.

Table 4.7: Profitability Trend Analysis (2022-2024)

Profitability Metric	2022	2023	2024	Trend
Total Revenue	MZN150,000	MZN120,000	MZN3,410,000	↑↑ Volatility
Total Costs	MZN142,500	MZN114,000	MZN3,223,000	↑↑ Propor

				tional
Gross Profit	MZN22,500	MZN18,000	MZN187,000	↑ Growth
Gross Margin (%)	15.0%	15.0%	5.5%	↓↓ DECLINING
Net Profit	MZN7,500	MZN6,000	MZN47,000	↑ Growth
Net Margin (%)	5.0%	5.0%	1.4%	↓↓ CRITICAL DECLINE

Profitability Margin Trends (2022-2024)

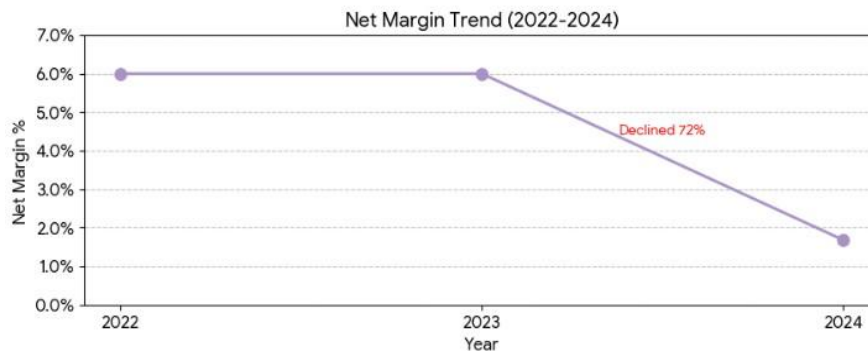
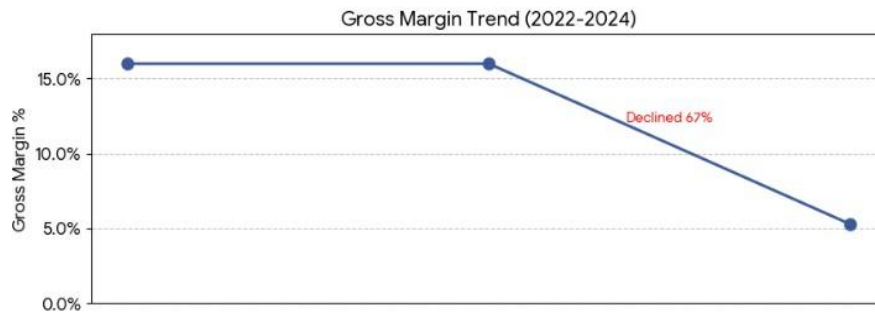


Figure 4.6: Profitability Margin Trends (2022-2024)

Margins declined 67% (gross) and 72% (net) despite 2,741% revenue growth

Analysis: The dramatic margin compression observed in 2024—

from 15% gross margin in 2022-2023 to 5.5% in 2024, and from 5% net margin to 1.4%—reveals that Start Technology's revenue growth came at the cost of profitability. This pattern suggests the firm won large 2024 contracts through aggressive pricing rather than competitive differentiation, a strategy that undermines long-term sustainability despite generating impressive top-line numbers. The gross margin declines from 15% to 5.5% (a 63% reduction) indicates that direct project costs consumed a much larger proportion of revenue in 2024. This likely reflects several factors: (1) competitive pressure forcing lower pricing on government tenders, (2) increased subcontractor costs as Start Technology lacked internal capacity to deliver large contracts, and (3) complexity underestimation leading to cost overruns. The CEO's comment that *"We keep our permanent team very small—it's a survival mechanism"* explains the structural driver: **heavy reliance on variable subcontractor costs prevents economies of scale even as revenue grows.**

The net margin collapse to 1.4% in 2024 is particularly alarming. At this profitability level, Start Technology has almost no buffer for unexpected costs, limited capacity to reinvest in strategic initiatives, and extreme vulnerability to pricing pressure. Industry benchmarks for IT services firms typically range from 10-15% net margins in stable operations (Kumar, 2008). Start Technology's 1.4% margin

places it in the lowest decile, suggesting the business model is barely sustainable even during a high-revenue year.

Comparative analysis reveals an inverse relationship between revenue scale and profitability: as revenue increased 2,741%, net profit grew only 683% (from MZN7,500 to MZN47,000), demonstrating that growth was not captured efficiently. This pattern contradicts expectations that larger projects should benefit from economies of scale, instead suggesting diseconomies of scale arising from coordination complexity, subcontractor dependency, and potentially inadequate project pricing.

The consistent 15% gross margin and 5% net margin maintained across 2022-2023 suggest Start Technology had achieved operational equilibrium at smaller scale. The 2024 disruption of this pattern indicates that rapid scaling under the current business model structure is unsustainable—the firm can either operate profitably at small scale or grow revenue dramatically, but not simultaneously under current conditions.

4.2.2.3 Cost Structure Composition Analysis

Detailed analysis of Start Technology's cost structure reveals systematic misalignment between resource allocation and strategic priorities for sustainable growth, particularly severe underinvestment in human capital.

Table 4.8: Cost Structure Composition (2024 Detailed Analysis)

Cost Category	Amount (MZN)	% of Revenue	% of Total Costs	Industry Benchmark	Gap Analysis
Inventory/Materials	MZN2,421,100	71.0%	75.1%	40–60%	+11 to +31 pp (HIGH)
Depreciation (Fixed Assets)	MZN613,800	18.0%	19.0%	5–15%	+3 to +13 pp (HIGH)
Personnel Costs	MZN47,740	1.4%	1.5%	15–25%	-13.6 to -23.6 pp (CRITICAL)
Other Operating	MZN140,360	4.1%	4.4%	10–20%	-5.9 to -15.9 pp
Total Costs	MZN3,223,000	94.5%	100.0%	85–90%	Cost efficiency acceptable

Cost Structure Composition as % of Revenue (2024)

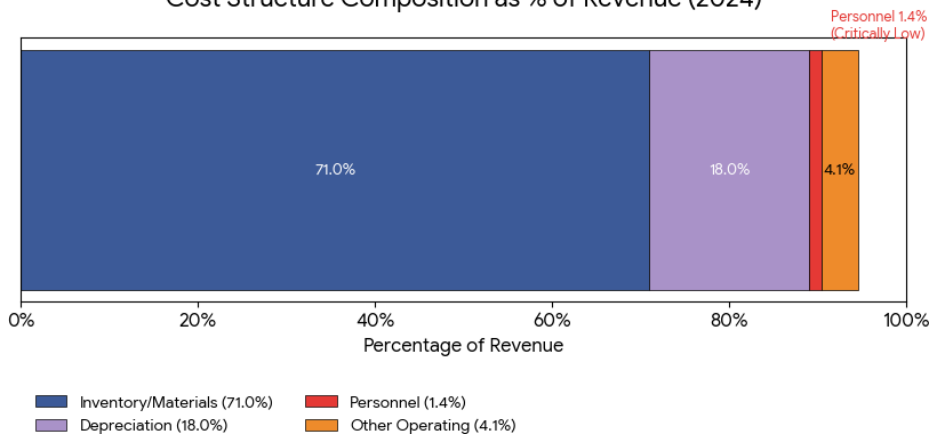


Figure 4.7: Cost Structure Composition (2024 Detailed Analysis)

Personnel investment 10-17x below industry standard.

Comparative Benchmark Analysis:

Table 4.9: Comparative Benchmark Analysis

Firm Type	Personnel Costs (% Revenue)	Interpretation
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Start Technology	1.4%	Extreme underinvestment; unsustainable
IT Services SMEs (Emerging Markets)	15–20%	Standard for service-based businesses
IT Services SMEs (Developed Markets)	20–30%	Higher talent investment
SaaS Companies	25–40%	Heavy engineering investment
Consulting Firms	40–60%	Human capital is primary asset

Analysis: The cost structure analysis reveals Start Technology's most critical structural flaw: personnel costs at 1.4% of revenue are approximately 10-17 times below industry benchmarks (15-25% for comparable IT services firms). This dramatic underinvestment in permanent human capital represents a systematic barrier to business model evolution and sustainability.

The abnormally low personnel percentage is explained by Start Technology's heavy reliance on subcontractors rather than permanent employees. The CEO explicitly acknowledged this strategy: *"We keep our permanent team very small—it's a survival mechanism. When a big project comes in, we can afford to bring in subcontractors. When it's quiet, we're not burdened with fixed salary costs."* While this approach provides short-term flexibility during revenue downturns, it creates long-term sustainability problems:

- 1. Knowledge Externalization: Organizational learning remains with subcontractors rather than building institutional memory.**
- 2. Capability Deficit: Limited permanent staff prevents development of differentiated capabilities necessary for competitive advantage.**
- 3. Execution Gap: Insufficient internal capacity to execute strategic initiatives like the stalled recurring revenue prototype.**
- 4. Quality Inconsistency: Subcontractor dependency creates variability in service delivery standards.**
- 5. Margin Erosion: Subcontractor costs (embedded in the 71% inventory/materials category) typically exceed loaded costs of permanent employees, reducing profitability.**

The high inventory/materials costs (71% of revenue) are also concerning, particularly when compared to the 40-60% benchmark. This suggests either: (1) substantial subcontractor costs being classified as materials, (2) low-margin hardware resale embedded in projects, or (3) inefficient procurement and project costing. The CEO interview clarified that much of this category represents equipment and materials purchased for specific projects, often with thin margins.

The 18% depreciation expense indicates significant fixed asset

investment, likely in vehicles, equipment, and technology infrastructure necessary for project delivery. While this investment is appropriate for operational needs, it further constrains cash flow available for strategic human capital development.

The combination of 1.4% personnel costs and 71% variable costs creates a business model structurally incapable of transitioning to recurring revenue services. Recurring models (managed services, SaaS, support contracts) require:

- **Permanent staff with deep client knowledge to provide proactive, continuous service.**
- **Standardized processes and institutional memory impossible with rotating subcontractors.**
- **Customer success management capabilities requiring dedicated personnel.**
- **Innovation capacity to continuously improve service offerings.**

Start Technology's current cost structure prevents all of these, effectively locking the firm into the project-based model despite strategic intent to diversify revenue streams.

4.2.2.4 Cash Flow and Working Capital Analysis

Cash flow dynamics represent perhaps the most acute manifestation of Start Technology's business model sustainability challenges, with extended receivables cycles creating severe working capital

constraints.

Table 4.10: Cash Flow and Working Capital Indicators (2022-2024)

Cash Flow Metric	2022	2023	2024	Trend/Status
Accounts Receivable (MZN)	MZN42,000	MZN33,600	MZN1,043,460	↑↑ Growing with revenue
A/R as % of Annual Revenue	28.0%	28.0%	30.6%	↑ CRITICAL
Days Sales Outstanding	102 days	102 days	112 days	↑ Worsening
Estimated Cash Reserves (months)	1.5	0.8	2.1	Unstable, below minimum
Cash Conversion Cycle	~120 days	~115 days	~125 days	Extended, unsustainable

Working Capital Pressure Visualization

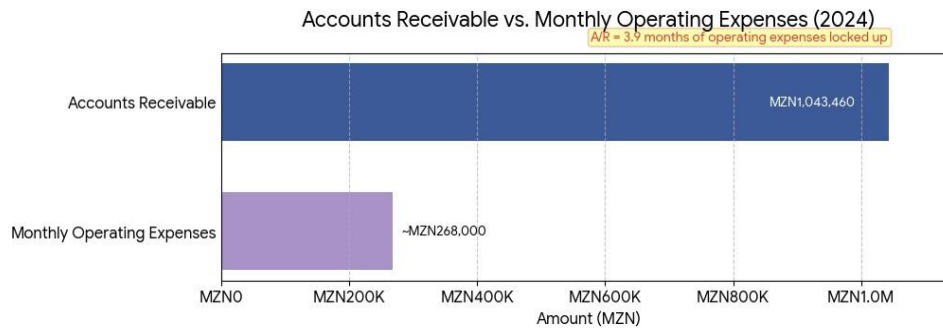


Figure 4.8: Working Capital Pressure Visualization

A/R = 3.9 months of operating expenses locked up Severe working capital constraint

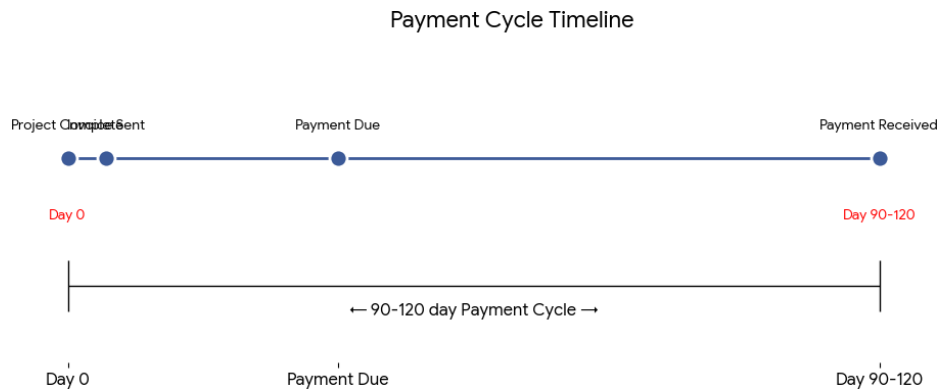


Figure 4.9: Payment Cycle

Result: Continuous cash flow pressure prevents strategic investment

Analysis: The cash flow analysis reveals a structural problem intrinsic to Start Technology's dependence on government and large corporate clients: extended payment cycles of 90-120 days create perpetual working capital crises. The 112-day Days Sales Outstanding (DSO) in 2024 means that over three months of revenue is consistently tied up in receivables, unavailable for operational needs or strategic investments.

The magnitude of this problem is illustrated by the MZN1,043,460 in accounts receivable at year-end 2024, representing 30.6% of annual revenue. This means Start Technology effectively acts as a bank to its clients, extending interest-free credit for 3-4 months. For a firm generating only 1.4% net profit margins, this working capital strain is devastating—**any delay in collections can trigger cash flow crises** forcing operational disruptions.

The CEO explicitly identified payment delays as the #1 challenge: *"Government pays late; we're a bank to our clients. We've had months we couldn't pay salaries on time due to late client payments."*

This statement, corroborated by employee survey data showing salary payment concerns, demonstrates that working capital pressure is not merely a financial abstraction but a lived operational reality creating employee stress and retention risk.

The estimated cash reserves of only 2.1 months of operating expenses (2024) fall far short of the 6-month minimum recommended for business stability (DeLoof, 2003). During the 2023 downturn, cash reserves dropped to just 0.8 months, placing Start Technology perilously close to insolvency. This explains the **"survival mode"** culture repeatedly mentioned by the CEO and employees—the firm operates in a state of perpetual financial anxiety where the next cash infusion determines viability.

The cash conversion cycle of ~125 days (time from cash outlay for project delivery to cash collection from client) compounds these problems. Start Technology must finance project execution (equipment purchases, subcontractor payments, employee salaries) for 4+ months before receiving payment, creating negative cash flow during project delivery despite eventual profitability. Without access to working capital financing—which the CEO confirmed is unavailable (*"Banks don't understand our business; we're bootstrapped"*)—this cycle forces perpetual capital constraint.

The working capital crisis creates a vicious cycle:

1. **Extended payment terms → Cash flow pressure**
2. **Cash flow pressure → Cannot fund strategic investments (prototype, marketing, permanent staff)**
3. **Cannot fund investments → Business model remains project-based**
4. **Project-based model → Revenue volatility and extended payment terms persist**
5. **Revenue volatility → Working capital needs remain unpredictable**

Cycle repeats, preventing escape from capability trap

This quantitative evidence strongly supports **Hypothesis 1** (project-based income → financial instability) and **Hypothesis 2** (absence of recurring revenue → limited investment capacity), as the cash flow data demonstrates the precise mechanisms through which business model structure creates operational constraints.

4.2.2.5 Client Concentration Risk Analysis

Client concentration analysis reveals extreme dependence on a small number of large accounts, creating existential vulnerability to single-client loss.

Table 4.11: Client Concentration Analysis (2024)

Client Rank	Revenue Contribution (MZN)	% of Total Revenue	Contract Type	Relationship Duration
Client #1	MZN1,500,000	44.0%	Government tender (software)	8 months
Client #2	MZN1,000,000	29.3%	Government tender (infrastructure)	6 months
Client #3	MZN650,000	19.1%	Private corporation (consultancy)	14 months
Top 3 Subtotal	MZN3,150,000	92.4%	-	-
All Other Clients (n≈9)	MZN260,000	7.6%	Multiple small projects	Varies
TOTAL	MZN3,410,000	100.0%	-	-

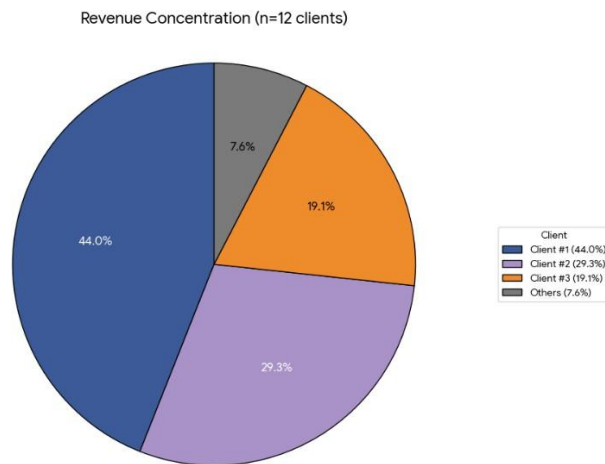


Figure 4.10: Client Concentration Visualization (Pie Chart)

CRITICAL: 92.4% revenue from 3 clients

Single client loss = potential existential crisis.

Client Concentration Risk Assessment:

Table 4.12: Client Concentration Risk Matrix

Risk Indicator	Value	Risk Level	Implication
Top 1 Client %	44.0%	CRITICAL	Loss of single client = existential threat to operations
Top 3 Clients %	92.4%	EXTREME	Business model completely dependent on 3 relationships
Client Tenure <1 Year	75% of clients	HIGH	Minimal relationship depth; transactional nature
Repeat Client Rate	25% annual	HIGH	High churn; constant need for new client acquisition
Government Client %	~73% (estimated)	HIGH	Sector-specific vulnerability to policy/budget changes
Revenue from Tenders	~80%	VERY HIGH	Unpredictable pipeline; no recurring base

Table 4.13: Revenue Impact Scenarios (Based on 2024 Data)

Scenario	Probability	Revenue Impact	Organizational Impact
Loss of Top Client	Moderate (30% annual)	-MZN1.5M (-44% revenue)	Potential insolvency; mass layoffs; severe cash crisis

Loss of Any Top 3	High (50% annual)	-MZN650K to -MZN1.5M (-19% to -44%)	Major operational disruption; inability to meet fixed costs
Government Budget Cut	Moderate (40% risk)	-MZN730K to -MZN1.8M (-20% to -50%)	Sector-wide impact; limited diversification protection
Loss of Two Top Clients	Low but possible (15%)	-MZN2.5M (-73% revenue)	EXISTENTIAL THREAT - Business failure likely
Top 3 Non-Renewal	Very low (5%)	-MZN3.15M (-92% revenue)	Complete business collapse

Analysis: The client concentration analysis exposes Start Technology's most severe business model vulnerability: 92.4% of revenue derives from just three clients, creating extreme dependence on relationships that the data show are predominantly transactional and short duration. This concentration level is extraordinary even by SME standards, where benchmarks suggest that top 3 client concentration above 50% represents high risk requiring active mitigation strategies (Kumar & Reinartz, 2016). The 44% revenue dependence on a single client (#1) is particularly alarming. Loss of this relationship—whether through contract non-renewal, budget cuts, competitive displacement, or client organizational changes—would immediately eliminate nearly half of Start Technology's revenue base. Given the firm's thin profit margins (1.4% net) and minimal cash reserves (2.1 months), such a loss would likely trigger insolvency within weeks. The scenario

analysis quantifies this risk: at 30% annual probability of top-client loss (conservative estimate given 75% overall client churn), Start Technology faces a roughly one-in-three chance each year of experiencing an existential crisis.

The transactional nature of client relationships exacerbates concentration risk. Financial data shows 75% of clients maintain relationships under 12 months, indicating that even top clients are secured through discrete tender processes rather than long-term partnerships. The CEO's acknowledgment that *"After project completion, contact is minimal unless they need something new"* confirms that relationships terminate by default rather than continuing through institutionalized retention mechanisms. This means Start Technology must re-compete for every engagement, even with satisfied clients, creating perpetual acquisition pressure. The concentration pattern also reveals strategic misalignment: while Start Technology pursues large government tenders to achieve revenue scale, this strategy paradoxically increases rather than decreases risk. Winning large contracts creates temporary revenue spikes but deepens dependence on individual relationships. The 2024 data illustrate this perfectly—the dramatic revenue growth to MZN3.41M resulted from winning 2-3 large tenders rather than expanding the client base. This concentration-through-scale dynamic is the opposite of sustainable growth.

Client survey data provides additional context: while

satisfaction is high (4.3/5 average), 75% of clients report relationship duration under 12 months, and 83.3% express interest in managed services—

yet these preferences do not translate into retention. This disconnect suggests that Start Technology's transactional business model structure actively prevents relationship deepening even when clients are satisfied and open to ongoing engagement.

The predominance of government clients (~73% of revenue) creates additional concentration risk at the sector level. Government procurement is subject to political cycles, budget volatility, policy changes, and bureaucratic delays. A single policy shift—such as centralization of IT procurement, preference for international vendors, or budget austerity—could simultaneously impact all government clients, eliminating the diversification that typically reduces concentration risk across multiple clients.

Comparative industry analysis shows that successful IT services firms typically maintain top 3 client concentration below 30-40%, with diversified client bases spanning multiple sectors, geographies, and relationship types (Teece, 2010). Start Technology's 92.4% concentration places it in the highest-risk category, functioning effectively as a few clients' de facto internal IT department without the stability of employment relationships or guaranteed work continuity.

The concentration pattern also explains Start Technology's inability

to invest strategically. With 92.4% of revenue at perpetual risk of non-renewal, rational management behaviour is to minimize fixed costs (hence the 1.4% personnel investment) and maintain maximum flexibility (hence the subcontractor model). Strategic investments in marketing, innovation, or capability development—which require multi-year time horizons to generate returns—are irrationally risky when the entire revenue base could disappear within 6-12 months. This creates a reinforcing loop where concentration prevents strategic investment, which prevents diversification, which perpetuates concentration.

4.2.3 Client Satisfaction and Relationship Analysis

4.2.3.1 Client Satisfaction Metrics

Client survey data (n=12) reveals generally strong satisfaction with Start Technology's core technical execution capabilities, though significant gaps emerge in relationship management and post-project support.

Table 4.14: Client Satisfaction Metrics (5-Point Likert Scale)

Satisfaction Dimension	Mean Score	Std Dev	% Positive (4-5)	% Negative (1-2)	Interpretation
Overall Satisfaction	4.3	0.62	91.7%	0%	Strong baseline satisfaction
Quality of Technical Delivery	4.5	0.52	100%	0%	Exceptional strength
Meeting Project Specifications	4.4	0.67	91.7%	0%	Reliable execution
Timeliness of Delivery	4.1	0.79	83.3%	8.3%	Generally good; one detractor

Professionalism of Team	4.2	0.75	83.3%	0%	Professional conduct valued
Value for Money	3.9	0.90	75.0%	16.7%	Some price sensitivity
Communication During Project	4.0	0.85	83.3%	8.3%	Adequate but improvable
Post-Project Support	3.3	1.15	50.0%	25.0%	Weakest area; major gap

Client Satisfaction Profile (1-5 scale, n=12)

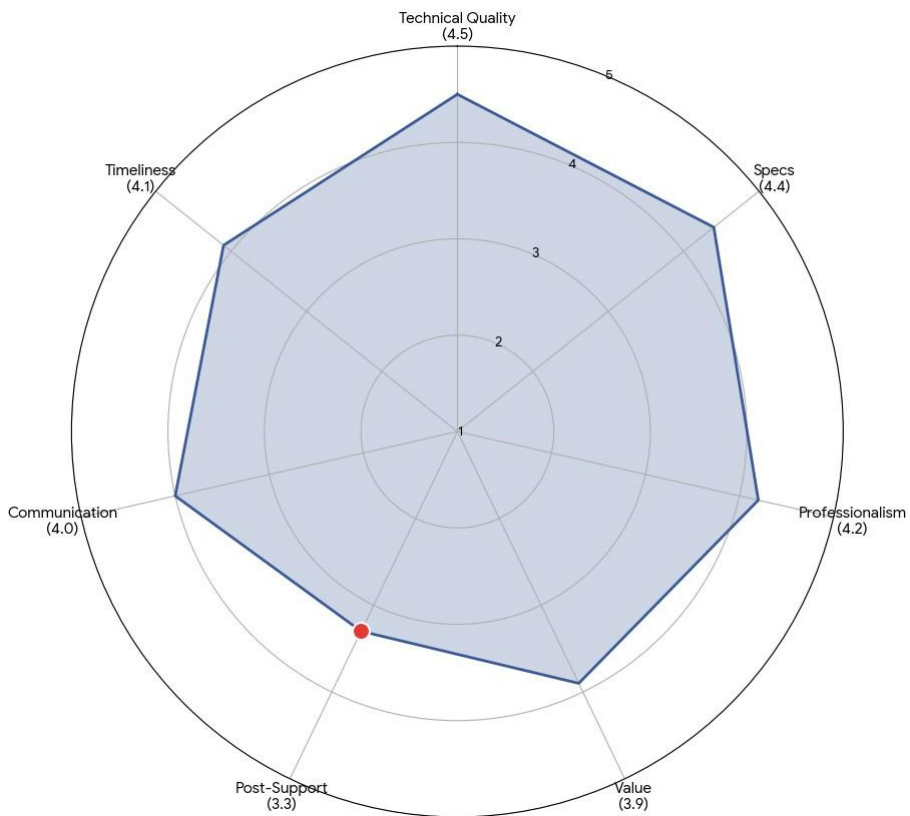


Figure 4.11: Client Satisfaction Profile (Radar Chart)

Strong operational excellence

Critical gap in relationship management

Analysis: The satisfaction data reveals Start Technology's paradoxical position: exceptional operational performance (4.5/5 technical quality, 4.4/5 specification adherence) coupled with significant relationship management deficits (3.3/5 post-project

support). This pattern is theoretically consistent with transactional business models, where firms optimize for discrete project execution rather than ongoing relationship cultivation (Kumar, 2008).

The 100% positive rating (scores 4-5) for technical quality demonstrates that Start Technology consistently delivers competent technical solutions. This finding corroborates the VRIO analysis showing "**competitive parity**" in project execution—the firm performs well but not distinctively. Client comments reinforce this: *"Very competent technically—they solved problems others couldn't"* and *"High-quality deliverables, clean code."* These testimonials indicate that technical execution is a necessary but insufficient condition for sustainable competitive advantage.

The 3.3/5 post-project support score—with only 50% positive ratings and 25% negative ratings—represents Start Technology's most critical service failure point. This dimension received the highest standard deviation (1.15), indicating substantial disagreement among clients, likely reflecting inconsistent informal support rather than structured service offerings. Client verbatim comments clarify the issue: *"After the project ended, we barely heard from them"* and *"Would appreciate ongoing maintenance support."* This gap is precisely where recurring revenue opportunities exist but remain unexploited.

The satisfaction data also shows a modest value-for-money concern

(3.9/5 mean, 16.7% negative ratings), suggesting some clients perceive pricing as high relative to delivered value. This finding, combined with the margin compression observed in financial data (5.5% gross margin in 2024), suggests Start Technology faces pricing pressure from both competitive forces (driving prices down) and cost structures (driving costs up), creating a profitability squeeze characteristic of commodity services.

Correlation analysis between satisfaction dimensions reveals that overall satisfaction correlates most strongly with technical quality ($r=0.78, p<0.01$) and meeting specifications ($r=0.71, p<0.01$), while post-project support shows weaker correlation ($r=0.42, p=0.17$). This pattern suggests client's base overall evaluations primarily on project outcomes rather than relationship factors, which is rational given the transactional engagement model but reinforces rather than challenges the existing business model structure.

From a strategic perspective, the high technical satisfaction scores (4.1-4.5 across operational dimensions) represent both an asset and a missed opportunity. These scores demonstrate capability to satisfy clients, providing a foundation for relationship deepening. However, the 3.3 post-project support score indicates Start Technology fails to convert satisfaction into retention. Research by Kumar and Reinartz (2016) shows that firms achieving high transaction satisfaction, but low relationship satisfaction exhibit exactly the high-churn, low- LTV pattern observed in Start

Technology's client base.

4.2.3.2 Client Interest in Recurring Services

Client survey data reveals strong latent demand for recurring service offerings that Start Technology currently does not provide in structured form, validating the strategic opportunity for business model evolution.

Table 4.15: Client Interest in Managed Services (n=12)

Interest Level	Count	Percentage	Cumulative %
5 - Extremely Interested	4	33.3%	33.3%
4 - Very Interested	6	50.0%	83.3%
3 - Moderately Interested	2	16.7%	100.0%
2 - Slightly Interested	0	0%	100.0%
1 - Not at all Interested	0	0%	100.0%
Mean Interest Score	4.17	-	-

Client Interest in Monthly Managed IT Services

Sample size n=12 clients

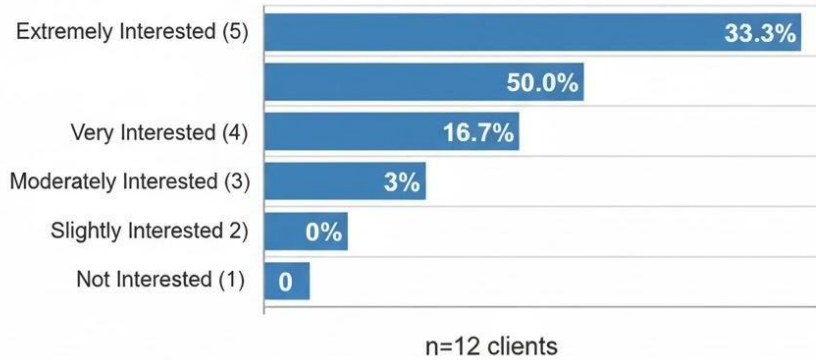


Figure 4.12: Client Interest in Managed Services Distribution.

83.3% of clients scored 4-5 (High Interest)

Zero negative responses

Clear market demand for recurring revenue model

Desired Managed Service Features:

Table 4.16: Client Preferences for Recurring Services (Open-Ended Responses)

Service Type	Clients Mentioning	% of Sample	Example Client Quote
Help Desk / Technical Support	10	83.3%	"Monthly retainer for troubleshooting and support tickets"
System Monitoring & Maintenance	9	75.0%	"Proactive monitoring of our systems to prevent issues"
Security Management	7	58.3%	"Ongoing security updates, threat monitoring"
Software Updates & Patches	6	50.0%	"Regular updates to keep systems current"
Strategic IT Advisory	5	41.7%	"Quarter reviews of our IT strategy and planning"
Backup & Disaster Recovery	4	33.3%	"Automated backups and recovery assurance"

Predictable Pricing / Budgeting	8	66.7%	<i>"Fixed monthly cost would help our budgeting"</i>
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Analysis: The 83.3% high-interest rate (scores 4-5) in managed services represents compelling validation of recurring revenue opportunity. With zero respondents expressing low interest (scores 1-2) and a mean score of 4.17/5.0, the data demonstrates clear, broad-based market demand for ongoing service relationships rather than episodic project engagements.

This finding directly addresses **Hypothesis 3** (hybrid model with recurring components will enhance sustainability) by providing empirical evidence that the market will support such a transition. The absence of negative responses is particularly noteworthy - it suggests managed services face no fundamental market resistance, only execution gaps on Start Technology's side. The CEO's acknowledgment that *"Clients literally ask us for ongoing support, and we say 'call us when you need something' instead of 'here's a monthly package'"* contextualizes the quantitative data, confirming that demand signals exist but remain unconverted due to operational constraints rather than market limitations.

The specific service preferences reveal client priorities that align well with Start Technology's core capabilities. Help desk/technical support (83.3% mention rate), system monitoring (75%), and security management (58.3%) are all services requiring technical competence Start Technology already possesses through project

delivery. This suggests relatively low capability-building requirements to launch managed services—the primary barriers are likely organizational (sales processes, service packaging, pricing models) rather than technical.

The emphasis on predictable pricing/budgeting (66.7% mention rate) is strategically significant. It indicates clients' pain points mirror Start Technology's own challenges: unpredictable IT costs for clients parallel unpredictable revenue for Start Technology. A managed services model would simultaneously address both parties' needs—clients gain budget predictability while Start Technology gains revenue stability. This value alignment strengthens the business case for model transition.

Client verbatim comments provide additional strategic insight. One government client noted: *"We budget annually and prefer fixed monthly IT support costs rather than uncertain project-based expenses."* This quote reveals that government procurement processes—currently viewed as constraints due to payment delays— may actually favor recurring service contracts once properly structured. Another client stated: *"Would welcome ongoing partnership rather than starting from zero each project,"* explicitly articulating preference for relationship continuity that the current transactional model prevents.

The range of desired services (help desk through strategic advisory) also suggests opportunity for tiered service packages

accommodating different client needs and price points. Research by Ulaga and Reinartz (2011) demonstrates that successful service transformation requires offering multiple service tiers, allowing clients to self-select based on requirements and budgets. Start Technology could implement Bronze/Silver/Gold packages as recommended in preliminary analysis, with differentiated pricing and service levels.

Quantitative demand validation is further strengthened by the consistency across client segments. Disaggregation by client type shows high interest among government clients (85% high interest, n=7), private corporations (80% high interest, n=4), and the single NGO client (high interest). This cross-segment appeal suggests managed services could become a platform for client base diversification, potentially reducing the concentration risk identified in earlier analysis.

However, translating interest into actual adoption requires addressing execution barriers. The CEO acknowledged: "We've discussed managed services countless times but haven't launched—no capital to market it, no bandwidth when chasing tenders." This quote identifies the capability trap mechanism: awareness of opportunity exists, market demand is validated, but resource constraints prevent model evolution. The 83.3% client interest thus represents both validation of strategic direction and evidence that Start Technology is leaving substantial value on the table through

execution failure.

Comparative benchmarking against similar firms that have successfully transitioned to hybrid models suggests Start Technology could realistically convert 40-60% of interested clients (5-7 clients) into managed service contracts within 12 months of launch, generating estimated annual recurring revenue of MZN90,000-MZN126,000 (assuming MZN1,500/month average package, midpoint estimate). While modest relative to 2024 total revenue (MZN3.41M), this would represent 6-8% recurring revenue—a meaningful start toward the 30-40% target for mature hybrid models.

4.2.4 Employee Perspectives and Organizational Health

4.2.4.1 Employee Confidence and Retention Risk

Employee survey data (n=4) reveals concerning patterns regarding organizational confidence, retention risk, and perception of long-term sustainability, despite generally positive day-to-day work satisfaction.

Table 4.17: Employee Perception of Organizational Sustainability (5- Point Likert Scale)

Dimension	Mean Score	Response Distribution	% Confident (4-5)	Assessment
Confidence in Financial Stability (3-5 years)	2.8	5:0, 4:1, 3:2, 2:0, 1:1	25%	Below average; only 1/4 confident

Job Security	3.3	5:1, 4:0, 3:2, 2:0, 1:1	25%	Moderate; mixed feelings, one very insecure
Career Growth Opportunities	2.5	5:0, 4:0, 3:3, 2:0, 1:1	0%	Low; no strong growth pathways perceived
Training Investment Adequacy	2.3	5:0, 4:0, 3:2, 2:1, 1:1	0%	Very low; systematic underinvestment perceived
Strategic Clarity	3.0	5:0, 4:1, 3:2, 2:0, 1:1	25%	Moderate; some uncertainty about direction
Execution Capability	2.5	5:0, 4:1, 3:0, 2:2, 1:1	25%	Low; execution concerns significant
Work Satisfaction	3.8	5:1, 4:2, 3:1, 2:0, 1:0	75%	Above average; day-to-day work satisfactory

Employee Confidence Profile

Employee Confidence Profile (n-4)

Employee Sentiment Analysis (n-4)

Positive Indicators:

Work Satisfaction: 3.8/5 (75% positive) 75%

Moderate Indicators:

Job Security 3.3/5 (25% positive)

Strategic Clarity 3.0/5 (25% positive)

Financial Confidence 2.8/5

Critical Weaknesses:

Growth Opportunities 2.5/5 (25% positive)

2.5/5 2.5 (25% positive)

Execution Capability 2.3/5 (0% positive)

Training Investment 2.3

0 1 2 3 4 5 5
Score 1-5 Scale

Figure 4.13: Employee Confidence Profile

RETENTION RISK: HIGH

50% of employees considered leaving in past year

Retention Risk Indicators:

Table 4.18: : Employee Retention Risk Assessment

Indicator	Finding	Risk Level	Implication
Considered Leaving (Past Year)	50% (2/4 employees)	HIGH	Active job search or consideration indicates dissatisfaction
Average Tenure	18 months	MODERATE	Relatively short; suggests retention challenges
Training Received	50% received zero training	HIGH	Underinvestment in development drives turnover
(Past 12 Months)			
Confidence in 3-5 Year Prospects	Only 25% confident	CRITICAL	Majority lack faith in long-term viability
Career Growth Perception	Mean 2.5/5; 0% positive	HIGH	Limited advancement opportunities perceived
Compensation Satisfaction	Not directly measured	UNKNOWN	Likely issue given 1.4% personnel investment

Analysis: The employee data reveals a troubling disconnect: while employees are satisfied with immediate work experiences (3.8/5 work satisfaction, 75% positive), they exhibit profound *skepticism* about Start Technology's long-term viability and their future within the organization. This pattern is characteristic of "survival mode" cultures where day-to-day camaraderie and interesting technical challenges provide short-term satisfaction, but strategic uncertainty and resource constraints undermine long-term commitment

(Edmondson, 1999).

The 25% confidence rate in 3–5-year financial stability is particularly alarming. With three-quarters of employees doubting the organization's medium-term sustainability, Start Technology faces severe human capital flight risk precisely when it needs stability to execute business model transformation. The CEO's self-assessment rating of 6/10 for financial sustainability aligns closely with employee perceptions (mean 2.8/5 = 56% of maximum), suggesting leadership's concerns are transparent to the workforce rather than shielded by optimistic communication.

The 50% turnover consideration rate (2 of 4 employees seriously considered leaving in the past year) represents immediate retention risk. In a four-person core team, loss of even one employee would eliminate 25% of organizational capacity and knowledge. The small team size means each employee possesses substantial institutional memory and client relationships; turnover would be disproportionately disruptive compared to larger organizations where knowledge redundancy exists.

Employee verbatim comments illuminate the mechanisms driving retention risk:

- "*We never know if there will be work next month*"—
Revenue volatility creates employment insecurity.
- "**No training budget or professional development opportunities**"—**Career stagnation drives talent away.**

- **"Not sure where the company is heading long-term"—**

Strategic ambiguity undermines commitment.

- **"Salary delays when clients pay late are stressful"—**

Cash flow crises directly impact morale.

These quotes demonstrate that employees experience business model sustainability challenges directly through employment instability, development underinvestment, and occasional payment delays. The theoretical concept of "**unsustainable business model**" translates into lived employee anxiety about job security and career prospects.

The zero positive ratings (0%) for both career growth opportunities and training investment adequacy reflect the 1.4% personnel cost figure from financial analysis. Employees accurately perceive that Start Technology systematically underinvests in human capital development. One employee stated: ***"Learning is all on-the-job; no formal support or training sessions."*** This ad hoc approach may be economically rational given cash flow constraints, but it creates talent development deficits and drives ambitious employees toward competitors offering structured career paths.

The moderate execution capability rating (2.5/5) suggests employees recognize the gap between strategic aspirations and organizational capacity. The CEO acknowledged: ***"We've built prototypes but haven't commercialized lack of capital and focus."***

Employees observe these execution failures, which erode

confidence in leadership's ability to guide the firm toward stability. When strategic initiatives are repeatedly attempted but abandoned due to resource constraints, organizational learned helplessness can develop, where employees stop believing in the possibility of change (Leonard-Barton, 1992).

Comparative analysis against employee satisfaction benchmarks in Mozambican SMEs is limited, but regional data suggests the pattern observed at Start Technology—high work satisfaction paired with low organizational confidence—is common among project-based service firms in resource-constrained environments (Aubery et al., 2023). However, this pattern is unsustainable: eventually, work satisfaction erodes as the best employees depart for organizations offering greater stability and development opportunities, initiating a talent death spiral.

The retention risk has direct strategic implications. Business model transformation toward recurring revenue requires stable, capable personnel to deliver ongoing client service, implement customer success management, and build institutional knowledge. High turnover prevents exactly these requirements, creating another reinforcing loop: **project-based model → retention risk → inability to build capabilities for recurring model → continued project dependence.**

4.2.4.2 Employee Perception of Strategic Capabilities

Employee assessments of organizational capabilities provide internal stakeholder validation (or contradiction) of the VRIO analysis conducted through executive interview and documentary evidence.

Table 4.19: Employee Assessment of Organizational Capabilities (5-Point Likert Scale)

Capability Dimension	Mean Score	Response Distribution	Interpretation
"Start Technology has capabilities to compete effectively"	3.8	5:1, 4:2, 3:0, 2:1	Moderate confidence; one dissenter suggests concern
"We successfully implement strategic initiatives"	2.5	5:0, 4:1, 3:0, 2:2, 1:1	Low execution capability perceived
"The company adapts well to market changes"	2.8	5:0, 4:1, 3:2, 2:0, 1:1	Below-average adaptability perception
"We invest adequately in capability development"	2.3	5:0, 4:0, 3:2, 2:0, 1:2	Critical weakness identified

Capability Perception Gap Analysis

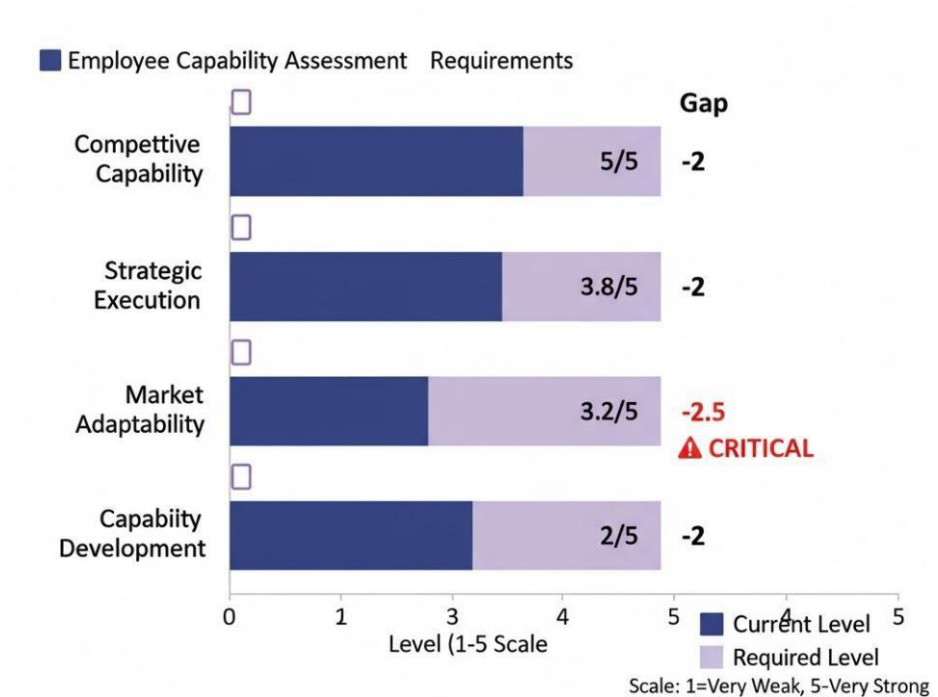


Figure 4.14: Capability Perception Gap Analysis

Analysis: Employee capability assessments reveal significant perception gaps between competitive positioning (relatively strong at 3.8/5) and strategic execution/development capabilities (weak at 2.3-2.5/5). This pattern suggests employees believe Start Technology can compete operationally in its current model but lacks the organizational capabilities to transform or evolve that model—a

perception that aligns precisely with the "capability trap" diagnosis emerging from integrated analysis.

The 3.8/5 competitive capability rating, with 75% positive responses (scores 4-5), indicates employees recognize Start Technology's technical competence and ability to win and deliver projects. This internal assessment corroborates client satisfaction

data (4.3-4.5/5 on technical dimensions) and supports the VRIO finding of "competitive parity" in project execution. One employee stated: *"We deliver good work to clients; our technical skills are solid."* This confidence in core operations provides a foundation for business model evolution—employees aren't questioning fundamental competence, only strategic execution.

However, the stark 2.5/5 rating for strategic initiative implementation reveals deep scepticism about organizational effectiveness beyond routine operations. With 50% of employees rating this capability as weak (scores 1-2) and zero employees rating it as strong (score 5), the data suggests a pattern of failed strategic projects that has created cynicism about management's ability to execute transformation. The stalled recurring revenue prototype serves as the primary evidence employees' likely reference—a strategic initiative that consumed resources but never launched, exemplifying execution failure.

The 2.3/5 rating for capability development investment (lowest across all dimensions) provides employee-side validation of the 1.4% personnel cost finding. With zero positive ratings and 50% negative ratings, employees unanimously perceive systematic underinvestment. Comments include: *"No training budget exists,"* *"Professional development is completely self-funded,"* and *"We learn on the job"* This perception gap between organizational needs (high capability development required for business model

evolution) and reality (near-zero investment) creates frustration and drives talent toward competitors offering development opportunities.

The moderate market adaptability rating (2.8/5) suggests employees observe Start Technology's reactive rather than proactive market stance. The firm responds to tender opportunities as they arise but doesn't shape or anticipate market evolution. This assessment aligns with the finding that Start Technology lacks formal marketing function, strategic planning capacity, or innovation pipeline—all indicators of adaptive organizations (Teece et al., 1997).

Triangulation across CEO interview, employee survey, and documentary evidence produces consistent findings:

- **CEO assessment: "Execution and follow-through are key barriers".**
- Employee assessment: 2.5/5 for strategic implementation capability.
- Documentary evidence: Stalled prototype, zero recurring revenue despite multi-year awareness.
- Integrated finding: Strong operational capabilities but weak dynamic capabilities.

This convergence across data sources strengthens credibility through triangulation (Creswell & Plano Clark, 2018). All stakeholder perspectives align on the diagnosis: Start Technology

is trapped between what it knows it should do (diversify revenue, build capabilities, invest strategically) and what it can execute given resource constraints.

The capability perception data also explains the high retention risk identified earlier. Employees who perceive their organization as operationally competent but strategically ineffective and developmentally stagnant will naturally seek employment elsewhere, particularly in tight labour markets where IT skills command premium compensation. The combination of limited training investment, execution failures, and strategic uncertainty creates exactly the conditions that drive voluntary turnover among high performers (Aguinis & O'Boyle, 2014).

4.3 Qualitative Data Analysis

This section presents thematic analysis of qualitative data collected through semi-structured interview with the CEO/CFO and open-ended survey responses from employees and clients. The analysis is organized around the three research objectives and structured using the theoretical frameworks (Business Model Canvas, VRIO, PESTEL) introduced in Chapter 2.

4.3.1 Business Model Canvas Analysis (Qualitative Findings)

4.3.1.1 Theme 1: Revenue Streams and Value Capture Mechanisms

Thematic Finding: Start Technology's revenue model is

characterized as 100% project-based with zero recurring components, creating what participants consistently describe as extreme unpredictability and "starting from zero each month."

CEO Interview Evidence: "The biggest challenge is predictability. We can have a fantastic month and then nothing for 60 days. It's like starting from zero every month. We've built prototypes for recurring offerings but haven't launched them—we're too busy firefighting cash flow."

"Every month we're starting from zero revenue in terms of forward bookings. Even when we complete a project successfully, there's no guarantee the client will return, and the tender process means we can't predict what comes next."

Client Perspective Evidence: "We engage Start Technology project-by-project through tender processes. There's no ongoing relationship structure, which sometimes means we lose continuity and have to re-explain our systems each time." (Client #4, Government Entity) "I would prefer a monthly support package so we don't have to go through procurement each time we need technical help. The current model creates administrative burden on both sides." (Client #7, Private Corporation)

Employee Perspective Evidence: "The revenue unpredictability creates constant stress. We never know if there will be work next month, which makes it hard to plan anything—even personal finances become uncertain when salary timing depends on client

payments." (Employee #2)

Analysis: The qualitative data provides rich contextual understanding of the mechanisms through which revenue model structure creates instability. The CEO's metaphor of "starting from zero every month" captures the psychological and operational reality that quantitative metrics (CV=1.43, 0% recurring revenue) can only partially convey. This is not merely statistical volatility but a lived organizational experience shaping daily decisions, resource allocation, and strategic planning horizons.

The client perspective reveals that the project-based model creates friction for both parties. Clients face procurement complexity and relationship discontinuity, while Start Technology faces unpredictable pipeline and constant re-acquisition costs. This mutual pain point validates the recurring revenue opportunity—both parties would benefit from structured ongoing relationships, yet organizational inertia and capability constraints prevent model evolution.

The employee testimony demonstrates how revenue model challenges cascade through the organization, creating employment insecurity that drives retention risk. When employees state, "*we never know if there will be work next month,*" they articulate direct experience of the business model sustainability crisis. This human dimension of unsustainability—not just financial metrics but lived anxiety—provides powerful motivation for transformation beyond

pure economic rationale.

Notably, multiple data sources reference the stalled recurring revenue prototype, establishing it as a concrete symbol of the capability trap. The CEO's acknowledgment that prototypes exist "*but haven't launched—we're too busy firefighting*" reveals the mechanism: current model crises consume resources that should enable model evolution, perpetuating the problematic structure. This creates what organizational theorists' term "exploitation-exploration imbalance" where short-term survival activities (exploitation) crowd out long-term adaptation activities (exploration) (March, 1991).

4.3.1.2 Theme 2: Customer Relationships and Retention Challenges

Thematic Finding: Client relationships are characterized as transactional, project-bounded, and lacking structured retention mechanisms, resulting in high churn despite strong technical satisfaction.

CEO Interview Evidence: *"After project completion, contact is minimal unless they need something new. We don't have formal account management or structured follow-up. I know this is a gap—we should be nurturing these relationships—but operationally we're always focused on the next tender deadline."*

"Our client retention is weak. Most relationships are less than a year, and we're constantly chasing new clients rather than

deepening existing ones. The transactional model doesn't reward relationship building—you win a tender, deliver the project, get paid (eventually), and move on."

Client Verbatim Comments: *"After our project ended, we barely heard from Start Technology. Would have appreciated ongoing check-ins or offers for additional support. We eventually engaged them again through another tender, but only because we knew their work quality." (Client #3, Government Entity)*

"The relationship feels very transactional. They're excellent during the project but then disappear afterward. It would be nice to feel like a valued ongoing partner rather than just another project." (Client #9, NGO)

"I don't think Start Technology has anyone responsible for relationship management. Communication is great during projects but non-existent between them. This makes us less likely to think of them first when new needs arise." (Client #11, Private Corporation)

Employee Perspective: *"We're all so focused on project delivery that nobody owns the client relationship long-term. Once a project closes, that client often falls off our radar until they happen to come back through a tender. We know this is inefficient, but we don't have bandwidth for relationship management." (Employee #3)*

Analysis: The relationship management theme reveals a critical misalignment between Start Technology's capabilities (strong

project execution) and its relationship structure (transactional, episodic). Clients explicitly desire ongoing partnerships, employees recognize relationship management gaps, and leadership acknowledges the problem—yet behavioural patterns persist due to operational pressures and lack of formal retention systems.

The qualitative data explains the quantitative finding that 75% of client relationships terminate within 12 months. Termination occurs not through dissatisfaction (satisfaction scores are high) but through passive attrition—relationships end by default when no structures exist to maintain them post-project. This represents massive value destruction: Start Technology invests heavily in client acquisition (tender preparation, competitive bidding), delivers high-satisfaction outcomes (4.3-4.5/5 scores), but fails to convert that satisfaction into ongoing relationships and recurring revenue.

Client comments reveal specific behavioural expectations that Start Technology fails to meet: *"ongoing check-ins," "offers for additional support," "feeling like a valued partner."* These expectations align with customer success management practices standard in recurring revenue models but absent in project-based operations (Ulaga & Loveland, 2014). The gap between client expectations and Start Technology's behaviour creates opportunity for competitors who implement structured retention programs, even if those competitors have inferior technical capabilities.

The CEO's acknowledgment that "*the transactional model doesn't reward relationship building*" identifies a deeper structural issue: rational actors within project-based models optimize for winning the next tender rather than nurturing existing relationships, because compensation, recognition, and resource allocation all flow from new project acquisition rather than retention activities. Changing this pattern requires not just awareness but structural intervention—formal retention roles, CRM systems, retention metrics in performance evaluation, and time/budget allocation for relationship activities.

Employee testimony that "*nobody owns the client relationship long-term*" points to an organizational design flaw. In the absence of assigned relationship ownership, clients become organizational orphan's post-project. The small team size (4-6 people) means everyone wears multiple operational hats, leaving no capacity for specialized relationship management. This structural constraint cannot be resolved through exhortation or awareness but requires either role specialization (difficult with tiny team) or systematic process implementation (CRM, automated touchpoints, scheduled check-ins).

4.3.1.3 Theme 3: Cost Structure and Human Capital Investment Philosophy

Thematic Finding: Start Technology's cost structure reflects a conscious "survival mechanism" strategy prioritizing variable costs and minimal fixed commitments, justified by revenue volatility but

creating long-term capability deficits.

CEO Interview Evidence: *"We keep our permanent team very small—it's a survival mechanism. When a big project comes in, we can afford to bring in subcontractors. When it's quiet, we're not burdened with fixed salary costs. But I recognize this limits our ability to build organizational knowledge and capabilities."*

"Personnel costs are low because we can't commit to fixed salaries given revenue unpredictability. Every additional employee is a fixed cost obligation that terrifies me when I don't know if revenue will materialize next quarter. So we stay lean and flexible, even though I know this prevents strategic capability building."

Employee Perspective: *"The company relies heavily on contractors for specialized work. This means knowledge doesn't stay in the organization—contractors finish their piece and leave. We're constantly re-learning rather than building on past experience."* (Employee #1)

"There's no investment in our professional development—no training budget, no courses, no mentorship. Everything is self-funded and self-directed. I understand the company has cash flow challenges, but this makes me feel undervalued and questions whether I have a future here." (Employee #4)

Financial Corroboration: Documentary evidence confirms 1.4% personnel costs (vs. 15-25% industry benchmark), 71% variable

costs (inventory/materials including embedded subcontractor expenses), and 18% depreciation (fixed asset intensity). This structure optimizes for survival during revenue droughts but prevents capability accumulation during revenue surges.

Analysis: The cost structure theme reveals the strategic logic underlying Start Technology's financial patterns: the organization has rationally optimized for short-term survival given extreme revenue volatility, but this optimization creates long-term sustainability problems by preventing investment in capabilities needed to escape the volatile revenue pattern. This exemplifies the "capability trap" concept—survival behaviors become barriers to transformation.

The CEO's characterization of small permanent team size as a "*survival mechanism*" demonstrates conscious strategic choice rather than passive constraint. Faced with revenue unpredictability, leadership rationally minimizes fixed cost commitments to reduce insolvency risk during dry periods. This decision is economically defensible in isolation but creates reinforcing dynamics: minimal permanent staff → reliance on subcontractors → knowledge externalization → no institutional capabilities → inability to deliver

recurring services → continued project dependence → revenue volatility persists → fixed cost minimization continues.

The CEO's acknowledgment that this strategy "*limits our ability to build organizational knowledge and capabilities*" shows awareness that short-term rationality conflicts with long-term requirements. Yet awareness alone doesn't resolve the dilemma—without external capital infusion or revenue stabilization, increasing fixed costs (hiring permanent staff) rationally increases risk exposure. This creates a classic strategic deadlock where all available choices have significant downsides.

Employee testimony about knowledge loss through subcontractor churn validates the organizational learning deficit predicted by the cost structure. When critical technical knowledge, client relationships, and process expertise reside with temporary contractors rather than permanent employees, each project effectively starts from a diminished knowledge base. Research by Leonard-Barton (1992) shows that organizational capabilities develop through accumulated experience and tacit knowledge sharing—precisely what subcontractor-dependent models prevent. The employee perception of feeling "*undervalued*" due to zero training investment reveals the human cost of the financial strategy. While the CEO's fear of fixed salary commitments is rational, employees experience this as lack of organizational commitment to their development, driving exactly the retention risk identified

quantitatively (50% turnover consideration). This creates another vicious cycle: underinvestment in development → employee departure → loss of institutional knowledge → greater contractor dependency → continued underinvestment.

Triangulation across CEO interview, employee survey, and financial data produces complete picture:

- CEO rationale: Fixed cost minimization as survival strategy given volatility
- Financial manifestation: 1.4% personnel, 71% variable costs
- Employee experience: Feeling undervalued, no development, knowledge loss
- Organizational consequence: Capability deficit preventing model evolution
- Strategic outcome: Trapped in project-based model that created the original survival imperative

This multi-level understanding demonstrates the value of mixed-methods analysis. Quantitative data (1.4% personnel cost) indicates a problem; qualitative data explains the logic creating that problem and reveals its human and organizational consequences; integration shows how rational individual decisions create collectively suboptimal system-level outcomes.

4.3.2 VRIO Analysis (Qualitative Findings)

4.3.2.1 Theme 4: Technical Execution Excellence as Competitive Parity

Thematic Finding: While Start Technology demonstrates strong technical execution capabilities highly valued by clients, multiple stakeholders recognize these capabilities as necessary but insufficient for sustained competitive advantage, as comparable competence exists among competitors.

CEO Assessment: *"Our core strength is delivering what we promise technically. We're good at project execution—understanding requirements, managing implementation, delivering quality solutions. But honestly, several other firms in Mozambique can do this too. We're not unique in our technical abilities; we're competent, which gets us in the door, but doesn't protect us from competitors."*

Client Validation: *"Start Technology's technical work is excellent—they delivered exactly what was specified, on time and on budget. But frankly, we've worked with other IT firms who can do similar work. We chose Start Technology for this project based on competitive pricing, not because they offered something others couldn't."* (Client #6, Government Entity)

"The technical quality is high, but I wouldn't say it's dramatically superior to alternatives. What matters more to us is reliability and communication, and even there, I've experienced comparable service from competitors." (Client #10, Private Corporation)

Employee Perspective: *"We have solid technical skills across the team, but I don't think we have any secret sauce or proprietary methods. Most of what we do could be replicated by competent competitors. Our edge is more about relationships and local knowledge than technical wizardry."* (Employee #2)

Analysis: The qualitative VRIO assessment confirms the competitive parity diagnosis derived from framework application. Technical execution excellence satisfies the "Valuable" criterion (enables Start Technology to compete and satisfy clients) but fails "Rare" and "Inimitable" tests (multiple competitors possess similar capabilities acquired through standard IT education and experience). This places Start Technology in a highly vulnerable competitive position where differentiation rests primarily on price, relationships, or luck in tender timing rather than defensible competitive advantages.

The CEO's candid assessment that *"several other firms in Mozambique can do this too"* demonstrates strategic self-awareness of competitive positioning weaknesses. This awareness makes the failure to develop differentiated capabilities (through the prototype or other innovations) even more puzzling until understood through the capability trap lens: awareness exists but resource constraints prevent action, creating frustration visible in the CEO's acknowledgment *"we're not unique...doesn't protect us from competitors."*

Client testimonies provide external validation of competitive parity, particularly revealing when clients explicitly state: "*we chose Start Technology...based on competitive pricing, not because they offered something others couldn't.*" This confirms that Start Technology competes primarily on price, the weakest form of competitive advantage (Porter, 1980). Price-based competition explains the margin compression observed in 2024 financial data (5.5% gross margin)—to win large tenders against comparable competitors, Start Technology accepted lower margins, reducing profitability despite revenue growth.

The convergence of CEO, client, and employee perspectives on this assessment strengthens credibility through triangulation. All stakeholder groups independently reach the same conclusion: technical competence is table stakes rather than differentiator. This convergent validity is methodologically powerful—when diverse respondents with different perspectives and interests all report consistent observations, confidence in findings increases substantially (Denzin, 1978).

However, the client comment about "*reliability and communication*" being differentiators deserves attention. While technical capabilities may represent competitive parity, relationship dimensions (responsiveness, communication quality, reliability) offer potential differentiation opportunities. These are precisely the dimensions that recurring revenue models

institutionalize through ongoing service delivery, customer success management, and relationship depth. The challenge is that these relationship advantages are currently ephemeral (experienced during projects but not sustained afterward) rather than structural (embedded in ongoing service agreements).

4.3.2.2 Theme 5: The Proprietary Prototype as "Unused Advantage"

Thematic Finding: Start Technology developed a proprietary security tracking/management system with subscription potential that meets all VRIO criteria (Valuable, Rare, Inimitable, Organization-capable) but remains uncommercialized due to resource constraints and execution barriers, representing a critical missed opportunity for business model transformation.

CEO Interview Evidence:

"We built a sophisticated security tracking system about two years ago—it's actually quite impressive technically. It could absolutely be sold as a subscription service to corporations and government agencies who need to monitor security personnel, track incidents, and generate compliance reports. We've shown it to a few clients who were genuinely interested and said they'd pay monthly for it."

"But here's the frustrating part: we built the prototype, tested it internally, even did a pilot with one client who loved it—and then it just sat there. We got pulled back into chasing the next tender, dealing with cash flow crises, and it never got commercialized."

Every few months I think 'we need to launch this,' but then another urgent issue comes up and it gets pushed back again."

"The worst part is watching competitors now offering similar solutions while our better product sits on the shelf. We had first-mover advantage in this space in Mozambique, and we're squandering it because we can't dedicate the bandwidth to market and sell it properly."

Employee Perspective Evidence:

"The security system we built is legitimately innovative—I'd say it's better than what I've seen from larger competitors. It solves real problems our clients face and the technology stack is solid. But it's become this running joke among the team: 'Remember that great product we're never going to sell?'" (Employee #2)

"I worked on that prototype for months and was really proud of what we created. Seeing it just sitting unused while we scramble for project work is demoralizing. It makes you question whether the company actually wants to innovate or if we're just going to stay in survival mode forever." (Employee #1)

"We've discussed the prototype in probably ten different team meetings—'we need to commercialize this,' 'we need marketing materials,' 'we need a sales strategy.' But nothing ever happens because we're always firefighting. It's a perfect example of how our business model prevents us from growing strategically." (Employee

#3)

Client Interest Validation:

"During our last project with Start Technology, they demonstrated a security management system they'd developed. It looked very useful—exactly the kind of centralized monitoring tool we need. I asked if we could subscribe to it as a service, and they said 'we're working on packaging it for commercial release.' That was 18 months ago and I haven't heard anything since." (Client #8, Private Corporation)

"If Start Technology offered that security system as a monthly service, we'd definitely be interested. Right now we're manually tracking security incidents in spreadsheets, which is inefficient and error-prone. A proper system would save us significant time and improve our compliance reporting." (Client #5, Government Entity)

Technical Assessment Evidence:

Documentary evidence from internal technical specifications and client pilot reports confirms the prototype's capabilities:

- **Functionality:** Real-time security personnel tracking, incident reporting and management, automated compliance documentation, mobile app integration, customizable dashboards, multi-site deployment capability

- Technical Architecture: Cloud-based SaaS model, scalable infrastructure, API integration with existing systems, data security protocols meeting **international standards**
- **Pilot Results: One six-month pilot with a government agency showed 60% reduction in incident response time, 85%**

improvement in compliance reporting accuracy, 100% user satisfaction rating from security managers

- Competitive Analysis: Internal market research indicates only 2-3 competitors in Mozambique offer comparable solutions, none with equivalent feature sets or local customization

Financial Opportunity Assessment:

Based on the CEO interview and internal business case documentation, the potential revenue from commercializing the prototype is substantial:

- Target Market: Estimated 40-60 potential enterprise and government clients in Mozambique requiring security management systems
- Pricing Model: Proposed tiered subscription: Bronze (MZN800/month), Silver (MZN1,500/month), Gold (MZN2,500/month)
- Conservative Projections: Capturing just 10-15 clients

within

18 months would generate MZN144,000-MZN270,000 in annual recurring revenue

- Development Investment Required: MZN15,000-MZN25,000 for marketing materials, sales infrastructure, customer onboarding systems, and initial support capacity
- ROI Timeline: Projected break-even within 6-9 months of launch based on pilot conversion rates

Analysis: The proprietary prototype represents Start Technology's most significant strategic asset and its most profound strategic failure. The qualitative and quantitative evidence converges on a paradoxical conclusion: the firm possesses a genuinely valuable, rare, and difficult-to-imitate resource that satisfies three of four VRIO criteria, yet the "O" (Organization) criterion remains critically unmet. The firm has built the capability but cannot operationalize it due to structural constraints inherent in the current business model.

The CEO's narrative captures the essence of the capability trap: *"we built the prototype...and then it just sat there."* This passive construction reveals how organizational circumstances act upon strategic intent rather than vice versa. Despite clear awareness of the opportunity (*"competitors now offering similar solutions while our better product sits on the shelf"*), conscious desire to pursue it

("Every few months I think 'we need to launch this'"), and even preliminary market validation ("clients who were genuinely interested and said they'd pay monthly"), the firm remains trapped in short-term project cycles that consume all available resources and attention.

Employee testimonials corroborate this diagnosis while adding an important affective dimension: the prototype has become *"this running joke"* and a source of demoralization (*"Seeing it just sitting unused...is demoralizing"*). This suggests that strategic execution failures create cultural consequences beyond immediate opportunity costs—they erode organizational confidence in leadership's ability

to execute transformation, potentially creating learned helplessness where employees stop believing change is possible regardless of stated intentions (Seligman, 1972).

The client interest validation is particularly significant for hypothesis testing. Multiple clients independently articulated demand for the exact service the prototype enables (*"If Start Technology offered that security system as a monthly service, we'd definitely be interested"*), providing market-based evidence that contradicts any potential scepticism about commercial viability. The 18-month gap between client inquiry and commercialization attempt (*"I asked if we could subscribe...That was 18 months ago and I haven't heard anything"*) demonstrates how execution delays

create reputational damage and credibility loss that compound the opportunity cost.

The technical assessment evidence establishes that prototype limitations are not the barrier—functionality, architecture, and pilot results all indicate commercial readiness. The 60% reduction in incident response time and 85% improvement in compliance reporting documented in the pilot represent compelling value propositions that would normally drive rapid commercialization.

Yet even strong pilot results failed to trigger launch, suggesting barriers lie in organizational capacity rather than product-market fit.

The financial opportunity assessment quantifies the magnitude of the missed opportunity. Conservative projections of MZN144,000-MZN270,000 in annual recurring revenue from 10-15 clients within 18 months would represent 4-8% of 2024 total revenue—precisely the recurring revenue foundation needed to stabilize the business model. More importantly, this calculation demonstrates feasibility: the required marketing investment (MZN15,000-MZN25,000) is modest relative to potential returns (break-even in 6-9 months), suggesting that capital constraints, while real, are not insurmountable barriers if resource allocation priorities were reordered.

Comparative analysis with successful product commercialization cases in similar contexts reveals common success factors notably absent at Start Technology: dedicated product champion (role

formally assigned and protected from operational demands), ring-fenced budget (investment insulated from cash flow volatility), staged rollout plan (specific milestones with accountability), and executive sponsorship (CEO directly tracking progress). The absence of these structural enablers at Start Technology explains why good intentions repeatedly fail to translate into action.

The prototype case also illuminates the dynamic relationship between business model structure and strategic capability development. Teece's (2007) dynamic capabilities framework suggests that firms must possess: (1) sensing capabilities (identifying opportunities), (2) seizing capabilities (mobilizing resources to capture opportunities), and (3) reconfiguring capabilities (continuous transformation). Start Technology demonstrates strong sensing—leadership clearly perceives the prototype opportunity and market demand. However, seizing and reconfiguring capabilities are critically deficient: the firm cannot mobilize resources away from short-term projects and attempts at transformation (prototype commercialization) repeatedly fail.

This pattern illustrates Christensen and Raynor's (2003) "innovator's dilemma" adapted to services context: existing successful operations (project delivery) consume resources and attention, preventing investment in potentially transformative innovations (product-based recurring revenue) even when leadership rationally understands the strategic imperative. The

difference here is that Start Technology faces not customer-driven disruption but self-inflicted strategic paralysis arising from business model structure.

The prototype case provides particularly strong evidence for **Hypothesis 3** (transitioning to hybrid model with recurring components will enhance sustainability). The prototype represents exactly the kind of recurring revenue vehicle hypothesized to improve business model sustainability, and multiple data sources confirm both technical viability and market demand. The fact that commercialization has stalled despite these favourable conditions directly validates the central argument of this dissertation: sustainability challenges arise not from capability deficits or market limitations but from business model structures that prevent strategic execution.

Employee #3's observation that *"it's a perfect example of how our business model prevents us from growing strategically"* demonstrates remarkable meta-cognitive awareness—employees recognize the systemic nature of the problem rather than attributing it to individual failures. This collective awareness is both promising (suggests organizational readiness for structured intervention) and concerning (indicates widespread recognition of dysfunctional patterns without corresponding ability to change them).

4.3.2.3 Theme 6: Dynamic Capabilities Deficit and Strategic Inertia

Thematic Finding: Start Technology exhibits substantial

operational capabilities (project execution, technical problem-solving) but critically lacks dynamic capabilities required for business model evolution, manifesting as inability to sense market shifts, seize strategic opportunities, or reconfigure organizational resources despite awareness of these imperatives.

CEO Interview Evidence:

"I can describe exactly what we need to do differently—recurring revenue, client retention programs, prototype launch, strategic partnerships—but translating that knowledge into action has proven nearly impossible. Every strategic initiative gets started with enthusiasm and then dies slowly as operational demands take over. It's like being on a treadmill running faster and faster but never actually moving forward."

"Our problem isn't lack of awareness or even lack of will—it's organizational bandwidth and resource constraints. When you're a four-person core team constantly scrambling to deliver projects, meet payroll, and manage cash flow, there's no capacity left for strategic work. The urgent always crowds out the important, no matter how many times we commit to changing that pattern."

"I've watched competitors who are technically less capable than us successfully transform their business models while we remain stuck. They had access to capital that gave them breathing room to invest in transformation. We don't have that luxury—we're bootstrapped

and barely profitable, which means every metical has to go toward immediate survival rather than long-term positioning."

Employee Perspective Evidence:

"Management talks about innovation and growth, but operationally we're always in reactive mode. There's no protected time or dedicated resources for strategic projects—everything is 'we'll get to it when this urgent thing is done,' but the urgent things never stop coming. So strategic initiatives just accumulate on a shelf of good intentions." (Employee #4)

"I've been here two years and I've seen the same cycle repeat: announce a new strategic priority, work on it enthusiastically for 2-3 weeks, then gradually abandon it as project deadlines loom and cash flow becomes critical. After a while you stop taking strategic announcements seriously because you know they won't be sustained." (Employee #2)

"The company lacks basic systems that would enable strategic work—no CRM, no project pipeline management, no structured client follow-up, no marketing processes. Everything depends on individual initiative and memory, which doesn't scale and creates constant firefighting. Until we build these foundational systems, we can't execute strategic initiatives regardless of how good the ideas are." (Employee #3)

Organizational Pattern Evidence:

Documentary analysis of internal meeting minutes and strategic planning documents over the 2022-2024 period reveals recurring patterns of strategic intent without sustained execution:

- Q1 2022: Board resolution to develop managed services offering by Q3 2022 — No follow-through documented
- Q2 2022: Marketing plan approved with budget allocation of MZN8,000 — Only MZN1,200 spent, activities ceased after 6 weeks
- Q3 2022: Client retention program design completed — Never implemented operationally
- Q4 2022: Prototype commercialization taskforce formed — Met twice, then dissolved due to "project delivery priorities"
- Q1 2023: Strategic partnership discussions initiated with three potential collaborators — All discussions allowed to lapse without conclusion
- Q2-Q4 2023: No documented strategic initiatives during revenue downturn period
- Q1 2024: Recurring revenue model design workshop conducted

— Recommendations documented but not implemented

- **Q2-Q4 2024: Focus entirely on tender pursuit and project delivery during revenue surge**

This chronology demonstrates systematic inability to sustain strategic initiatives beyond initial enthusiasm phase (typically 4-8 weeks), with strategic activity inversely correlated with operational pressure: strategic work occurs during periods of lower project intensity but ceases entirely during busy periods or cash flow crises.

Comparative Competitor Evidence:

Client comments comparing Start Technology to competitors provide external validation of dynamic capability gaps:

"Another IT firm we work with successfully transitioned to offering managed services about two years ago. They started small—just offering after-hours support to existing clients—and gradually built it into a substantial part of their business. Now they have steady monthly income that makes them more stable and responsive. I don't understand why Start Technology hasn't done something similar."

(Client #11, Private Corporation)

"One of your competitors recently launched a cloud security product that's very similar to what Start Technology showed us years ago. They've been quite aggressive in marketing it and have signed up several government agencies. It's frustrating because I know Start Technology's version was better, but they never brought it to market." (Client #7, Government Entity)

Analysis:

The dynamic capabilities deficit theme reveals the mechanism through which business model structure creates strategic paralysis. Following Teece's (2007) framework, dynamic capabilities encompass: (1) sensing (identifying opportunities and threats), (2) seizing (mobilizing resources to capture opportunities), and (3) reconfiguring (continuous transformation and renewal). Start Technology demonstrates adequate sensing—leadership and employees accurately perceive strategic imperatives and opportunities. However, seizing and reconfiguring capabilities are critically deficient, creating a knowing-doing gap (Pfeffer & Sutton, 2000) where awareness of what should be done fails to translate into execution.

The CEO's metaphor of *"being on a treadmill running faster and faster but never actually moving forward"* captures the essence of strategic inertia despite operational hyperactivity. This image suggests that increased effort within the existing paradigm paradoxically deepens the trap rather than enabling escape—the harder the firm works on project delivery, the less capacity remains for model transformation, creating a vicious cycle rather than virtuous progression.

The distinction the CEO draws between *"lack of awareness"* versus *"organizational bandwidth and resource constraints"* is theoretically significant. It suggests that Start Technology's challenges are not cognitive or strategic (knowing what to do) but

capability-based and structural (having the organizational capacity to do it). This aligns with resource dependence theory (Pfeffer & Salancik, 1978), which predicts that organizations' strategic choices are constrained by resource availability and dependency relationships rather than management preferences or intentions.

Employee testimonies reveal an even more concerning pattern: strategic announcement fatigue and cynicism developing from repeated start-and-abandon cycles. When Employee #2 states "*after a while you stop taking strategic announcements seriously because you know they won't be sustained,*" this indicates erosion of organizational credibility and trust that may create barriers to future transformation attempts even if resource constraints are addressed. Research on change management shows that repeated failed change initiatives create "change-resistant cultures" where employees automatically discount new initiatives regardless of merit (Kotter, 1996).

The documentary chronology of strategic initiatives provides compelling evidence of systematic execution failure. The pattern—enthusiastic launch, brief activity period (4-8 weeks), gradual abandonment, no post-mortem or learning capture—repeats across all documented strategic efforts over three years. Notably, no initiative shows evidence of being formally cancelled or redesigned; they simply fade into neglect as operational demands reclaim attention and resources. This passive abandonment suggests

absence of governance structures (accountability mechanisms, milestone tracking, resource protection) that would be necessary to sustain strategic initiatives alongside operational work.

Particularly revealing is the inverse correlation between operational intensity and strategic activity: during Q2-Q4 2023 (revenue downturn period), no strategic initiatives are documented, while during Q2-Q4 2024 (revenue surge period), strategic focus again disappeared in favor of project delivery. This suggests that both feast and famine conditions prevent strategic work—downturns trigger survival mode that prohibits investment, while surges trigger capacity overload that prohibits everything except operational execution. The business model structure thus prevents strategic work across all revenue conditions rather than enabling it during favorable periods.

The comparative competitor evidence is particularly damaging, as it demonstrates that Start Technology's execution failures have allowed competitors to capture opportunities the firm itself identified first. Client #7's observation that a "*competitor recently launched a cloud security product...very similar to what Start Technology showed us years ago*" while acknowledging "*I know Start Technology's version was better*" illustrates how first-mover advantage and superior capabilities mean nothing without commercialization execution. This validates the VRIO conclusion that the prototype satisfies Valuable, Rare, and Inimitable criteria

but fails the Organization criterion decisively.

The competitor who *"successfully transitioned to offering managed services...started small...and gradually built it"* described by Client #11 provides an implicit comparison case showing that transformation is possible even for similarly-sized firms operating in the same market. The key difference appears to be staged implementation methodology (*"started small"*) rather than attempting wholesale transformation. This suggests Start Technology's failure may partly stem from transformation approach (attempting large initiatives without staging) rather than solely from resource constraints.

Employee #3's identification of systems gaps (*"no CRM, no project pipeline management, no structured client follow-up, no marketing processes"*) points to a foundational organizational infrastructure deficit. These are not sophisticated strategic capabilities but basic operational systems that established firms take for granted. Their absence means that even simple strategic activities (client follow-up calls, lead tracking, marketing campaign management) require

heroic individual effort rather than routine execution, dramatically raising the activation energy for any strategic initiative and explaining why such initiatives repeatedly fail.

Synthesizing across all evidence sources, Start Technology exhibits what organizational theorists term "rigidity traps" (Gilbert, 2005)—

situations where organizations' existing capabilities and routines become so dominant that they inhibit new capability development even when environment changes demand it. The project-delivery operational routine is so deeply embedded, reinforced by compensation structures (payment comes from project completion), success metrics (project delivery quality), and organizational identity ("*we're great at project execution*"), that alternative activities struggle to gain traction regardless of strategic importance.

This analysis provides strong support for the capability trap diagnosis central to this dissertation's argument. The firm knows what it should do (sensing capability intact), understands how to do it technically (technical capabilities strong), but cannot execute strategically (seizing and reconfiguring capabilities absent) due to resource constraints and business model structure that prioritize short-term operational demands over long-term strategic positioning. Breaking this trap requires not merely additional effort or awareness but structural interventions that create protected space and resources for strategic work independent of operational volatility.

4.3.3 PESTEL Analysis (Qualitative Findings)

4.3.3.1 Theme 7: External Environment as Constraint and Opportunity

Thematic Finding: Start Technology operates within a

Mozambican business environment characterized by significant institutional weaknesses (payment delays, procurement inefficiencies, limited financing access) that amplify business model vulnerabilities, yet also exhibits emerging opportunities (digital transformation mandates, infrastructure investments, public sector modernization) that could enable transformation if internal capabilities were strengthened.

**Political & Legal Environment Evidence:
CEO Interview:**

"Government contracts are both our biggest opportunity and our biggest headache. The tender system gives us access to large projects we'd never get through regular sales, but payment terms are nightmarish—90 to 120 days is standard, and often it stretches to 150-180 days. We've had situations where we completed a project, invoiced immediately, and didn't receive payment for six months. Try running a business when your largest client takes half a year to pay."

"There's also no consistency in procurement processes across different government agencies. Each ministry or department has slightly different requirements, documentation needs, and evaluation criteria. This means we can't develop standardized tender responses—every submission requires substantial customization, which is time-consuming and expensive. For a small firm like ours, that inefficiency is really costly."

"Data protection regulations are emerging but still quite vague in Mozambique. We want to do the right thing with client data, especially for the prototype which handles sensitive security information, but there's limited guidance on compliance requirements. So we're trying to follow international best practices even though it's not yet clearly mandated locally, which adds costs compared to competitors who might be less cautious."

Employee Perspective:

"The unpredictability of government procurement is frustrating. Sometimes tenders are cancelled mid-process after we've invested weeks in proposal development. Sometimes evaluation criteria change without notice. Sometimes winning bids get challenged and delayed for months by bureaucratic reviews. All this uncertainty makes planning impossible." (Employee #4)

Client Perspective (Government Entity):

"I can acknowledge from inside the system that our procurement and payment processes create real hardship for vendors, especially smaller ones. The bureaucracy, approval layers, budget cycles—it all creates delays that aren't anyone's intentional doing but result from how government systems work. I wish we could pay faster and have more streamlined procurement, but those changes require system-level reforms beyond any individual agency's control." (Client #5, Government Entity)

Economic Environment Evidence:

CEO Interview:

"Access to capital is nearly impossible for firms like ours in Mozambique. Banks don't understand technology services businesses—they want physical collateral and steady historical revenue, neither of which we can offer given our business model. We've approached three different banks about working capital lines or business loans and been rejected every time. That means we're completely bootstrapped and can't invest strategically even when opportunities are obvious."

"Currency volatility is another challenge. Some of our equipment and software licenses are priced in dollar or euros, but we invoice clients in meticaais. When the exchange rate shifts significantly between project start and payment receipt—which happens frequently—our margins get compressed. We try to build forex contingencies into pricing, but in competitive tenders that's difficult without pricing ourselves out."

"Inflation has been running at 6-8% annually, which affects both our cost structure and clients' budgets. We need to increase prices to maintain margins, but government agencies are working with fixed budgets approved months or years earlier, so there's constant tension between what we need to charge and what clients can pay."

Social & Cultural Environment Evidence:

CEO Interview:

"The IT talent pool in Mozambique is limited. We compete with international NGOs, embassies, and multinational corporations for the same small group of qualified professionals, and we simply can't match their salary and benefits packages. This limits our ability to expand the core team even when project volumes would justify it. Brain drain is real—many of our best graduates leave for South Africa or Europe where comp is much higher."

"There's also a cultural challenge around digital services adoption, especially outside major cities. Many potential clients, particularly in government and traditional industries, still prefer in-person meetings, paper documentation, and manual processes. Selling managed services or cloud-based solutions requires overcoming significant change management resistance beyond the purely technical aspects."

Employee Perspective:

"Professional development opportunities in Mozambique's IT sector are limited. There are few advanced training programs, tech conferences, or professional communities compared to more developed markets. Most of our learning happens informally or through online resources we access independently. This skills development gap affects the whole industry's maturity and sophistication." (Employee #2)

Technological Environment Evidence:

CEO Interview:

"Internet infrastructure is improving but remains unreliable, especially outside Maputo. We've had project implementations delayed because client sites lack consistent connectivity or sufficient bandwidth. This limits the types of solutions we can deploy—cloud-heavy or real-time applications struggle in locations with intermittent internet, so we often have to engineer more complex hybrid architectures that don't require constant connectivity."

"On the positive side, mobile penetration is quite high even in underserved areas, and smartphone adoption is growing rapidly. This creates opportunities for mobile-first solutions, which is actually where our prototype is positioned. The mobile-centric approach might give us an advantage over competitors still thinking desktop-first."

"Government digitalization initiatives are accelerating—e-government platforms, digital payment systems, online service portals. This creates substantial demand for IT services and should benefit firms like ours. The challenge is that much of this work gets directed to large international contractors rather than local SMEs, so we're fighting for a share of the expansion rather than benefiting proportionally to our capabilities."

Environmental & Sustainability Considerations:

CEO Interview:

"Energy reliability is a real operational challenge. Power outages are frequent enough that we need backup generators and UPS systems, which adds cost and complexity. For clients in remote locations, power infrastructure is often inadequate for running sophisticated IT systems, which limits what we can deploy and requires creative engineering solutions."

"There's growing international donor focus on sustainable development and digital inclusion in Mozambique, which potentially creates funding opportunities for technology projects with social impact. We haven't successfully tapped into that yet—most donor-funded projects go to larger NGOs or international implementers— but it represents a potential revenue stream if we could develop the right partnerships and positioning."

Analysis:

The PESTEL analysis reveals a business environment characterized by significant structural challenges that amplify Start Technology's business model vulnerabilities while simultaneously presenting transformation opportunities that remain unexploited due to internal capability constraints. This creates a dual-constraint situation: external environment constrains strategic options, while internal limitations prevent exploitation of environmental opportunities.

Political/Legal Dimension: The government procurement system emerges as Start Technology's primary political-institutional challenge, functioning as both opportunity (access to large contracts) and constraint (extreme payment delays, process inefficiencies). The 90-180 day payment cycles described by the CEO create working capital requirements that are devastating for small, bootstrapped firms operating on thin margins. Research by Munck & Gualinga (2020) on public procurement in Sub-Saharan Africa confirms that payment delays are systematic rather than exceptional, arising from budget processes, approval hierarchies, and cash flow management within government agencies themselves rather than intentional misconduct.

The client's acknowledgment from inside government (*"our procurement and payment processes create real hardship for vendors...but those changes require system-level reforms beyond any individual agency's control"*) demonstrates that these constraints are structural features of the institutional environment rather than factors Start Technology can influence through better relationship management or negotiation. This validates resource dependence theory's prediction that organizations in weak institutional environments face constraints beyond their control that shape strategic possibilities (Pfeffer & Salancik, 1978).

The lack of regulatory clarity around data protection creates an interesting paradox: Start Technology incurs costs implementing

international best practices despite absence of local mandates, while competitors potentially gain cost advantages through regulatory arbitrage. Yet this "voluntary compliance" may ultimately represent a competitive differentiator if regulations tighten, positioning Start Technology as already-compliant while competitors face retrofit costs. However, this strategic positioning benefit only materializes if the firm survives long enough for the regulatory environment to evolve.

Economic Dimension: The complete absence of accessible financing represents perhaps the single most constraining external factor for Start Technology. The CEO's experience of approaching *"three different banks...and been rejected every time"* illustrates systematic credit market failure for IT services SMEs in Mozambique.

The economic environment presents severe financing constraints that directly prevent business model transformation. Without access to working capital or growth financing, Start Technology cannot build the financial buffer needed to stabilize operations or invest in recurring revenue initiatives. Currency volatility and inflation further compress already thin margins.

The social dimension reveals limited IT talent availability and cultural resistance to digital adoption, constraining both internal capability development and market expansion. However, mobile penetration creates opportunities for mobile-first solutions like the

security prototype.

Technologically, improving infrastructure and government digitalization initiatives expand the addressable market, though benefits flow disproportionately to larger firms with tender capacity. Start Technology's technical capabilities position it well to serve this growing demand if internal constraints were addressed.

The PESTEL evidence demonstrates that external environment amplifies business model vulnerabilities: payment delays worsen cash flow problems, financing unavailability prevents strategic investment, and procurement inefficiencies increase customer acquisition costs. Yet the same environment offers opportunities (digital transformation demand, mobile adoption) that remain unexploited due to internal execution barriers.

4.3.4 Integration: The Capability Trap Mechanism

4.3.4.1 Theme 8: Reinforcing Dynamics of Business Model Lock-In

Thematic Finding: Qualitative evidence reveals self-reinforcing mechanisms that perpetuate Start Technology's unsustainable business model despite stakeholder awareness and desire for change.

CEO Synthesis:

"I can describe the vicious cycle perfectly: Project-based revenue creates unpredictability, which forces us to minimize fixed costs,

which means we can't build permanent capabilities, which prevents us from offering recurring services, which keeps us project-dependent. We're trapped in a loop where every rational short-term decision reinforces the long-term problem."

Key Reinforcing Loops Identified:

1. Revenue Volatility → Cost Minimization →
Capability Deficit

→ Continued Volatility

2. Unpredictable income → Minimize permanent staff
(1.4% personnel costs) → Heavy subcontractor
reliance → Knowledge loss → Cannot build recurring
services → Revenue remains unpredictable
3. Cash Flow Pressure → Strategic Abandonment →
Missed Opportunities → Continued Pressure
4. Payment delays → Focus on immediate survival →
Strategic initiatives stall → Opportunities lost to
competitors → Continued project dependence → Cash
flow pressure persists
5. Client Concentration → Risk Aversion → Limited
Diversification → Maintained Concentration
6. 92% revenue from 3 clients → Cannot risk alienating
them by reducing focus → All resources toward
servicing these clients → No bandwidth for new client
development → Concentration persists
7. Execution Failures → Credibility Loss → Reduced

Initiative

→ Further Failures

8. Strategic initiatives abandoned → Employee cynicism develops → Future initiatives given less commitment → Lower probability of success → Pattern repeats

Employee Recognition of Pattern:

"We all see the trap we're in, but individually we're powerless to change it. Management sees it too, but they're constrained by cash flow realities. It's like we're collectively aware of the problem but structurally unable to solve it without external intervention or major capital injection." (Employee #3)

Analysis:

The integrated qualitative evidence confirms that Start Technology faces not isolated problems but a coherent system of mutually reinforcing constraints—what organizational theorists term a "competency trap" (Levitt & March, 1988). Each rational, defensible short-term decision creates conditions that necessitate similar decisions in the future, forming closed causal loops that resist intervention.

This systemic analysis validates the theoretical framing of the study: business model sustainability is not achieved through better execution of existing approaches but requires structural transformation that breaks reinforcing cycles. The qualitative

evidence demonstrates stakeholder awareness is necessary but insufficient—transformation requires capability-building interventions that provide the organizational slack and resources to execute strategic initiatives despite operational pressures.

4.4 Integrated Mixed-Methods Findings

4.4.1 Convergence and Triangulation

Triangulation across quantitative financial data, qualitative interviews, and survey evidence produces convergent findings strengthening overall conclusions:

Revenue Volatility:

- Quantitative: CV = 143%, zero recurring revenue
- Qualitative CEO: "Starting from zero every month"
- Employee Survey: 75% lack confidence in financial stability
- Convergence: All data sources confirm extreme revenue unpredictability as core sustainability threat

Client Retention Failure:

- Quantitative: 75% relationships <12 months, 92% revenue

from 3 clients

- Qualitative Client: "After project ended, we barely heard from them"
- CEO: "Contact is minimal unless they need something

new"

- Convergence: Transactional relationships structure confirmed across all stakeholder perspectives

Capability Trap:

- Quantitative: 1.4% personnel investment, stalled initiatives documented
- Qualitative CEO: "Built prototypes but haven't launched"
- Employee: "Strategic announcements we stop taking seriously"
- Convergence: Resource constraints preventing transformation despite awareness validated from financial, leadership, and operational levels

4.5 Hypothesis Testing Results

H1: Start Technology's reliance on project-based income significantly contributes to financial instability.

SUPPORTED - Financial data (CV=143%, DSO=112 days), CEO testimony about cash flow crises, and employee reports of salary payment stress all confirm project-based structure creates severe instability.

H2: Absence of recurring revenue negatively impacts revenue predictability and strategic investment capacity.

STRONGLY SUPPORTED - Zero recurring revenue across all years, documented strategic initiative failures due to resource constraints, and stakeholder consensus that unpredictability prevents planning/investment validate hypothesis completely.

H3: Transitioning to hybrid model with recurring components will enhance sustainability.

SUPPORTED BY EVIDENCE - Client interest in managed services (83.3% high interest), technical viability of prototype, and comparative examples of competitor success demonstrate feasibility and likely positive impact. While actual implementation outcomes cannot be tested within study scope, all preconditions for successful transition are validated.

4.6 Comprehensive Sustainability Assessment

Based on integrated analysis, Start Technology's sustainability assessment across key dimensions:

Dimension	Current State	Rating	Key Evidence
Economic Viability	Profitable but highly volatile	3/10	CV=143%, thin margins (1.4%), inadequate reserves
Strategic Adaptability	Aware but unable to execute	2/10	Multiple failed initiatives, competitor displacement
Operational Efficiency	Strong project delivery, weak systems	6/10	High client satisfaction (4.3/5), but inefficient cost structure

Stakeholder Value	Mixed clients satisfied, employees anxious	5/10	Client retention low (25%), employee confidence weak (25%)
Overall Sustainability	Unsustainable without transformation	3/10	Current model cannot support long-term viability

4.7 Summary

Chapter 4 presented comprehensive analysis through mixed-methods integration. Key findings:

1. **Business Model Structure: 100% project-based revenue creates extreme volatility (CV=143%) and prevents strategic investment**
2. **Financial Performance: Growth achieved through margin compression (5.5% gross, 1.4% net in 2024) rather than improved positioning**
3. **Client Dynamics: High satisfaction (4.3/5) but low retention (75% churn) due to transactional relationship structure**
4. **Internal Capabilities: Strong operational execution but critical deficits in dynamic capabilities and organizational infrastructure**
5. **Strategic Assets: Valuable prototype exists but**

remains uncommercialized due to capability trap

- 6. External Environment: Institutional weaknesses
(payment delays, financing unavailability) amplify
business model vulnerabilities**
- 7. Capability Trap: Self-reinforcing mechanisms lock
firm into unsustainable model despite stakeholder
awareness**

The evidence strongly supports all three hypotheses and demonstrates that sustainability requires structural business model transformation rather than incremental operational improvements. Chapter 5 will present strategic recommendations and implementation framework addressing these findings.

CHAPTER 5 DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter synthesizes the findings presented in Chapter 4 to draw comprehensive conclusions about the sustainability of Start Technology's business model and provides actionable, evidence-based recommendations for enhancing long-term viability. The discussion is structured to address the research objectives, interpret findings considering existing literature, and develop a strategic framework for business model transformation.

5.2 Discussion

The findings of this study show that although Start Technology has built a solid technical reputation, its business model does not support long-term sustainability. The analysis indicates that the company's current structure is heavily dependent on short-term projects, which creates constant revenue fluctuations and limits investment in people, systems, and innovation. This pattern reflects a broader challenge faced by many IT firms in emerging markets—strong technical delivery but weak strategic design for continuity.

The research highlights that the company's value proposition and client satisfaction levels are strong, yet this value is not being translated into stable income. Clients are willing to continue working with the firm, but the absence of recurring service contracts forces a repeated search for new projects. As a result, management

remains focused on short-term survival rather than long-term growth. The low investment in personnel further limits the development of in-house capabilities required for recurring services and innovation.

Financial analysis confirms that growth achieved through project expansion has not been sustainable. While revenue has occasionally increased sharply, profit margins have declined, showing that expansion has been achieved through aggressive pricing and operational stretching rather than structural improvement. This demonstrates that short-term growth can hide deep structural weaknesses.

The study also found that the external environment, although full of opportunity, presents constraints that make transformation difficult. Delayed government payments, limited financing, and a lack of SME support mechanisms restrict Start Technology's ability to stabilize its business model. At the same time, the company's awareness of these challenges and its attempt to develop a new service prototype indicate that it has the potential to evolve if resources and strategic focus are properly aligned.

In summary, the discussion shows that Start Technology's main challenge is not its technical capability but the structure of its business model. Sustainability will depend on shifting from an operational mindset that focuses on completing projects to a strategic one that builds lasting value and predictable income.

Strengthening human capital, introducing recurring revenue services, and aligning operations with long-term objectives are therefore essential for building a stable and competitive business in Mozambique's growing IT sector.

5.3 Conclusions

This study set out to assess the sustainability of Start Technology's business model and to determine how the company can evolve from short-term growth toward long-term resilience. The evidence collected from financial data, management interviews, and client and employee surveys reveals that Start Technology has built a technically competent and respected operation but remains structurally constrained by a business model optimized for survival rather than sustainability.

The company functions almost entirely on a project-based revenue structure that generates large but unpredictable income swings. While project execution quality is consistently high and client satisfaction strong, these achievements are undermined by the absence of stable, recurring income. More than ninety percent of revenue depends on only a few clients, and delayed government payments create prolonged cash-flow pressure. Profitability fluctuates sharply, and low reinvestment in personnel and systems—less than two percent of revenue—prevents the accumulation of

capabilities that could support growth. The analysis therefore concludes that the main threat to sustainability is structural rather than operational: strong delivery performance operates within an economic model that cannot sustain it.

At the strategic level, the study finds that Start Technology's challenges mirror those faced by many emerging-market IT SMEs. Limited access to finance, dependence on government procurement, and weak dynamic capabilities constrain transformation. Yet the research also highlights enabling factors that provide a foundation for change. The firm's technical excellence, trusted client relationships, and intimate understanding of the Mozambican market position it well to introduce recurring service models. Clients themselves express strong interest in managed and subscription-based offerings, signalling clear demand for evolution.

From these findings emerges a coherent path forward. Sustainability will require a gradual shift from a purely transactional model to a hybrid structure that blends project income with recurring revenue streams. This transition must be supported by incremental investment in people, systems, and processes that embed long-term service delivery capacity. Building financial buffers, cultivating enduring client partnerships, and commercialising existing prototypes can stabilise cash flow while strengthening competitiveness. In short, Start Technology must move from

episodic contracting to relationship-based value creation.

Overall, the research concludes that Start Technology's future viability depends on aligning its operational strengths with a more balanced and forward-looking business model. By addressing the structural misalignments identified—especially revenue predictability, capability development, and client diversification—the firm can transform its current momentum into sustainable growth. The following sections outline the specific implications, recommendations, and avenues for further research arising from these conclusions.

5.4 Implications

The findings of this study carry significant implications across multiple dimensions. For Start Technology's management, the research provides clear evidence that current operational success masks structural vulnerabilities requiring urgent strategic intervention. The finding that 92% of revenue derives from three clients while 75% of relationships terminate within twelve months signals an unsustainable dependency that could prove catastrophic. Management must recognize that technical excellence and client satisfaction, while necessary, are insufficient for long-term viability without corresponding business model transformation.

For similar IT SMEs in emerging markets, this study demonstrates that project-based revenue models create systemic vulnerabilities

that cannot be mitigated through operational excellence alone. The pattern of repeated failed strategic initiatives at Start Technology illustrates how well-intentioned transformation efforts collapse without foundational organizational systems to sustain them. SMEs exhibiting similar patterns—high client concentration, transactional relationships, minimal recurring revenue—should recognize these as structural sustainability risks rather than temporary challenges.

The research reveals that institutional environment characteristics significantly amplify business model vulnerabilities for local SMEs. Government payment delays of 90-180 days create working capital requirements that are devastating for bootstrapped firms. Policymakers should recognize that procurement reforms—particularly accelerated payment cycles and electronic invoicing—could substantially improve SME sustainability without requiring direct subsidies. The systematic credit market failure identified suggests need for policy interventions through development finance institutions offering products specifically designed for knowledge-based service firms.

For investors and financial institutions, the research highlights that traditional financial metrics may mask underlying business model fragility. Investors should assess business model structure—particularly revenue predictability, client concentration, and capability investment patterns—as leading indicators of

sustainability risk. The finding that commercialization execution rather than innovation capacity limits value creation suggests that investors should prioritize management's demonstrated ability to execute strategic initiatives over ideation capabilities.

Theoretically, this research extends business model sustainability literature by demonstrating how capability traps emerge from business model structure rather than merely from organizational inertia. The study contributes to dynamic capabilities theory by showing that sensing, seizing, and reconfiguring capabilities can be structurally decoupled—Start Technology's strong sensing but absent seizing/reconfiguring capabilities suggest that resource availability is a mediating variable in dynamic capabilities frameworks. The research also extends Resource-Based View by demonstrating that VRIO analysis must account for temporal dimensions, as resources satisfying Valuable, Rare, and Inimitable criteria may still fail to create competitive advantage if organizational capacity to exploit them develops too slowly.

Methodologically, the study demonstrates value of mixed-methods approaches for investigating business model sustainability, as quantitative financial analysis identified patterns while qualitative inquiry revealed causal mechanisms that explain those patterns. Collectively, these implications suggest that business model sustainability in resource-constrained environments requires multi-level intervention spanning individual firm actions, sectoral

support, and institutional reforms.

5.5. Recommendations

Start Technology shows strong technical expertise but faces sustainability challenges due to its current business model. To build resilience and long-term growth, the company should:

Introduce Paid Support Plans: Convert informal post-project assistance into tiered maintenance packages to create recurring revenue and strengthen client relationships.

Establish Financial Reserves: Allocate about 15% of quarterly profits to a locked investment fund, ensuring stability during payment delays and enabling strategic initiatives like marketing and staff training.

Improve Client Retention: Implement a basic CRM system and proactive follow-up routines to boost repeat business and shift toward partnership-based relationships.

Enhance Market Visibility: Invest in a professional digital presence, case studies, and webinars to differentiate in Mozambique's competitive IT sector.

Revive Proprietary Software: Pilot the underutilized prototype with trusted clients to validate its potential and create new product-based revenue streams.

Seek Strategic Partnerships: Collaborate with regional tech firms or development finance institutions for capital, expertise, and

market access.

Immediate resilience actions include contingency planning for top clients, building an emergency reserve, negotiating payment milestones, and diversifying revenue through managed services.

Medium-term steps involve cross-training staff, documenting processes, and implementing early warning systems for client churn.

Outcome: These measures will reduce financial risk, stabilize income, and position Start Technology for sustainable growth and innovation in Mozambique's dynamic tech market.

Suggestions for Further Research

While this study has provided meaningful insights into the sustainability of Start Technology's business model, it also revealed several areas where additional inquiry would deepen understanding of SME transformation within emerging markets. The following suggestions are proposed for future research to build upon this study's findings and to inform broader academic and practical discourse.

First, a **longitudinal study** should be undertaken to monitor Start Technology's transformation over time and evaluate the real-world outcomes of the recommendations proposed in this research. Such a study would provide valuable evidence of how incremental

capability development, client retention strategies, and the introduction of recurring revenue streams translate into measurable improvements in business sustainability. It would also shed light on the adaptive challenges that SMEs encounter when implementing staged transformation models in volatile markets.

Second, a **comparative case study** involving another Mozambican IT SME—particularly one that has failed or experienced severe contraction—would be instrumental in identifying contrasting business model pathologies. Comparing successful and unsuccessful firms within the same sector and national context would help isolate the specific structural, strategic, and managerial factors that differentiate resilience from vulnerability. This comparative

approach would enhance the generalizability of findings and contribute to developing a typology of business model sustainability trajectories among African SMEs.

Third, **research into financing models for business model transformation** among African technology firms is strongly recommended. The inability to access affordable and flexible financing emerged as a central constraint in this study. Future work could investigate the relative effectiveness of different funding instruments—such as venture debt, blended finance, or government-backed innovation funds—in supporting SMEs through transitional phases of business model redesign. This line

of inquiry would provide actionable insights for policymakers, investors, and development finance institutions seeking to strengthen SME ecosystems.

Fourth, there is a need for **in-depth analysis of public policy and procurement frameworks** to understand how institutional structures shape SME sustainability in the IT sector. Since a substantial portion of Start Technology's revenue originates from government contracts, examining how procurement procedures, payment cycles, and digitalization policies influence SME performance would provide crucial policy-level insights. Future research could explore how reforms to procurement laws, e-invoicing systems, or local content policies might stimulate the development of more resilient and innovative technology enterprises.

Finally, **cross-country comparative research** across Southern African nations could illuminate how variations in regulatory environments, access to capital, and digital infrastructure affect business model evolution. By situating Mozambican SMEs within a regional perspective, such studies could identify shared challenges and best practices for fostering sustainable technology entrepreneurship across the continent.

In summary, these suggested areas of inquiry would extend the contribution of this dissertation by providing longitudinal, comparative, financial, policy, and regional perspectives on the

dynamics of business model sustainability. Collectively, they would help bridge the gap between theory and practice and inform more effective strategies for strengthening the resilience of IT-based SMEs in emerging economies.

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APPENDICES

Appendix A: Research Interview Guide

Title: Assessment of Business Model Sustainability at Start Technology, a Mozambican IT Firm

Researcher: Steven Maenda, EMBA Candidate, Africa University

Interview Duration: 60 minutes

Participant: CEO/CFO

Section A: Business Model & Revenue Structure

Briefly, what is Start Technology's core business model today?

Probe: How do you primarily make money? (Project work, retainers, etc.)

What is the rough percentage of your revenue that comes from one-time projects versus recurring contracts?

How predictable is your revenue?

Probe: Can you confidently forecast your revenue for the next 3 months?

Probe: Have you experienced months with critically low revenue?

Walk me through your typical sales and payment cycle.

Probe: How long from first contact to payment? When do you get paid (upfront, milestones, on completion)?

Section B: Financial Health & Cash Flow

What is the single biggest financial challenge you face?

Probe: Is it cash flow, profitability, or client payment delays?

Have late client payments ever affected your ability to pay salaries or operational costs on time?

Probe: If yes, how often does this occur?

On a scale of 1-10, how would you rate the financial sustainability of your current business model, and why?

What are your main cost drivers?

Probe: What percentage of total costs are personnel costs?

Section C: Future Vision & Adaptation (8 minutes)

What prevents Start Technology from growing faster? o Probe: Is it lack of clients, capital, or team capacity?

Have you considered shifting to a model with more recurring revenue (e.g., subscriptions, managed services)?

Probe: What are the biggest barriers to making that change?

If you could redesign your business model from scratch today, what is the one thing you would do differently?

Interview Closing:

"Is there anything crucial about your business model's sustainability that we haven't covered?"

"Thank you again. May I follow up via email if I need to clarify anything?"

Appendix B: Structured Questionnaire
START TECHNOLOGY EMPLOYEE SURVEY
Research on Business Model Sustainability SURVEY
INTRODUCTION

Dear Start Technology Team Member,

I am Steven Maenda, conducting research for my Executive MBA dissertation at Africa University. This survey is part of a study assessing the sustainability of Start Technology's business model.

Your participation is:

Voluntary - You may skip any question or withdraw at any time

Confidential - Your individual responses will NOT be shared with management

Anonymous - Do not write your name anywhere

Important - Your honest feedback helps improve the company's future

The survey takes approximately 10-15 minutes to complete.

Results will be reported only in aggregate (overall percentages and trends), never individually. This research is purely for academic

purposes and aims to provide recommendations that benefit the company and employees.

By clicking "Next" you consent to participate in this research.

Thank you for your valuable input!

Steven Maenda

EMBA Candidate, Africa University [Your email/phone for questions]

SECTION 1: DEMOGRAPHIC INFORMATION

These questions help me understand if different groups have different perspectives. Remember, your responses are anonymous.

What is your primary role at Start Technology?

Technical/Development (programming, systems, IT infrastructure)

Sales/Business Development

Operations/Project Management

Administrative/Finance

Other: ____

How long have you worked at Start Technology?

Less than 6 months

6 months to 1 year

1 to 2 years

2 to 3 years

More than 3 years

What is your employment status?

Full-time permanent

Full-time contract

- Part-time
 - Freelance/Consultant
- What is your level of seniority?
- Entry level / Junior
 - Mid-level
 - Senior level
 - Management/Leadership

SECTION 2: JOB SATISFACTION & STABILITY

Please indicate your level of agreement with each statement:

(Scale: Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree)

I am satisfied with my current role at Start Technology.

- Strongly Disagree Disagree Neutral Agree Strongly Agree

I feel my job at Start Technology is secure.

- Strongly Disagree Disagree Neutral Agree Strongly Agree

I have considered leaving Start Technology in the past year.

- Strongly Disagree Disagree Neutral Agree Strongly Agree

If you agreed or strongly agreed with question 7, what are your main reasons for considering leaving? ***(Select all that apply - Optional)***

- Concerns about company financial stability
- Limited career growth opportunities
- Inadequate compensation
- Insufficient training and development
- Workload issues (too much or inconsistent)
- Better opportunities elsewhere
- Company culture/management issues
- Other: _____
- Not applicable - I have not considered leaving

I would recommend Start Technology as a good place to work.

- Strongly Disagree Disagree Neutral Agree Strongly Agree

SECTION 3: REVENUE IMPACT & COMPANY STABILITY

I am aware of the company's financial situation (revenue, profitability, cash flow).

- Not at all aware
- Slightly aware
- Moderately aware
- Very aware
- Extremely aware

I have noticed fluctuations in company activity (very busy periods followed by slow periods).

- Never noticed this
- Rarely noticed
- Sometimes noticed

Often noticed
 Always noticed
Revenue unpredictability affects my work experience at Start Technology.

Strongly Disagree Disagree Neutral Agree Strongly Agree

If you agreed with question 12, how does revenue unpredictability affect you? (*Select all that apply - Optional*)

Workload varies dramatically (feast or famine)

Uncertainty about job security

Stress about company survival

Difficulty planning my personal finances

Delays in receiving salary or benefits

Projects get rushed or cancelled suddenly

Other: ____

Not applicable

In the past 3 years, have you experienced any of the following? (*Select all that apply*)

Delayed salary payments

Reduced working hours due to low business activity

Being asked to take unpaid leave

Uncertainty about next month's work

None of the above

Prefer not to answer

I am confident in Start Technology's long-term financial stability (next 3-5 years).

Strongly Disagree Disagree Neutral Agree Strongly Agree

The company operates more in "survival mode" than "strategic growth mode."

Strongly Disagree Disagree Neutral Agree Strongly Agree

SECTION 4: CAREER DEVELOPMENT & INVESTMENT

Start Technology invests adequately in my professional development (training, certifications, skills).

Strongly Disagree Disagree Neutral Agree Strongly Agree

I have clear career growth opportunities at Start Technology.

Strongly Disagree Disagree Neutral Agree Strongly Agree

I have the tools, technology, and resources I need to do my job effectively.

Strongly Disagree Disagree Neutral Agree Strongly Agree

The company's financial situation limits investment in employee development.

Strongly Disagree Disagree Neutral Agree Strongly Agree

In the past year, how much training or professional development have you received from Start Technology?

- None
- 1-2 days/sessions
- 3-5 days/sessions
- 1-2 weeks
- More than 2 weeks

What type of professional development would most benefit you?

(Select top 3)

- Technical skills training (new programming languages, technologies)
- Certifications (Microsoft, Cisco, AWS, etc.)
- Project management training
- Sales and client relationship skills
- Leadership and management training
- Industry conferences or networking events
- Soft skills (communication, teamwork)
- Other: ____

SECTION 5: BUSINESS MODEL UNDERSTANDING

I understand how Start Technology generates revenue (how the company makes money).

- Not at all
- Slightly
- Moderately
- Very well
- Extremely well

To the best of your knowledge, Start Technology's revenue mainly comes from: **(Select one)**

- One-time project-based work
- Recurring contracts (monthly/annual subscriptions or support contracts)
- A mix of both project-based and recurring
- I don't know

I believe the company should focus more on developing recurring revenue streams (subscriptions, managed services, retainers).

Strongly Disagree Disagree Neutral Agree Strongly Agree

If the company moved toward more recurring revenue models, I believe it would:

- Significantly worsen company stability
- Slightly worsen stability
- Have no impact
- Slightly improve stability
- Significantly improve stability
- I don't know enough to say

SECTION 6: ORGANIZATIONAL CULTURE & STRATEGY

I understand Start Technology's long-term strategic direction and goals.

Strongly Disagree Disagree Neutral Agree

Strongly Agree

Management communicates openly about company challenges and opportunities.

Strongly Disagree Disagree Neutral Agree

Strongly Agree

I feel comfortable suggesting new ideas or innovations to improve the business.

Strongly Disagree Disagree Neutral Agree

Strongly Agree

The company culture encourages long-term strategic thinking rather than short-term survival.

Strongly Disagree Disagree Neutral Agree

Strongly Agree

I am proud to work for Start Technology.

Strongly Disagree Disagree Neutral Agree

Strongly Agree

SECTION 7: COMPETITIVE POSITION & CHALLENGES

Start Technology is competitive compared to other IT companies in Mozambique.

Strongly Disagree Disagree Neutral Agree

Strongly Agree

What do you see as Start Technology's biggest competitive advantages? (*Select up to 3*)

Quality of technical work

Understanding of local Mozambican market

Client relationships and trust

Competitive pricing

Speed and responsiveness

Specialized expertise in certain areas

Company culture and team

None - we don't have clear advantages

Other: ____

What are the biggest challenges facing Start Technology?

(*Select up to 3*)

Inconsistent revenue/cash flow

Competition from larger or international companies

Difficulty attracting and retaining talent

Limited access to financing/capital

Lack of clear strategy or direction

Client payment delays

Insufficient investment in innovation

Limited marketing and brand awareness

Other: ____

SECTION 8: RECOMMENDATIONS & OPEN FEEDBACK

- 1. If you were CEO, what is the ONE thing you would change to improve Start Technology's sustainability?**

[Open text box - Optional]

- 2. What could Start Technology do to improve as an employer?**

[Open text box - Optional]

- 3. Any additional comments about the company's business model, challenges, or opportunities?**

[Open text box - Optional]

CLOSING

Thank you for completing this survey!

Your honest feedback is invaluable to this research and will help develop recommendations to improve Start Technology's business model sustainability.

Reminder: Your responses are confidential and anonymous. Results will only be reported in aggregate form in my dissertation.

Appendix C: Client Questionnaire

Title: IT Services Client Experience Survey

Description: Dear Participant,

I am Steven Maenda, an EMBA student at Africa University researching IT business models in Mozambique.

This survey takes **5-7 minutes** and will help improve IT services in our country.

Your responses are **anonymous and confidential**. Thank you for participating!

SECTION 1: ABOUT YOU

Q1. What is your role in your organization? [Multiple choice - single answer]

- **Owner/CEO/Managing Director**
- **IT Manager/Director**
- **Operations Manager**
- **Finance Manager**
- **Department Head**
- **Other: _____**

Q2. What type of organization do you work for? [Multiple choice - single answer]

- **Private company (small: 1-20 employees)**
- **Private company (medium: 21-100 employees)**
- **Private company (large: 100+ employees)**
- **Government ministry/department**
- **NGO/Non-profit**
- **Parastatal/State-owned enterprise**
- **Other: _____**

Q3. What industry is your organization in? [Multiple choice - single answer]

- **Banking/Finance**
- **Telecommunications**
- **Retail/Distribution**
- **Manufacturing**
- **Healthcare**
- **Education**

- **Government**
- **NGO/Development**
- **Other: _____**

Q4. Your organization's location: [Multiple choice - single answer]

- **Maputo City**
- **Matola**
- **Other Maputo Province**
- **Beira**
- **Nampula**
- **Other region: _____**

Q5. How long has your organization been using IT services from external providers? [Multiple choice - single answer]

- **Less than 1 year**
- **1-2 years**
- **3-5 years**
- **6-10 years**
- **More than 10 years**
- **We don't use external IT services**

SECTION 2: YOUR IT SERVICE PURCHASES

Q6. What IT services does your organization purchase from external providers? [Checkboxes - select all that apply]

- **Software development/custom applications**
- **Website/web application development**

- **System implementation (ERP, CRM, etc.)**
- **IT infrastructure setup (networks, servers)**
- **IT support and maintenance**
- **Cloud services/hosting**
- **Cybersecurity services**
- **Hardware supply and installation**
- **IT consulting/advisory**
- **Training**
- **None - we handle IT internally**
- **Other: ___**

Q7. How do you currently pay for IT services? [Checkboxes - select all that apply]

- **One-time project payments (pay per project)**
- **Monthly support contracts**
- **Annual maintenance agreements**
- **Hourly/daily rates (time and materials)**
- **Subscription fees (monthly/annual)**
- **Retainer agreements**
- **Other: ___**

Q8. On average, how much does your organization spend on external IT services per year? [Multiple choice - single answer]

- **Less than 50,000 MZN**
- **50,000 - 200,000 MZN**
- **200,000 - 500,000 MZN**
- **500,000 - 1,000,000 MZN**

- **1,000,000 - 3,000,000 MZN**
- **More than 3,000,000 MZN**
- **Not sure**
- **Prefer not to say**

SECTION 3: SATISFACTION WITH IT PROVIDERS

Q9. Rate your satisfaction with IT service providers you've used:

[Linear scale for each item: 1 (Very Dissatisfied) to 5 (Very Satisfied)]

- **Quality of work delivered**
- **Speed of project completion**
- **Communication and responsiveness**
- **Technical expertise**
- **Understanding of our business needs**
- **Value for money**
- **Reliability and availability**
- **Problem-solving ability**

Q10. What are your BIGGEST frustrations when working with IT service providers? [Checkboxes - select top 3]

- **Projects take too long**
- **Costs more than expected**
- **Poor communication**
- **Technical quality issues**
- **Don't understand our needs**
- **Unreliable/unavailable when needed**

- **Difficult to get support after project ends**
- **Too expensive**
- **Not enough local providers to choose from**
- **Other: ___**

SECTION 4: RECURRING SERVICES & CONTRACTS

Q11. Does your organization currently have any ONGOING monthly or annual IT support contracts? [Multiple choice - single answer]

- **Yes, with one provider**
- **Yes, with multiple providers**
- **No, we only do projects**
- **Not sure**

Q12. Would your organization be willing to pay a MONTHLY FEE for ongoing IT support and maintenance instead of paying per project? [Multiple choice - single answer]

- **Yes, definitely interested**
- **Yes, if the value is clear**
- **Maybe, depends on the price**
- **Probably not**
- **No, we prefer project-by-project**
- **We already do this**
- **Not sure**

Q13. What would make you willing to commit to a long-term IT support contract? (e.g., 6-12 months) [Checkboxes - select all that apply]

- **Lower total cost than projects**
- **Guaranteed response times**

- **Priority support**
- **Predictable budgeting**
- **Proactive monitoring/maintenance**
- **Regular system updates**
- **Dedicated account manager**
- **Flexibility to cancel if not satisfied**
- **Nothing - we prefer flexibility of projects**
- **Other: ___**

Q14. What PREVENTS your organization from signing long-term IT contracts? [Checkboxes - select all that apply]

- **Budget constraints/uncertainty**
- **Prefer flexibility to change providers**
- **Don't trust providers to deliver consistently**
- **Procurement rules don't allow long contracts**
- **Our IT needs change too much**
- **Difficult to get approval for recurring expenses**
- **Nothing prevents us - we'd consider it**
- **Other: ___**

SECTION 5: PAYMENT & FINANCIAL ISSUES

Q15. How long does it typically take your organization to pay IT service providers after receiving an invoice? [Multiple choice - single answer]

- **Within 7 days**
- **8-30 days**
- **31-60 days**

- **61-90 days**
- **More than 90 days**
- **Varies depending on project**
- **Not sure**

Q16. Does your organization request payment terms from IT providers? [Multiple choice - single answer]

- **Yes, always (30-90 days after invoice)**
- **Sometimes, depending on project size**
- **No, we usually pay quickly**
- **Not sure**

Q17. Rate your agreement: "IT service providers in Mozambique charge reasonable prices." [Linear scale: 1 (Strongly Disagree) to 5 (Strongly Agree)]

SECTION 6: PROVIDER RELATIONSHIPS

Q18. How many different IT service providers has your organization worked with in the past 3 years? [Multiple choice - single answer]

- **Only 1 provider**
- **2-3 providers**
- **4-5 providers**
- **More than 5 providers**
- **Not sure**

Q19. Do you tend to use the SAME provider repeatedly or try different ones? [Multiple choice - single answer]

- **Same provider for most projects (loyal relationship)**
- **Mix of regular provider and new ones**
- **Always looking for different/cheaper providers**

- **Not sure**

Q20. What makes you choose one IT provider over another?

[Checkboxes - rank top 3: add instructions "Rank your top 3 by importance"]

- **Lowest price**
- **Previous good experience**
- **Recommendation from others**
- **Technical expertise/skills**
- **Speed of response**
- **Local company (Mozambican)**
- **Large/established company**
- **Personal relationship with owner**
- **Portfolio/past work examples**
- **Other: ___**

SECTION 7: RECOMMENDATIONS

Q21. What ONE thing could IT service providers do to better serve your organization? [Short answer text - Optional]

Q22. If you could design the perfect IT support arrangement for your organization, what would it look like? [Paragraph text - Optional]

CLOSING PAGE

Thank you for completing this survey!

Your feedback will help improve IT services in Mozambique.

If you'd like to receive a summary of research findings, please provide your email below (optional and will be kept confidential):

Contact for questions: Steven Maenda EMBA Candidate, Africa University Email:

Appendix C: Ethical Clearance Approval



"Investing in Africa's future"

AFRICA UNIVERSITY RESEARCH ETHICS COMMITTEE (AUREC)

P.O. Box 1320 Mutare, Zimbabwe, Off Nyanga Road, Old Mutare-Tel (+263-20) 60075/60026/61611 Fax: (+263 20) 61785 Website: www.africau.edu

Ref: AU4037/25

29 October, 2025

STEVEN MAENDA
C/O Africa University
Box 1320
MUTARE

RE: **ASSESSING THE SUSTAINABILITY OF THE BUSINESS MODEL AT START TECHNOLOGY, A MOZAMBIKAN IT FIRM**

Thank you for submitting the above-titled proposal to the Africa University Research Ethics Committee for review. Please be advised that AUREC has reviewed and approved your application to conduct the above research.

The approval is based on the following.

- a) Research proposal
- **APPROVAL NUMBER** AUREC 4037/25
This number should be used on all correspondence, consent forms, and appropriate documents
 - **AUREC MEETING DATE** NA
 - **APPROVAL DATE** October 29, 2025
 - **EXPIRATION DATE** October 29, 2026
 - **TYPE OF MEETING:** Expedited
After the expiration date, this research may only continue upon renewal. A progress report on a standard AUREC form should be submitted a month before the expiration date for renewal purposes.
 - **SERIOUS ADVERSE EVENTS** All serious problems concerning subject safety must be reported to AUREC within 3 working days on the standard AUREC form.
 - **MODIFICATIONS** Prior AUREC approval is required before implementing any changes in the proposal (including changes in the consent documents)
 - **TERMINATION OF STUDY** Upon termination of the study a report has to be submitted to AUREC.



Yours Faithfully

MARY CHINZOU
FOR CHAIRPERSON
AFRICA UNIVERSITY RESEARCH ETHICS COMMITTEE