

Final Project 2

PMG 497

Project Template

Midocean University

Faculty of Management

Department/ Specialization General Administration



The Role of Strategic Planning in Achieving Competitive Advantage for Startups

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1. Chapter 1: Introduction

1.1. Research Background

In today's highly volatile and competitive global economy, startups operate in environments characterized by rapid technological change, shifting customer preferences, and intense market rivalry. Unlike established corporations, startups typically function with limited financial resources, evolving organizational structures, and high levels of uncertainty. These conditions significantly increase the risk of failure, particularly during the early stages of development.

Consequently, the need for structured managerial approaches that can guide decision-making and ensure sustainable growth has become more critical than ever. Among these approaches, strategic planning has emerged as a central mechanism through which organizations define their direction, allocate resources effectively, and position themselves competitively within their industries (Guterman, 2023).

Strategic planning is not merely the preparation of a formal business document; rather, it is a systematic and dynamic process that involves clarifying the organization's vision and mission, analyzing internal and external environments, setting long-term objectives, and formulating actionable strategies.

According to Khuan et al. (2023), strategic business planning serves as a pathway to sustainable growth by aligning organizational capabilities with market opportunities. In the context of startups, this alignment is particularly essential because misallocation of scarce resources or poorly defined objectives can quickly undermine competitiveness and survival prospects. Strategic planning therefore functions as a navigational framework that reduces uncertainty and enhances organizational coherence.

The literature on strategic management has long emphasized the importance of positioning and resource deployment in achieving superior performance. Classical strategic theories suggest that competitive advantage arises when firms are able to implement value-creating strategies that are not simultaneously being implemented

by competitors.

In startup contexts, however, the challenge is compounded by the absence of established routines, limited market reputation, and constrained access to capital.

Arora (2025) argues that early-stage ventures must move beyond traditional business planning and adopt comprehensive strategic planning practices that integrate market analysis, innovation strategies,

and financial foresight. This broader perspective positions strategic planning as an engine of early venture growth rather than a static planning exercise.

At the same time, competitive advantage has become a decisive factor determining whether startups can survive and scale in competitive markets.

Competitive advantage refers to the firm's ability to create superior value relative to competitors, either through cost efficiency, differentiation, innovation, or superior capabilities.

Farida and Setiawan (2022) emphasize that business strategies contribute directly to competitive advantage when they are supported by performance optimization and innovation capabilities. For startups, innovation often serves as a primary differentiating factor, enabling them to disrupt existing markets or introduce novel value propositions. However, innovation alone is insufficient without strategic direction; it must be embedded within a coherent strategic framework to generate sustainable outcomes.

Recent empirical research further highlights the multifaceted nature of competitiveness in startup ecosystems.

Taghavy et al. (2024) demonstrate that dynamic capabilities, resilience, and strategic alignment significantly influence startup competitiveness.

Their findings suggest that strategic planning enhances competitive positioning when it fosters alignment between organizational resources and environmental demands. Similarly, Stefia et al. (2024) show that dynamic marketing capabilities and strategic information management contribute to international startup success, reinforcing the idea that structured strategic processes are instrumental in building sustainable market positions. These studies collectively indicate that startups benefit from integrating strategic planning with capability development to strengthen their competitive standing.

Moreover, contemporary research has begun exploring the role of intellectual capital and innovation systems in shaping startup advantage.

Tokaldan et al. (2025) propose a comprehensive framework linking intellectual capital drivers with competitive advantage in startup companies, arguing that strategic orientation enables startups to leverage intangible assets effectively.

Jain (2025) also underscores the intersection between innovation and financial strategy, illustrating how startups utilize financial planning as a strategic tool to support competitive positioning. These

contributions extend the understanding of strategic planning beyond traditional market positioning toward an integrated model that connects innovation, finance, and knowledge resources.

Despite the growing body of research, much of the strategic management literature historically focused on large, established corporations, with relatively limited emphasis on the unique characteristics of startups. Startups differ significantly in their operational constraints, risk exposure, and growth trajectories. As noted by Abdulwahab et al. (2025), entrepreneurial ventures require context-specific strategic approaches that account for scalability challenges and sectoral dynamics. This indicates a need to further investigate how strategic planning practices function within startup environments and how they translate into measurable competitive outcomes.

Given these developments, it becomes evident that strategic planning plays a potentially transformative role in shaping startup competitiveness. However, the relationship between structured planning processes and specific dimensions of competitive advantage—such as cost leadership, differentiation, and innovation—remains an area requiring deeper empirical exploration. While existing studies acknowledge the importance of strategy for organizational performance, there is still a need to examine systematically how strategic planning components influence competitive advantage in resource-constrained startup settings.

Therefore, this study seeks to explore the role of strategic planning in achieving competitive advantage for startups.

By examining the relationship between

planning processes and competitive outcomes, the research aims to contribute to both strategic management theory and entrepreneurial practice. Understanding this relationship is particularly significant in contemporary startup ecosystems, where sustainable growth depends not only on creativity and innovation but also on disciplined strategic direction and effective resource alignment.

1.2. Research Problem

Despite the growing recognition of strategic planning as a fundamental managerial practice, its specific role in enhancing competitive advantage within startups remains insufficiently explored. While numerous studies have examined strategic management in established corporations, startups operate under unique structural and environmental conditions that may alter the effectiveness and implementation of planning processes. The high failure rate among startups further raises questions about whether inadequate strategic planning contributes to weak competitive positioning. Therefore,

identifying both theoretical and practical gaps in the existing literature is essential to clarify the problem addressed by this study

1.2.1. Theoretical Gaps

The existing body of strategic management literature has extensively examined the relationship between strategic planning and organizational performance. However, much of this research has traditionally focused on large, mature firms with stable organizational structures and abundant resources. As highlighted by Gutterman (2023), strategic planning frameworks are often developed within the context of established enterprises, assuming formalized processes and long-term operational stability. This creates a theoretical limitation when attempting to apply such frameworks directly to startups, which typically operate in uncertain, rapidly changing environments.

Moreover, recent studies have examined individual determinants of competitive advantage in startups, such as intellectual capital (Tokaldan et al., 2025), innovation and financial

strategy (Jain, 2025), and dynamic capabilities (Taghavy et al., 2024). While these studies contribute valuable insights, they tend to analyze these factors independently rather than integrating them within a comprehensive strategic planning framework. Similarly, Farida and Setiawan (2022) emphasize the role of business strategy in enhancing competitive advantage, yet limited empirical research directly measures how structured strategic planning processes influence specific dimensions of competitive advantage in startup settings.

Therefore, there remains a theoretical gap in understanding how the core components of strategic planning-such as vision formulation, environmental analysis, and goal setting-collectively contribute to achieving sustainable competitive advantage in startups. This study seeks to bridge this gap by examining the direct relationship between strategic planning practices and competitive advantage dimensions within startup organizations.

1.2.2. Practical Gaps

From a practical perspective, startups face significant survival challenges, particularly during their early years. Many ventures fail not necessarily due to lack of innovation, but because of poor strategic direction, weak market positioning, and ineffective resource allocation.

Arora (2025) argues that early-stage ventures often rely heavily on informal planning or short-term decision-making, which limits their capacity for sustained growth. Similarly, Khuan et al. (2023) emphasize that structured strategic planning is a critical pathway to sustainable growth and long-term competitiveness.

In addition, empirical evidence suggests that competitiveness in startups depends on strategic alignment and dynamic capabilities (Stefia et al., 2024; Taghavy et al., 2024). However, in practice, many startup founders prioritize operational execution and product development over systematic strategic planning. This imbalance may result in missed market opportunities, inefficient cost structures, and inability to build a distinctive competitive position.

Despite increasing awareness of the importance of strategic management, there remains a practical deficiency in how startups implement formal planning tools and integrate them into daily decision-making processes.

Consequently, there is a need for empirical research that provides evidence-based insights into whether and how strategic planning enhances competitive advantage in startup contexts.

Main Research Question

Based on the identified theoretical and practical gaps, the main research question guiding this study is:

To what extent does strategic planning contribute to achieving competitive advantage for startups?

1.3. Research Significance

The significance of this study stems from the increasing strategic challenges faced by startups in highly competitive and uncertain markets. As startups continue to play a vital role in economic growth, innovation, and job creation, understanding the mechanisms that enhance their competitiveness becomes both academically and practically important. This study contributes by clarifying how strategic planning influences competitive advantage within startup contexts, thereby addressing gaps in both theory and practice.

1.3.1. At the theoretical level

At the theoretical level, this study contributes to the strategic management and entrepreneurship literature by integrating strategic planning theory with competitive advantage frameworks in the specific context of startups.

Although prior studies have examined strategic planning (Guttermann, 2023; Khuan et al., 2023) and competitive advantage determinants such as innovation and intellectual capital (Farida & Setiawan,

2022; Tokaldan et al., 2025), limited research has empirically linked structured planning processes to measurable dimensions of competitive advantage within early-stage ventures.

Furthermore, contemporary research highlights the importance of dynamic capabilities and strategic alignment in startup competitiveness (Taghavy et al., 2024; Stefia et al., 2024), yet the role of formal strategic planning as an enabling mechanism remains underexplored.

By examining strategic planning as an integrated construct that includes vision, mission, environmental analysis, and goal setting, this study extends existing theoretical models and provides a clearer conceptual linkage between planning processes and competitive outcomes.

Thus, the study enriches academic understanding by offering a comprehensive framework that explains how strategic planning contributes to cost leadership, differentiation, and innovation in startup environments.

1.3.2. At the practical level

At the practical level, this research provides actionable insights for startup founders, managers, and policymakers. Many startups prioritize innovation and rapid execution while neglecting structured strategic planning, which may undermine long-term competitiveness (Arora, 2025). By empirically examining the impact of planning practices on competitive advantage, this study offers evidence-based guidance for entrepreneurs seeking sustainable growth.

Additionally, understanding the relationship between strategic planning and competitive positioning can assist incubators, accelerators, and government agencies in designing targeted support programs that enhance startup survival rates.

The findings may also help founders improve resource allocation, align internal capabilities with market demands, and strengthen innovation strategies to build lasting competitive advantage.

1.4. Research Questions

Based on the research problem and identified gaps, this study seeks to answer the following questions:

1. What is the level of strategic planning implementation in startups?
2. What are the key components of strategic planning adopted by startups?
3. How does strategic planning influence the competitive advantage of startups?
4. Is there a statistically significant relationship between strategic planning and the dimensions of competitive advantage (cost leadership, differentiation, and innovation)?

1.5. Research Objectives

In alignment with the research questions, the objectives of this study are:

1. To assess the level of strategic planning practices implemented in startups.
2. To identify the core components of strategic planning adopted by startup firms.
3. To examine the impact of strategic planning on competitive advantage dimensions (cost leadership, differentiation, and innovation).
4. To provide practical recommendations that enhance competitive positioning through effective strategic planning.

1.6. Research Hypotheses

Based on the theoretical framework and prior empirical findings, the following hypotheses are proposed:

H1: There is a statistically significant positive relationship between strategic planning and competitive advantage in startups.

H1a: Strategic planning has a significant positive effect on cost leadership in startups.

H1b: Strategic planning has a significant positive effect on differentiation in startups.

H1c: Strategic planning has a significant positive effect on innovation in startups.

1.7. Research Model

The proposed research model explains the relationship between strategic planning and competitive advantage in startups. Strategic planning is the independent variable and includes vision, mission, SWOT analysis, and goal setting. Competitive advantage is the dependent variable and is measured through cost leadership, differentiation, and innovation.

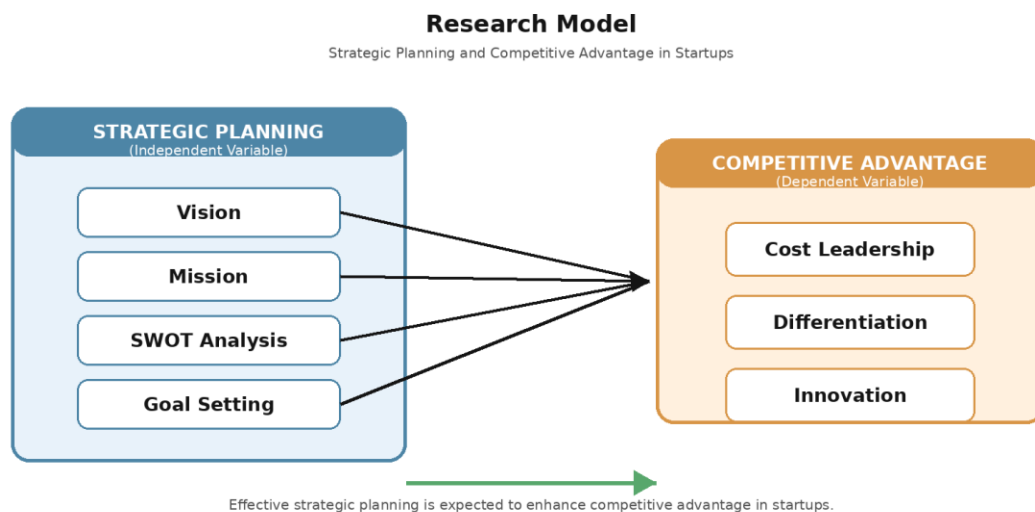


Figure 1. Research model of the study

1.8. Scope of the Study

The scope of this study is defined across three main dimensions: conceptual, geographical, and temporal scope.

From a conceptual perspective, the study focuses exclusively on examining the relationship between strategic planning and competitive advantage in startups. Strategic planning is operationalized through four core components: vision, mission, SWOT analysis, and goal setting. Competitive advantage is measured through three dimensions: cost leadership, differentiation, and innovation. Other organizational factors, such as leadership style or organizational culture, are not included within the boundaries of this research.

From a geographical perspective, the study targets startups operating within a specified country or region (to be identified according to the research setting). The findings will therefore be generalizable primarily to startups within similar economic and institutional environments.

From a temporal perspective, the research is cross-sectional, meaning that data will be collected at a single point in time. The study examines the current state of strategic planning practices and their association with competitive advantage, without tracking changes over extended periods.

By clearly defining these boundaries, the study maintains focus and ensures that its findings are directly aligned with the stated research objectives.

1.9. The Project Structure

This research will be organized into several chapters in order to present the study in a clear and systematic manner. The project structure is presented in the following table:

Chapter	Title	Main content
Chapter One	Introduction	Research background, research problem, significance, questions, objectives, hypotheses, model, scope, and project structure.
Chapter Two	Literature Review	Theoretical discussion of strategic planning, competitive advantage, and the relationship between the study variables.

Chapter Three	Research Methodology	Research design, population and sample, data collection method, research instrument, and statistical analysis procedures.
Chapter Four	Statistical Analysis and Findings Discussion	Sample profile, reliability and validity tests, descriptive statistics, hypotheses testing, and discussion of findings.
Chapter Five	Research Limitations, Recommendations, and Conclusion	Limitations, future research directions, practical recommendations, and final conclusion.

Table 1. Project structure and plan

2. Chapter 2: Literature Review

2.1. Introduction

This chapter reviews the theoretical foundations and empirical studies related to the main variables of the study: strategic planning as the independent variable and competitive advantage as the dependent variable.

The purpose of this chapter is to establish a strong conceptual framework that explains how structured planning processes may influence competitive positioning in startups.

The chapter begins by discussing the concept and dimensions of strategic planning, followed by an in-depth analysis of competitive advantage and its core components.

It then examines previous empirical studies that link both variables, highlighting areas of agreement and divergence in the literature. The chapter concludes by synthesizing the reviewed studies and reinforcing the rationale for the proposed research model.

2.2. The Independent Variable: Strategic Planning

Strategic planning is widely recognized as a systematic managerial process that defines organizational direction and ensures alignment between internal capabilities and external opportunities.

According to Gutterman (2023), strategic planning involves clarifying mission and vision, assessing environmental conditions, setting objectives, and designing action plans that guide long-term performance.

Unlike operational planning, which focuses on short-term activities, strategic planning emphasizes sustainability, competitive positioning, and long-term value creation.

In startup environments, strategic planning plays a particularly critical role due to high uncertainty and resource constraints.

Khuan et al. (2023) argue that strategic business planning acts as a pathway to sustainable growth by ensuring that emerging firms align their internal strengths with market opportunities.

Their findings indicate that startups that adopt structured planning mechanisms demonstrate improved adaptability and competitive resilience.

Arora (2025) further emphasizes that early-stage ventures must move beyond traditional business plans toward comprehensive strategic planning models that integrate innovation, financial foresight, and market analysis.

This perspective expands the scope of strategic planning from static documentation to a dynamic growth engine capable of supporting scaling and competitive expansion.

The literature commonly identifies several core components of strategic planning.

First, vision and mission formulation provides clarity of purpose and long-term direction. A well-defined vision motivates stakeholders and guides strategic decision-making.

Second, environmental analysis-often conducted through SWOT analysis-enables firms to identify strengths, weaknesses, opportunities, and threats.

Third, goal setting translates strategic direction into measurable objectives.

These components collectively shape the strategic orientation of startups and influence their market positioning.

In addition, research suggests that strategic planning enhances dynamic capabilities and strategic alignment (Taghavy et al., 2024). By fostering alignment between organizational resources and environmental demands, structured planning strengthens the firm's ability to adapt and compete effectively.

2.3. The Dependent Variable: Competitive Advantage

Competitive advantage refers to a firm's ability to generate superior value relative to its competitors.

It enables organizations to achieve above-average performance and maintain market relevance.

In startup contexts, competitive advantage is often associated with innovation, agility, and differentiation strategies.

Farida and Setiawan (2022) argue that business strategies directly influence competitive advantage when they enhance performance and innovation capacity.

Their findings demonstrate that innovation serves as a key mechanism through which firms achieve differentiation and long-term competitiveness. This is particularly relevant for startups, which frequently rely on novel products or services to enter competitive markets.

Tokaldan et al. (2025) introduce the role of intellectual capital as a driver of competitive advantage in startups.

They suggest that intangible assets-such as knowledge, expertise,

and organizational learning-contribute significantly to sustainable competitiveness when strategically managed.

This perspective aligns with the resource-based view, which emphasizes the strategic value of unique internal resources.

Moreover, Jain (2025) highlights the intersection between innovation and financial strategy, showing how startups leverage financial planning tools to enhance competitive positioning.

Effective financial strategy allows startups to allocate resources efficiently, reduce cost structures, and support innovative initiatives.

Taghavy et al. (2024) also emphasize the importance of dynamic capabilities and resilience in strengthening startup competitiveness.

Their findings suggest that competitive advantage is not solely derived from static resources but from the firm's ability to reconfigure capabilities in response to environmental changes.

Based on the reviewed literature, competitive advantage in startups can be operationalized through three primary dimensions: cost leadership, differentiation, and innovation. These dimensions provide measurable indicators for evaluating a startup's competitive position.

2.4. The Relationship Between the Study Variables

The relationship between strategic planning and competitive advantage has been widely discussed in strategic management literature.

Strategic planning contributes to competitive advantage by clarifying direction, improving resource allocation, and enhancing environmental responsiveness.

Khuan et al. (2023) demonstrate that structured strategic planning significantly supports sustainable growth and competitive strength.

Their findings suggest that firms with clear strategic direction are better positioned to capitalize on opportunities and mitigate risks.

Similarly, Arora (2025) emphasizes that comprehensive planning enhances scalability and competitive sustainability in early-stage ventures.

Empirical evidence also supports the indirect role of planning in strengthening competitive determinants.

For instance, Taghavy et al. (2024) find that strategic alignment enhances startup competitiveness, while Stefia et al. (2024) highlight the impact of strategic information management and dynamic marketing capabilities on international startup success.

These studies indicate that planning mechanisms improve competitive advantage by fostering capability development and organizational coherence.

Furthermore, Farida and Setiawan (2022) confirm that strategic business approaches significantly influence innovation and performance, which are key components of competitive advantage.

Jain (2025) reinforces this relationship by demonstrating how strategic financial planning supports innovation-driven competitiveness in startups.

Despite these findings, limited empirical research directly tests the comprehensive impact of strategic planning dimensions-such as vision, SWOT analysis, and goal setting-on cost leadership, differentiation, and innovation within startups.

Therefore, this study seeks to empirically examine this relationship and provide quantitative evidence regarding the extent to which strategic planning contributes to competitive advantage.

2.5. Conclusion

This chapter reviewed the theoretical and empirical literature related to strategic planning and competitive advantage in startup contexts.

The discussion demonstrated that strategic planning serves as a structured managerial process that enhances alignment, capability development, and long-term positioning.

The literature also confirmed that competitive advantage in startups is influenced by innovation, intellectual capital, financial strategy, and dynamic capabilities.

Although prior studies highlight the importance of strategic orientation, there remains a need for integrated empirical research examining the direct relationship between strategic planning components and competitive advantage dimensions.

This gap justifies the development of the current study's conceptual framework and hypothesis testing in the subsequent empirical phase.

3. Chapter 3: Research Methodology

3.1. Introduction

This chapter presents the research methodology used to examine the role of strategic planning in achieving competitive advantage for startups. It describes the operational definitions of the variables, research design, research population and sampling technique, data collection method, types of data, and statistical analysis procedures. The chapter clarifies how the study will be conducted and how the research hypotheses will be tested.

The methodology is designed to match the purpose of the study, which is to measure the relationship between strategic planning and competitive advantage. Since the study focuses on measurable relationships among clearly defined variables, a quantitative approach and survey-based data collection are appropriate.

3.2. Operational Definitions for Research Variables

Operational definitions clarify how each research variable is understood and measured in this study. The following table presents the main variables, their roles in the research model, their operational meanings, measurement dimensions, and questionnaire indicators.

Variable	Role in the study	Operational definition	Main dimensions / indicators	Measurement
Strategic Planning	Independent variable	A systematic managerial process through which startups define direction, analyze the environment, set objectives, and formulate strategies.	Vision, mission, goal clarity, internal/external analysis, resource allocation, decision guidance, and adaptive review	SP1–SP8 using a five-point Likert scale
Cost Leadership	Dependent variable dimension	The startup's ability to reduce costs and offer value efficiently	Cost efficiency and resource utilization	CL1–CL2 using a five-point Likert scale

Variable	Role in the study	Operational definition	Main dimensions / indicators	Measurement
		compared with competitors.		
Differentiation	Dependent variable dimension	The startup's ability to provide unique products, services, or value propositions that distinguish it from competitors.	Product/service distinctiveness and unique customer value	DF1–DF2 using a five-point Likert scale
Innovation	Dependent variable dimension	The startup's ability to introduce new ideas, products, services, or processes that improve competitiveness.	New ideas/products/services and innovation-enabled market position	IN1–IN2 using a five-point Likert scale
Competitive Advantage	Dependent variable	The overall ability of the startup to achieve superior market positioning compared with competitors.	Cost leadership, differentiation, innovation, market responsiveness, and sustainable advantage	Composite mean derived from CL1–CL2, DF1–DF2, IN1–IN2, and CA1–CA3

Table 2. Operational definitions of research variables

3.3. Research Design (Research Onion)

This study adopts a quantitative research design because it aims to measure the effect of strategic planning on competitive advantage using numerical data. The study follows a deductive approach, moving from theoretical assumptions about strategic planning and competitive advantage to empirical hypothesis testing.

The research design is descriptive and analytical. The descriptive component will identify the level of strategic planning practices and competitive advantage among startups, while the analytical

component will examine the statistical relationship between strategic planning and competitive advantage dimensions, including cost leadership, differentiation, and innovation.

Research onion layer	Selected option	Application in this study
Research philosophy	Positivism	The study depends on objective measurement and statistical testing of relationships between variables.
Research approach	Deductive approach	The study tests hypotheses developed from previous literature and theoretical assumptions.
Methodological choice	Quantitative mono-method	Numerical data will be collected through a structured questionnaire and analyzed statistically.
Research strategy	Survey strategy	A questionnaire will be used to collect data from the target respondents.
Time horizon	Cross-sectional	Data will be collected at one point in time to examine the current relationship between variables.
Sampling technique	Purposive and convenience sampling will be used to target respondents who are familiar with strategic planning practices in startup organizations.	The technique is selected to access respondents who are relevant to the research topic.
Data analysis	Cronbach's alpha, descriptive statistics, Pearson correlation, and regression analysis	These procedures will be used to test reliability, describe variables, and examine relationships and effects.

Table 3. Research design according to the Research Onion

3.4. Research Population & Sampling Methods and Technique

The research population consists of startup founders, co-founders, senior managers, and employees involved in planning and strategic decision-making. These respondents are appropriate because they are familiar with startup strategy, market positioning, resource allocation, and competitive practices.

A purposive and convenience sampling technique will be used. Purposive sampling helps target respondents who have knowledge of strategic planning in startups, while convenience sampling supports practical access to participants within the available time and resources.

The target population consists of startup founders, co-founders, senior managers, and employees involved in planning and strategic decision-making within startup firms.

The sampling method will be as follows: purposive and convenience sampling will be used to target respondents who are familiar with strategic planning practices in startup organizations.

3.5. Data Collection Method

Data will be collected using a structured questionnaire. The questionnaire will include demographic questions and measurement items related to strategic planning and competitive advantage. Strategic planning will be measured through vision, mission, SWOT analysis, and goal setting, while competitive advantage will be measured through cost leadership, differentiation, and innovation.

A five-point Likert scale ranging from strongly disagree to strongly agree will be used for the main questionnaire items. This scale is suitable for measuring perceptions and supports the application of statistical analysis procedures.

The main data collection instrument will be a structured questionnaire consisting of demographic questions and measurement items for strategic planning and competitive advantage dimensions.

3.6. Types of Data

The study will use primary data and secondary data. Primary data will be collected directly from respondents through the questionnaire. These data will provide direct evidence about strategic planning practices and competitive advantage in startup contexts.

Secondary data will be collected from academic books, journal articles, previous studies, and relevant reports related to strategic planning, entrepreneurship, startups, and competitive advantage. These sources will support the literature review and help interpret the findings.

3.7. Statistical Analysis Procedures

After the questionnaires are collected, the data will be coded and entered into statistical software such as SPSS. The analysis will include both descriptive and inferential statistical procedures. The purpose of these procedures is to summarize the sample profile, test the quality of the measurement instrument, and examine the research hypotheses.

Statistical procedure	Purpose	Application in this study
Data coding and screening	To prepare the dataset and identify missing or invalid responses.	All questionnaire responses will be coded according to the five-point Likert scale and checked before analysis.
Frequency and percentage	To describe demographic characteristics of respondents.	Used for gender, age, education, experience, and other categorical variables.
Mean and standard deviation	To describe the level of each research variable.	Used to summarize respondents' perceptions of the main study variables.
Cronbach's alpha	To test internal consistency reliability.	A value of 0.70 or above will be considered acceptable for the questionnaire scales.
Pearson correlation	To examine the strength and direction of relationships between variables.	Used to test whether the main variables are positively and significantly related.
Regression analysis	To test the effect of the independent variable on the dependent variable.	Used to examine the research hypotheses and determine the predictive power of the model.

Table 4. Statistical analysis procedures

3.8. Conclusion

This chapter presented the methodological procedures of the study. It explained the operational definitions of the research variables, the quantitative research design, research onion, population and sampling method, data collection method, types of data, and statistical analysis procedures. These procedures provide a clear framework for testing the relationship between strategic planning and competitive advantage in startups.

4. Chapter 4: Statistical Analysis and Discussion of Findings

4.1. Introduction

This chapter presents the empirical analysis of the questionnaire data collected to examine the role of strategic planning in achieving competitive advantage for startups. The analysis follows the quantitative procedures specified in Chapter 3 and is organized around data screening, sample description, reliability and validity assessment, descriptive statistics, correlation analysis, regression-based hypothesis testing, and discussion of the findings in relation to the literature reviewed in Chapter 2.

The unit of analysis was the individual respondent. Although 50 form submissions were recorded, one respondent did not provide consent and supplied no demographic or measurement data. That submission was excluded before analysis. The final analytical sample therefore comprised 49 complete and consenting responses. All reported inferential tests are two-tailed and use a significance level of $\alpha = .05$.

4.2. Data Preparation and Analysis Strategy

The response workbook was screened before analysis. The 49 eligible cases contained no missing demographic or Likert-scale values, and all measurement responses fell within the permitted range from 1 (Strongly Disagree) to 5 (Strongly Agree). No eligible case was removed. Composite scores were calculated as the arithmetic mean of the relevant items, which preserved the original five-point metric and facilitated direct interpretation of construct means.

The administered questionnaire contained 17 analytical items. Eight items measured strategic planning, while nine items measured competitive advantage. The latter comprised cost leadership, differentiation, innovation, and three general competitive-advantage items. This coding scheme follows the fields contained in the actual response workbook and was used consistently throughout the analysis.

Construct	Codes	No. of items	Score construction
Strategic Planning	SP1–SP8	8	Mean of eight planning items
Cost Leadership	CL1–CL2	2	Mean of two cost items
Differentiation	DF1–DF2	2	Mean of two differentiation items
Innovation	IN1–IN2	2	Mean of two innovation items
General Competitive Advantage	CA1–CA3	3	Mean of three general items
Overall Competitive Advantage	CL1–CA3	9	Mean of all nine outcome items

Table 7. Coding and analytical structure of the research variables

For descriptive interpretation, mean scores from 1.00 to 1.80 were classified as very low, 1.81–2.60 as low, 2.61–3.40 as moderate, 3.41–4.20 as high, and 4.21–5.00 as very high. Reliability was evaluated

using Cronbach's alpha. Internal construct validity was assessed using corrected item–total correlations, the Kaiser–Meyer–Olkin (KMO) measure, and Bartlett's test of sphericity. Pearson correlation and ordinary least-squares regression were used to test the hypotheses. Spearman correlations and 5,000-resample bootstrap confidence intervals were added as robustness checks where residual normality was imperfect.

4.3. Sample Characteristics

Table 8 presents the demographic profile of the 49 respondents retained for analysis. Frequencies and percentages are calculated from the valid analytical sample.

Characteristic	Category	Frequency	Percentage
Gender	Female	39	79.6%
	Male	10	20.4%
Age	25–34 years	23	46.9%
	45 years and above	10	20.4%
	35–44 years	9	18.4%
	Under 25	7	14.3%
Educational Level	Bachelor's Degree	29	59.2%
	Diploma	14	28.6%
	Master's Degree	6	12.2%
Role in Startup	Other	21	42.9%
	Employee	15	30.6%
	Manager	5	10.2%
	Founder	4	8.2%
	Co-founder	4	8.2%
Startup Age	More than 6 years	18	36.7%
	Less than 1 year	16	32.7%
	1–3 years	9	18.4%
	4–6 years	6	12.2%

Table 8. Respondent demographic profile (N = 49)

Women represented 79.6% of the sample, whereas men accounted for 20.4%. The largest age group was 25–34 years (46.9%), followed by respondents aged 45 years or above (20.4%). Most participants held a bachelor's degree (59.2%), while 28.6% held a diploma and 12.2% held a master's degree. Employees formed 30.6% of the sample; founders and co-founders jointly represented 16.3%,

managers represented 10.2%, and 42.9% selected another role. Regarding organizational age, 36.7% reported startups operating for more than six years, 32.7% reported less than one year, 18.4% reported one to three years, and 12.2% reported four to six years.

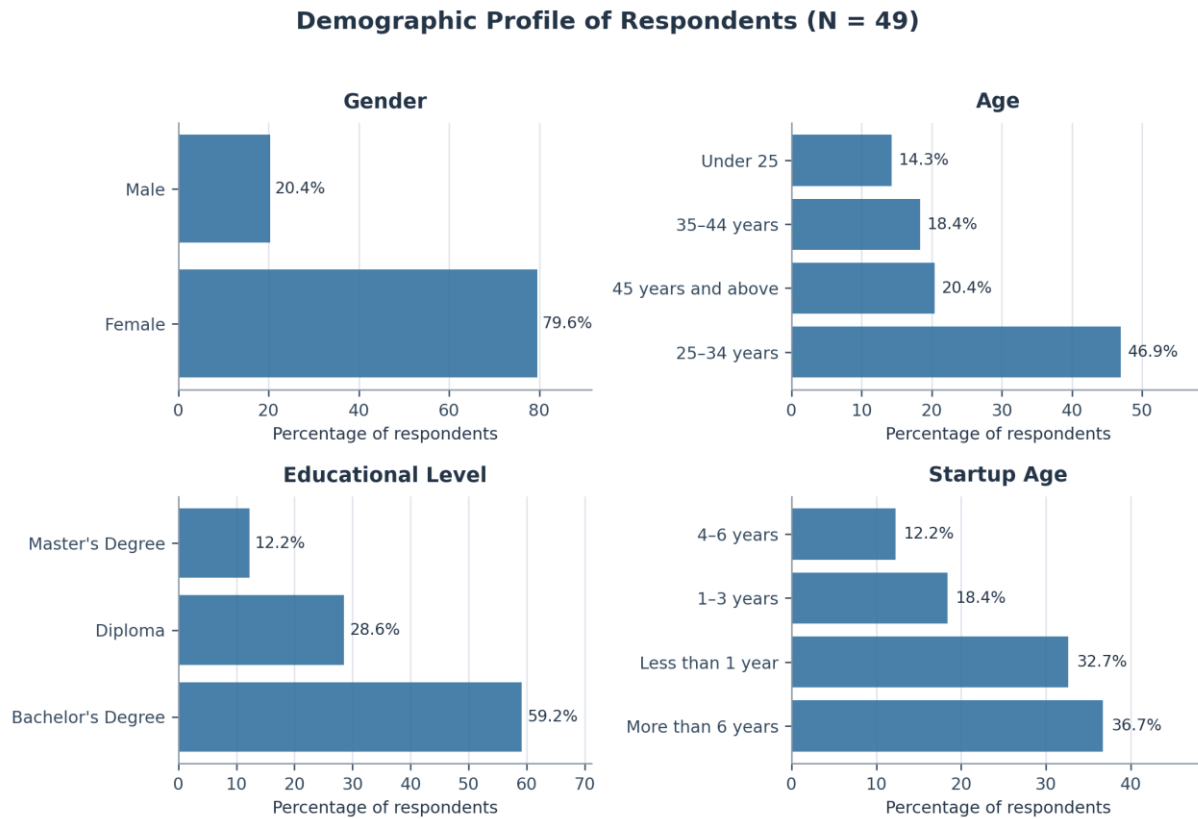


Figure 2. Demographic profile of respondents (N = 49)

Figure 2 visually summarizes the sample profile. The chart shows the concentration of female respondents, the dominance of the 25-34 age group, the high share of bachelor-degree holders, and the spread of startup ages represented in the analytical sample.

The profile provides useful representation across organizational ages and roles, but it also reveals sample concentration by gender and the broad ‘Other’ role category. These characteristics should be considered when interpreting the generalizability of the results.

4.4. Reliability and Validity Assessment

4.4.1. Internal Consistency Reliability

Cronbach’s alpha was calculated for every multi-item scale. A coefficient of .70 or above was treated as acceptable. As shown in Table 9, all coefficients exceeded .89, demonstrating excellent internal consistency.

Scale	Items	Cronbach's α	Interpretation
Strategic Planning	8	0.972	Excellent
Cost Leadership	2	0.914	Excellent
Differentiation	2	0.936	Excellent
Innovation	2	0.900	Excellent
General Competitive Advantage	3	0.963	Excellent
Overall Competitive Advantage	9	0.976	Excellent
Full Instrument	17	0.983	Excellent

Table 9. Internal consistency reliability results

The strategic-planning scale achieved $\alpha = .972$ and the overall competitive-advantage scale achieved $\alpha = .976$. The full 17-item instrument achieved $\alpha = .983$. The two-item subscales also performed strongly: cost leadership $\alpha = .914$, differentiation $\alpha = .936$, and innovation $\alpha = .900$. These values support use of the composite scores. At the same time, coefficients approaching .98 can indicate closely overlapping item content; the findings therefore demonstrate consistency but do not by themselves establish that every item captures a distinct aspect of the construct.

4.4.2. Internal Construct Validity

Corrected item–total correlations were positive and statistically significant for every item. For strategic planning, the coefficients ranged from .843 to .942. For overall competitive advantage, they ranged from .804 to .943. Both ranges are well above the commonly used minimum of .30, indicating that each item contributes meaningfully to its intended composite.

Scale	Corrected item–total r	KMO	Bartlett's χ^2	df	p
Strategic Planning	.843–.942	0.915	533.42	28	< .001
Overall Competitive Advantage	.804–.943	0.873	661.69	36	< .001

Table 10. Construct validity diagnostics

The KMO values were .915 for strategic planning and .873 for overall competitive advantage, indicating that the correlation patterns were suitable for construct-level analysis. Bartlett's test was significant for strategic planning, $\chi^2(28) = 533.42$, $p < .001$, and for competitive advantage, $\chi^2(36) = 661.69$, $p < .001$. Taken together, the item–total, KMO, and Bartlett results provide satisfactory evidence of internal measurement validity for the present sample. Because the sample is modest relative to the total number of items, these diagnostics should not be interpreted as a substitute for a fully powered confirmatory factor analysis.

4.5. Descriptive Analysis of Research Variables

Table 11 summarizes the composite scores. All substantive constructs were rated at a high level. Strategic planning had a mean of 3.48 (SD = 1.19), while overall competitive advantage had a mean of 3.63 (SD = 1.16). Among the outcome dimensions, general competitive advantage recorded the highest mean (M = 3.67), followed by innovation (M = 3.64), cost leadership (M = 3.62), and differentiation (M = 3.57).

Construct	Mean	SD	95% CI for mean	Level
Strategic Planning	3.48	1.19	[3.14, 3.82]	High
Cost Leadership	3.62	1.18	[3.28, 3.96]	High
Differentiation	3.57	1.25	[3.21, 3.93]	High
Innovation	3.64	1.22	[3.29, 3.99]	High
General Competitive Advantage	3.67	1.22	[3.32, 4.02]	High
Overall Competitive Advantage	3.63	1.16	[3.30, 3.96]	High

Table 11. Descriptive statistics for the research constructs (N = 49)

The item-level results clarify which planning practices were most and least established. The clearest strength was mission definition (SP2, M = 3.67), followed by effective resource allocation (SP6, M = 3.61), vision clarity (SP1, M = 3.57), and plan review in response to market change (SP8, M = 3.55). In contrast, internal strengths-and-weaknesses analysis (SP4, M = 3.29), clear communication of strategic goals (SP3, M = 3.33), and external opportunities-and-threats analysis (SP5, M = 3.35) were rated only at a moderate level.

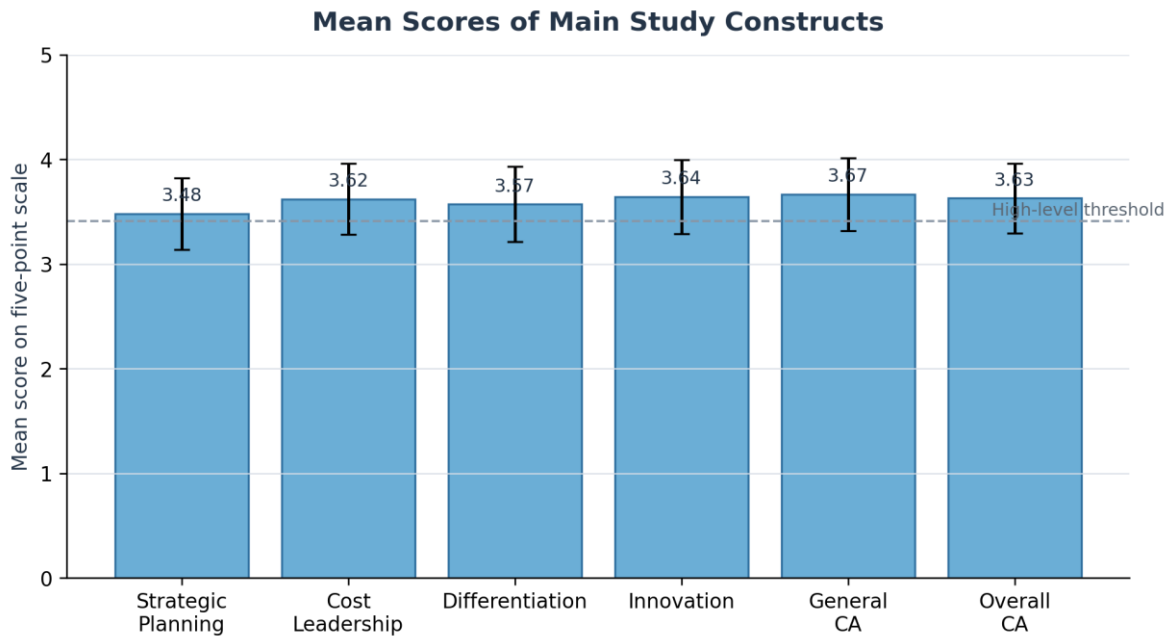


Figure 3. Mean scores of the main study constructs

Figure 3 confirms that strategic planning and all competitive-advantage dimensions were evaluated at a high level. The confidence intervals also show that the outcome dimensions cluster closely around the same substantive range.

Rank	Code	Strategic-planning item	Mean	SD	Level
1	SP2	Clear mission and purpose	3.67	1.26	High
2	SP6	Effective resource allocation	3.61	1.32	High
3	SP1	Clear future-oriented vision	3.57	1.37	High
4	SP8	Plans reviewed when markets change	3.55	1.17	High
5	SP7	Planning guides major decisions	3.49	1.29	High
6	SP5	External opportunities/threats analysis	3.35	1.32	Moderate
7	SP3	Defined and communicated goals	3.33	1.28	Moderate
8	SP4	Internal strengths/weaknesses analysis	3.29	1.38	Moderate

Table 12. Item-level descriptive statistics for strategic planning

These findings answer the first two research questions. Strategic planning was implemented at a high overall level, but the pattern was uneven. Mission, resource allocation, vision, and adaptive review were the most established practices, whereas formal environmental analysis and goal communication were comparatively weaker.

4.6. Correlation Analysis and Assumption Checks

Pearson correlations were calculated between strategic planning and each competitive-advantage outcome. All relationships were positive, strong, and statistically significant at $p < .001$. Spearman rank correlations were also calculated as a sensitivity analysis and led to the same substantive conclusion.

Outcome	Pearson r	p	Spearman p	p	Strength
Overall Competitive Advantage	0.880	< .001	0.835	< .001	Strong positive
Cost Leadership	0.798	< .001	0.725	< .001	Strong positive
Differentiation	0.838	< .001	0.783	< .001	Strong positive
Innovation	0.880	< .001	0.831	< .001	Strong positive

Table 13. Correlations between strategic planning and competitive-advantage outcomes

Composite-score skewness ranged from -0.95 to -0.60 , remaining within the commonly accepted ± 1 range. Breusch–Pagan tests were nonsignificant for all four regression models ($p = .103$ to $.339$), providing no evidence of heteroscedasticity. Residual normality was acceptable for the cost-leadership and differentiation models but was imperfect for the overall and innovation models. Consequently, the interpretation emphasizes effect sizes and confidence intervals, and the regression results were checked with nonparametric Spearman coefficients and 5,000-resample bootstrap intervals. The robustness results remained positive and statistically significant.

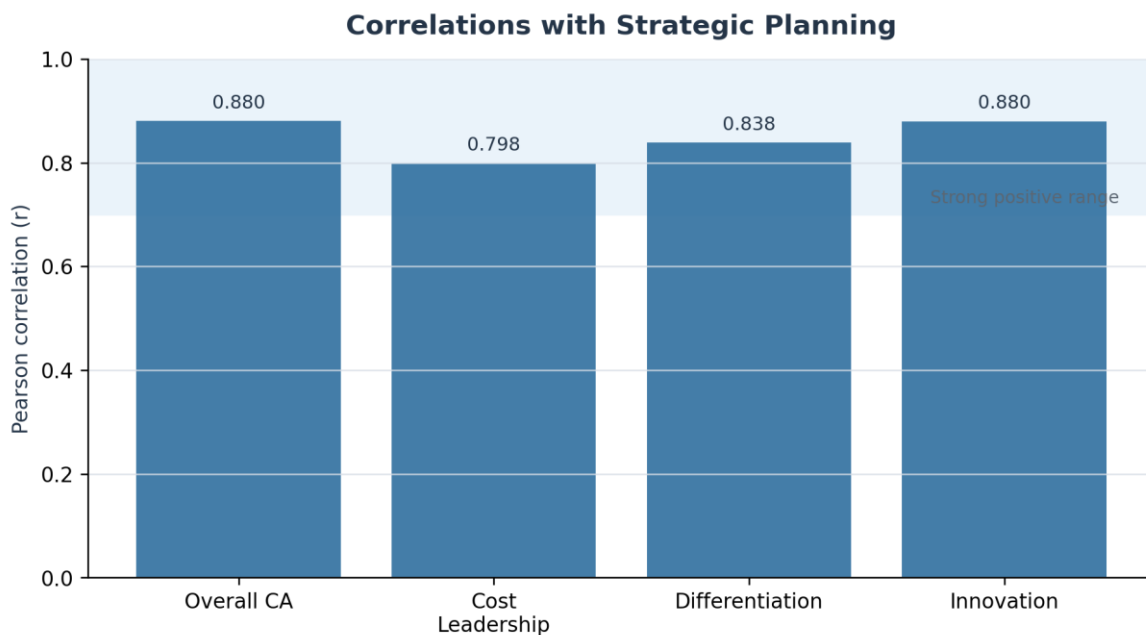


Figure 4. Pearson correlations between strategic planning and competitive-advantage outcomes

Figure 4 illustrates the strength of the bivariate relationships. All coefficients fall within the strong positive range, with the highest relationships observed for overall competitive advantage and innovation.

4.7. Hypotheses Testing

Four ordinary least-squares regression models were estimated. Strategic planning was the predictor in every model. The dependent variables were overall competitive advantage, cost leadership, differentiation, and innovation, respectively. Because each model contains a single predictor, the

standardized regression coefficient is numerically equal to the corresponding Pearson correlation. The results are reported in Table 14.

Hyp.	Outcome	B	SE	β	R ²	F(1,47)	p	Bootstrap 95% CI for B
H1	Overall Competitive Advantage	0.858	0.067	0.880	0.775	161.58	< .001	[0.695, 0.968]
H1a	Cost Leadership	0.792	0.087	0.798	0.637	82.51	< .001	[0.587, 0.934]
H1b	Differentiation	0.881	0.084	0.838	0.703	111.13	< .001	[0.714, 1.005]
H1c	Innovation	0.906	0.071	0.880	0.774	160.91	< .001	[0.750, 1.016]

Table 14. Regression results for the research hypotheses

4.7.1. Main Hypothesis (H1)

H1 proposed a statistically significant positive relationship between strategic planning and competitive advantage. Strategic planning strongly predicted overall competitive advantage, $B = .858$, $SE = .067$, $\beta = .880$, $t(47) = 12.71$, $p < .001$. The model was significant, $F(1,47) = 161.58$, and explained 77.5% of the observed variance ($R^2 = .775$; adjusted $R^2 = .770$). The conventional 95% confidence interval for B was [.722, .993], and the bootstrap interval was [.695, .968]. H1 was therefore supported.

4.7.2. Cost Leadership Hypothesis (H1a)

H1a proposed that strategic planning has a significant positive association with cost leadership. The coefficient was positive and significant, $B = .792$, $SE = .087$, $\beta = .798$, $t(47) = 9.08$, $p < .001$. The model explained 63.7% of the variance in cost leadership, $F(1,47) = 82.51$, $R^2 = .637$. The bootstrap interval [.587, .934] excluded zero. H1a was supported.

4.7.3. Differentiation Hypothesis (H1b)

H1b proposed that strategic planning has a significant positive association with differentiation. Strategic planning was a strong predictor, $B = .881$, $SE = .084$, $\beta = .838$, $t(47) = 10.54$, $p < .001$. The model explained 70.3% of the variance in differentiation, $F(1,47) = 111.13$, $R^2 = .703$. The bootstrap interval [.714, 1.005] remained entirely positive. H1b was supported.

4.7.4. Innovation Hypothesis (H1c)

H1c proposed that strategic planning has a significant positive association with innovation. The estimated coefficient was $B = .906$, $SE = .071$, $\beta = .880$, $t(47) = 12.69$, $p < .001$. The model explained 77.4% of the variance in innovation, $F(1,47) = 160.91$, $R^2 = .774$. The bootstrap interval [.750, 1.016] excluded zero. H1c was supported.

Hypothesis	Statistical decision	Conclusion
H1	Reject the null hypothesis	Supported: positive association with overall competitive advantage

Hypothesis	Statistical decision	Conclusion
H1a	Reject the null hypothesis	Supported: positive association with cost leadership
H1b	Reject the null hypothesis	Supported: positive association with differentiation
H1c	Reject the null hypothesis	Supported: positive association with innovation

Table 15. Summary of hypothesis-testing decisions

Collectively, the tests answer the third and fourth research questions. Strategic planning was strongly and positively associated with competitive advantage, and the relationship was significant for cost leadership, differentiation, and innovation. The innovation and overall competitive-advantage models produced the largest standardized effects, while cost leadership produced the smallest—although still strong—effect.

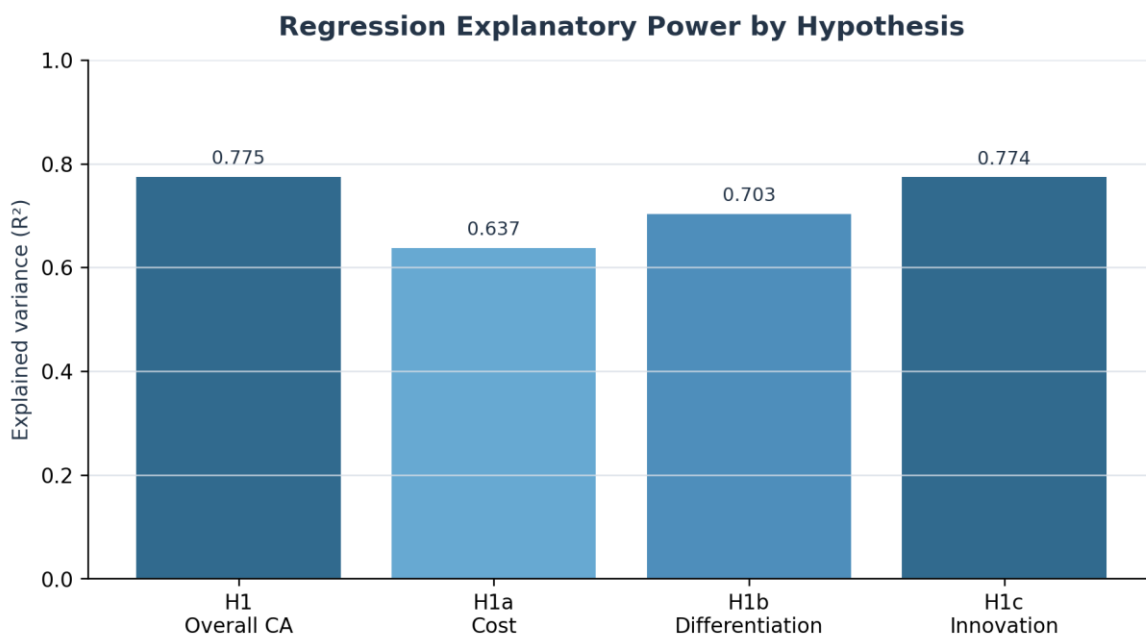


Figure 5. Regression explanatory power for the research hypotheses

Figure 5 shows the proportion of explained variance in each regression model. Strategic planning explained the largest shares of variance in overall competitive advantage and innovation, while the cost-leadership model remained substantial.

4.8. Discussion of Findings

4.8.1. Level and Pattern of Strategic Planning

The high overall strategic-planning mean indicates that respondents generally perceived their startups as strategically oriented. This finding is consistent with Gutterman (2023), who describes strategic planning as a systematic process connecting vision, mission, environmental assessment, and objectives. It also supports Khuan et al. (2023), who position structured planning as a pathway to sustainable growth. However, the moderate means for internal analysis, external analysis, and goal

communication show that strategic orientation was not equally mature across all practices. The startups appeared stronger in directional and adaptive activities than in formal analytical routines.

This imbalance is important for practice. A clear mission or vision can provide direction, but sustained competitiveness requires regular environmental scanning and measurable, communicated goals. The result also echoes Arora's (2025) argument that early-stage ventures should move beyond informal business planning toward comprehensive systems combining market analysis, financial foresight, and innovation.

4.8.2. Strategic Planning and Overall Competitive Advantage

The strong correlation between strategic planning and overall competitive advantage ($r = .880$) and the substantial explained variance ($R^2 = .775$) provide direct empirical support for the central research model. The result is consistent with Khuan et al. (2023), whose work links planning with sustainable growth and competitive strength, and with Taghavy et al. (2024), who emphasize strategic alignment as a contributor to startup competitiveness. It also corresponds with Stefia et al. (2024), who highlight strategic information management and dynamic marketing capabilities as mechanisms supporting startup success.

Conceptually, planning can strengthen competitiveness by aligning scarce resources with market priorities, clarifying decision criteria, and creating routines for responding to environmental change. The descriptive finding that resource allocation and plan review were among the stronger planning practices reinforces this interpretation. Nevertheless, the result is associational: the cross-sectional design cannot establish that planning caused the observed competitive outcomes, and successful startups may also be more able to formalize planning.

4.8.3. Strategic Planning and Cost Leadership

The positive relationship with cost leadership supports the view that planning assists startups in controlling costs and using resources efficiently. This result is compatible with Jain (2025), who stresses the role of financial strategy in resource allocation and competitive positioning, and with Farida and Setiawan (2022), who connect business strategy with performance optimization. The comparatively lower R^2 for cost leadership (.637) suggests that cost outcomes may depend more heavily than the other dimensions on additional factors such as supplier terms, scale economies, technology, and operational process design.

4.8.4. Strategic Planning and Differentiation

Strategic planning explained 70.3% of the variance in differentiation. This supports the argument that distinctive customer value is more likely to emerge when market choices, resource priorities, and strategic objectives are explicit. The finding is consistent with Farida and Setiawan (2022), who identify innovation and performance as mechanisms connecting strategy to competitive advantage, and with Tokaldan et al. (2025), who emphasize the strategic use of knowledge and intellectual capital in startup competitiveness.

4.8.5. Strategic Planning and Innovation

Innovation displayed one of the strongest relationships with strategic planning ($r = .880$; $R^2 = .774$). This suggests that planning and innovation are complementary rather than contradictory. Strategic direction can focus experimentation, protect resources for new initiatives, and establish mechanisms for responding to market signals. The finding is consistent with Arora (2025), who frames strategic planning as an engine of early-venture growth, and with Jain (2025), who links financial strategy to innovation-driven competitiveness. It also supports the dynamic-capability perspective discussed by Taghavy et al. (2024), under which firms build advantage by reconfiguring resources in response to change.

4.8.6. Interpretation Boundaries

The size of the observed relationships should be interpreted cautiously. Predictor and outcome data were collected from the same respondents at one point in time, some competitive-advantage items explicitly referred to strategic planning, and the instrument displayed exceptionally high internal consistency. Common-method variance and overlapping wording may therefore have increased the estimated relationships. The nonprobability sampling approach, small sample, concentration of female respondents, broad 'Other' role category, and inclusion of firms older than six years also limit external generalization. The results provide strong evidence of association within this sample, but they should not be presented as proof of causation or as population-wide effect estimates.

4.9. Conclusion

This chapter analyzed 49 complete and consenting questionnaire responses. The instrument demonstrated excellent reliability and satisfactory internal validity. Respondents reported high levels of strategic planning and competitive advantage, although environmental analysis and goal communication were comparatively weaker planning practices. Strategic planning was strongly and positively related to overall competitive advantage, cost leadership, differentiation, and innovation. All

four hypotheses were supported, and sensitivity analyses confirmed the direction and significance of the results.

The findings support the study's theoretical proposition that structured planning contributes to stronger competitive positioning in startup settings. Practical priorities include retaining mission clarity, resource allocation, and adaptive review while formalizing SWOT analysis and measurable goal communication. Future studies should use larger probability samples, independent data sources, and longitudinal designs because the present design is cross-sectional and nonprobability-based.

References

1. Abdulwahab, J., Afang, H., Gaddafi, M., & Madu, M. (2025). Entrepreneurial ventures and effective strategies for scaling the rice industries in Abuja Municipal, Nigeria. *Journal of Business Development and Management Research*. <https://doi.org/10.70382/ajbdmr.v9i7.030>
2. Arora, K. (2025). Comprehensive study that goes beyond the business plan: Strategic planning as the engine of early-stage venture growth. *International Journal For Multidisciplinary Research*. <https://doi.org/10.36948/ijfmr.2025.v07i06.56712>
3. Farida, I., & Setiawan, D. (2022). Business strategies and competitive advantage: The role of performance and innovation. *Journal of Open Innovation: Technology, Market, and Complexity*. <https://doi.org/10.3390/joitmc8030163>
4. Guttermann, A. (2023). Introduction to strategic planning. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.4407351>
5. Jain, A. (2025). The intersection of innovation and finance: How startups leverage financial strategies for competitive advantage. *International Journal For Multidisciplinary Research*. <https://doi.org/10.36948/ijfmr.2025.v07i02.34822>
6. Khuan, H., B., B., Marlina, M., & Solehati, A. (2023). Unraveling the secrets of strategic business planning: A pathway to sustainable growth and competitive advantage. *The ES Economics and Entrepreneurship*. <https://doi.org/10.58812/esee.v2i01.127>
7. Stefia, C., Haryanto, B., Wahyudi, L., & Setiawan, A. (2024). The impact of dynamic marketing capabilities (DMCs) and strategic information management (SIM) on international start-up success: A meta narrative analysis. *Heliyon*,
10. <https://doi.org/10.1016/j.heliyon.2024.e40541>
8. Taghavy, A., Hazari, N., & Chaijani, M. (2024). Assessing the impact of dynamic capabilities, resilience and strategic alignment on startup competitiveness in Iran. *Asia-Pacific Journal of Business Administration*. <https://doi.org/10.1108/apjba-11-2023-0605>
9. Tokaldan, M., Jahanshad, A., & Pourzamani, Z. (2025). Presenting a framework of drivers and strategic factors in the comprehensive model of intellectual capital and competitive advantage in startup companies. *AI and Tech in Behavioral and Social Sciences*. <https://doi.org/10.61838/kman.aitech.3.1.10>

Appendix A: Questionnaire for Research Variables

The following questionnaire is designed to measure the study variables: strategic planning and competitive advantage. The responses will be measured using a five-point Likert scale as follows:

1 = Strongly Disagree	2 = Disagree	3 = Neutral	4 = Agree	5 = Strongly Agree
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Table 5. Questionnaire items for the research variables

Variable	Code	Item	Response scale
Strategic Planning	SP1	The startup has a clear vision that guides its future direction.	1 2 3 4 5
Strategic Planning	SP2	The startup has a clear mission that explains its purpose.	1 2 3 4 5
Strategic Planning	SP3	Strategic goals are clearly defined and communicated within the startup.	1 2 3 4 5
Strategic Planning	SP4	The startup regularly analyzes its internal strengths and weaknesses.	1 2 3 4 5
Strategic Planning	SP5	The startup regularly analyzes external opportunities and threats.	1 2 3 4 5
Strategic Planning	SP6	Strategic planning helps the startup allocate its resources effectively.	1 2 3 4 5
Strategic Planning	SP7	The startup uses strategic planning to guide major decisions.	1 2 3 4 5
Strategic Planning	SP8	Strategic plans are reviewed and updated when market conditions change.	1 2 3 4 5
Cost Leadership	CL1	The startup is able to offer products or services at competitive costs.	1 2 3 4 5
Cost Leadership	CL2	The startup uses resources efficiently to reduce unnecessary costs.	1 2 3 4 5
Differentiation	DF1	The startup provides products or services that are different from competitors.	1 2 3 4 5
Differentiation	DF2	The startup has a unique value proposition for customers.	1 2 3 4 5
Innovation	IN1	The startup continuously develops new ideas, products, or services.	1 2 3 4 5
Innovation	IN2	Innovation helps the startup strengthen its market position.	1 2 3 4 5
Competitive Advantage	CA1	Strategic planning helps the startup respond quickly to market changes.	1 2 3 4 5
Competitive Advantage	CA2	Strategic planning improves the startup's ability to compete.	1 2 3 4 5
Competitive Advantage	CA3	Strategic planning contributes to achieving sustainable competitive advantage.	1 2 3 4 5

Appendix B: Table of Research Tools

Table 6 summarizes the main research variables, their role in the research model, measurement dimensions, questionnaire items, scale, and supporting sources.

Variable	Role in the model	Main dimensions	Questionnaire items	Scale	Main supporting sources
Strategic Planning	Independent variable	Vision, mission, goal clarity, environmental analysis, resource allocation, decision guidance, adaptive review	SP1–SP8	Five-point Likert scale	Gutterman (2023); Khuan et al. (2023); Arora (2025)
Competitive Advantage	Dependent variable	Cost leadership, differentiation, innovation, market responsiveness, sustainable advantage	CL1–CL2, DF1–DF2, IN1–IN2, CA1–CA3	Five-point Likert scale	Farida & Setiawan (2022); Taghavy et al. (2024); Tokaldan et al. (2025)
Demographic profile	Control/descriptive data	Gender, age, education, job position, startup experience	D1–D5	Categorical choices	Used for sample profile and descriptive statistics

Table 6. Research tools and measurement sources

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