THE CUEA JOURNAL OF HUMANITIES & SOCIAL SCIENCES

Vol. 2, No. 1 (2026) | ISSN 3078-3143 (Online)

THE ROLE OF MINIMUM VIABLE PRODUCT (MVP) DEVELOPMENT IN SHAPING PERFORMANCE OUTCOMES OF THE NAILAB ACCELERATOR INITIATIVE IN NAIROBI COUNTY, KENYA

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Abstract

This paper examined the impact of developing a Minimum Viable Product (MVP) on the performance of startups in the Nailab Accelerator Initiative in Nairobi County, Kenya, and whether the process has a quantifiable impact on the final performance of startups. Although entrepreneurship is one of the crucial avenues of economic empowerment, there are insufficient studies articulating the impact of structured MVP development on the success of startups in accelerators. This paper fills this gap by concentrating on the Nailab Accelerator Initiative. Developing an MVP can help business owners test their ideas, conserve resources and obtain feedback on them prior to investing in large-scale production. Quantitative methods were used, and a descriptive research design was utilised. The target population was 250 trained startups, and the sample size determination table by Krejcie and Morgan (1970) was used to determine the required sample size. Out of 152 questionnaires administered, 131 valid responses were collected, yielding a response rate of 86%. Simple linear regression analysis indicated a statistically significant positive relationship between MVP development and startup performance ($\beta = 0.795$, $p < 0.001$), with MVP development explaining approximately 63% of the variance in startup performance ($R^2 = 0.633$). The results indicate that MVP-oriented training can assist early-stage entrepreneurs in matching products with market demands. In addition to technical validation, MVP development promoted innovation, adaptability and increased customer engagement. Startups that took a more iterative approach to testing refined their concepts, entered the market sooner and were better positioned for growth. This paper has shown that MVP training is not merely a technical resource; rather, it cultivates learning, iteration and intentional adaptation. Incorporating MVP thinking into accelerator programmes helps entrepreneurs convert uncertainty into opportunity and ideas into impact.

Keywords: *minimum viable product, product iteration, customer feedback, training, innovation, emerging markets*

1.0 INTRODUCTION

1.1 Background to the Study

Entrepreneurship is widely regarded as a vital driver of economic growth, job creation and innovation. Nevertheless, most startups collapse within their first few years of existence; not, in many cases, because the underlying idea was weak, but because it was never properly validated. In fast-moving and resource-constrained settings, the capacity to develop, test and refine a product rapidly has emerged as one of the strongest predictors of venture survival (Lee, 2025). At the heart of this capacity lies the concept of the Minimum Viable Product (MVP): a simplified, testable version of a product that enables founders to gather real-world feedback and refine their offering based on genuine customer needs rather than untested assumptions (Lortie et al., 2025). What makes the

MVP approach appealing is its ability to convert uncertainty into structured, actionable learning. Instead of committing substantial capital to a fully developed product before establishing whether a market for it even exists, founders can iterate through smaller, faster cycles, testing assumptions, incorporating feedback and adjusting their offering along the way. Consequently, this iterative logic has become embedded not only in individual startup practice but also in the design of accelerator programmes themselves, which increasingly frame MVP development as a structured pathway from idea to market-ready product. Despite this growing prominence, empirical evidence quantifying the actual contribution of MVP development to startup performance, particularly within accelerator settings, remains limited.

This gap is especially pronounced in emerging markets such as Kenya, where accelerator programmes like Nailab play a central role in equipping entrepreneurs with the tools needed to build viable, investable businesses. Nairobi, in particular, has become the hub of Kenya's startup ecosystem, hosting the majority of the country's accelerators and drawing sustained investment in entrepreneurial training. Yet, despite this investment, many startups that pass through these programmes continue to struggle to translate training into measurable performance outcomes such as revenue growth, job creation and market expansion. Much of the existing literature has focused primarily on the general effectiveness of accelerators, while comparatively little attention has been paid to whether, and to what extent, MVP development specifically drives these outcomes.

Against this backdrop, the present study addresses that gap by examining the role of MVP development in shaping the performance of startups within the Nailab Accelerator Initiative in Nairobi County, Kenya. Adopting a quantitative, descriptive research design, the study surveys trained startups in order to assess how MVP-related practices, namely product iteration, responsiveness to customer feedback and speed of testing, relate to measurable performance outcomes. In so doing, the paper makes both an empirical and a practical contribution: it offers accelerators and policymakers evidence-based insight into which MVP practices most strongly predict startup success, and it provides a replicable framework for evaluating MVP-driven performance in other emerging-market contexts.

1.2 Statement of the Problem

Accelerator programmes such as Nailab play an indispensable role in shaping Kenya's entrepreneurship landscape, yet they continue to face considerable difficulty in demonstrating that the training they provide translates into long-term startup success. Within MVP development training specifically, entrepreneurs are frequently left without systematic, evidence-based guidance on how to build, test and refine a product or service, a shortfall compounded by the fact that research in this area remains notably sparse. Consequently, both accelerators and founders are left to navigate MVP development without a reliable roadmap to guide their decisions.

This deficiency is especially apparent within the context of Nailab, where little is currently known about how MVP-related strategies actually influence the sustainability and growth of the startups that pass through the programme. Although recent scholarship has increasingly examined the broader effectiveness of accelerators operating in Nairobi, this body of work has, for the most part, treated MVP development as a peripheral or implicit component of accelerator training rather than as a distinct variable warranting direct empirical investigation (Ndururi, 2025). As a result, the specific, quantifiable contribution of MVP practices, as distinct from accelerator support more broadly, to measurable startup outcomes such as revenue growth, job creation and market expansion remains largely unexamined.

This gap carries meaningful consequences. Without clear empirical evidence linking specific MVP practices to specific performance outcomes, accelerators such as Nailab are unable to determine which elements of their training curricula are genuinely driving startup success, and policymakers are similarly left without the evidence base needed to design funding models or training interventions that meaningfully incorporate MVP principles. It is this gap between the widespread promotion of MVP development as a best practice and the near-total absence of empirical evidence quantifying its actual contribution to startup performance within the Kenyan accelerator context that the present study seeks to address.

1.3 Purpose and Objectives of the Study

The purpose of this study was to examine the development of the Minimum Viable Product within the Nailab Accelerator Initiative and to assess how MVP strategies influence startup performance. The study was guided by the following specific objectives:

1. To examine how customer insights were incorporated during MVP development to refine product design.
2. To assess the rapid cycles of improvement and iteration applied to the MVP.
3. To determine how the improved MVP was received and adopted in the target market.
4. To investigate how the MVP procedure enabled the company to successfully develop new products.

1.4 Significance of the Study

The findings of this study are of direct relevance to accelerator managers, startup founders, development partners and policymakers engaged in entrepreneurship support in Kenya. For accelerators, the evidence clarifies which elements of MVP training are most strongly associated with measurable performance, and therefore where curricular investment is best directed. For policymakers, the study provides an empirical basis for embedding MVP principles within innovation policy, training curricula and funding criteria. For the academic community, the study contributes quantitative evidence on a relationship that has to date been largely asserted rather than measured, and it does so within an emerging-market accelerator context that remains under-researched.

1.5 Limitations of the Study

The study was conducted within a single accelerator, the Nailab Accelerator Initiative in Nairobi County, which limits the extent to which the findings can be generalised to other accelerators, sectors or regions. This was mitigated by surveying the full trained cohort through a statistically determined sample and by describing the study context in detail so that readers may judge transferability. Second, the study relied on self-reported questionnaire data, which may be subject to recall and social-desirability bias; anonymity and confidentiality were assured in order to encourage candid responses. Third, the cross-sectional design captures relationships at a single point in time and therefore does not establish causality or track performance trajectories beyond the accelerator programme.

2.0 LITERATURE REVIEW

This section reviews the theoretical and empirical literature relevant to MVP development and startup performance, and concludes by identifying the knowledge gaps the study addressed.

2.1 Theoretical Review

This study adopts an eclectic theoretical approach, integrating more than one theory to explain the phenomenon under investigation rather than relying on the lens of a single perspective. This choice is deliberate rather than a matter of convenience, since MVP development and startup performance are inherently multidimensional phenomena that no single theory is sufficient to account for fully. Entrepreneurial outcomes are jointly determined by two distinct but interacting dimensions: the capabilities of the individuals driving the venture, and the resources and organisational structures available to convert those capabilities into performance. A single-theory approach would necessarily privilege one of these dimensions at the expense of the other. A purely individual-level theory would explain why certain founders iterate effectively but would say little about whether the venture has the organisational assets to exploit that iteration; likewise, a purely resource-level theory would explain what a venture possesses without accounting for how those resources came to be recognised, mobilised or deployed in the first place. Given that MVP development sits at the intersection of founder judgement and organisational capability, a framework capturing only one side would produce an incomplete, and potentially misleading, explanation of performance outcomes.

In light of this, the study integrates Human Capital Theory and the Resource-Based View, thereby allowing it to examine the human-driven and resource-driven dimensions of MVP development simultaneously. Human Capital Theory accounts for the skills, knowledge and adaptability that entrepreneurs bring to the iterative process of building and refining an MVP. The Resource-Based View accounts for the distinctive organisational resources and capabilities that allow a startup to translate those human competencies into a sustainable competitive advantage. Used together, the two theories complement each other's blind spots: where Human Capital Theory foregrounds individual agency and learning, the Resource-Based View foregrounds organisational and relational assets; and where the Resource-Based View has been critiqued for underweighting intangible, dynamic factors, insights on innovation capability and network strength help address that gap.

2.1.1 Human Capital Theory

Human Capital Theory, proposed by Becker (1964), suggests that education and training increase individuals' skills, thereby making them productive contributors to economic growth. This implies that knowledge, experience and practical ability are core to success in the context of entrepreneurship. In line with this, recent research shows that entrepreneurship education equips individuals to build creative, resilient ventures capable of sustainable growth (Ganefri et al., 2022). When applied to MVP development, the theory suggests that entrepreneurs use acquired skills to transform ideas into market solutions through invention, experimentation and iteration (Assenova & Amit, 2023). Beyond this, MVP training also increases entrepreneurial preparedness by facilitating lifelong learning, responsiveness to customers and adaptability to dynamic environments (Kanchana & Sreedharan, 2023). Human Capital Theory highlights variables that define the effectiveness of MVPs and the performance of startups more broadly. These include the speed of iterations, which reflects how quickly founders develop new products (Assenova & Amit, 2023), and customer feedback integration, which reflects their capacity to adjust to market demands (Kanchana & Sreedharan,

2023). Collectively, these aspects indicate that human capital is a direct source of empowerment for MVP strategies and startup success. Yet skills and adaptability alone do not determine outcomes: founders still require the organisational resources and capabilities to act on what they know, which is where the Resource-Based View becomes relevant.

2.1.2 Resource-Based View Theory

The Resource-Based View (RBV) of competitive advantage was introduced by Wernerfelt (1984) and further developed by Barney (1991), who emphasised that the unique resources and capabilities of an organisation are the source of competitive advantage. In the context of entrepreneurship and accelerators such as Nailab, RBV underscores the importance of rare and valuable resources in helping startups establish a solid market presence (Cai et al., 2025; Li et al., 2022). Applying RBV to MVP development, startups do not necessarily need to coordinate resources to compete directly with rivals; instead, they can do better by first determining their own distinct advantages and then applying these to design, test and refine their products as quickly and effectively as possible. When done well, this approach can foster growth, sustainability and scalability through a combination of smart tools, effective management and a culture of continuous innovation.

RBV is not, however, without its critics. Recent research notes that the theory emphasises physical assets while underestimating intangible ones such as knowledge, relationships and networks (Kiyabo & Isaga, 2020). It has also been criticised for offering a relatively narrow perspective that may not adequately capture the dynamics and unpredictability of entrepreneurship (Cai et al., 2025). This critique echoes the very gap that Human Capital Theory helps to fill, reinforcing the value of an eclectic approach. In this context, two variables become particularly important in predicting MVP efficacy and, consequently, startup performance. The first is innovation capability, defined as the extent to which a startup can transform its available resources into new commercial solutions (Cai et al., 2025). The second is the strength of networks, which reflects the depth of social and relational capital that assists founders in refining their MVPs and opening new possibilities (Kiyabo & Isaga, 2020). Together with the human-capital variables identified above, these resource-based variables offer a more complete account of what is required for a startup to succeed, one that neither theory could provide on its own.

2.2 Empirical Review

2.2.1 Accelerators and MVP Development: Global Evidence

Globally, accelerator programmes are regarded as important launch pads for startups, providing mentorship, training and resources to new ventures. These programmes typically last three to six months and culminate in pitch events, where founders present their ideas under real market conditions, honing their skills in attracting investment and validating their business models (Cohen et al., 2025). In this context, MVP development has emerged as a key factor in startup success. Accelerators can support entrepreneurs in applying their knowledge to practice and aligning innovations with customer needs by promoting rapid design, testing and refinement. Studies indicate that investment in accelerators worldwide has increased dramatically over the past decade, underscoring the importance of enhancing the resilience of entrepreneurs and, in turn, startup performance (Hallen et al., 2020; Blank, 2023).

2.2.2 Evidence from Africa

In Africa, entrepreneurship is not merely a trend but a lifeline for youth who struggle to find employment and build meaningful livelihoods. Accelerators and training programmes equip these innovators with the skills needed to develop viable businesses. One key component is MVP development, which enables entrepreneurs to generate ideas rapidly, obtain feedback and refine solutions into scalable products (Assenova & Amit, 2023). Many of these programmes are integrated into university curricula and community initiatives, thereby assisting a new generation of entrepreneurs in delivering market-ready solutions to local challenges. In South Africa, evidence suggests that accelerator and incubator programmes have achieved strong results, particularly among entrepreneurs in underserved communities. Startups participating in these programmes are more likely to generate higher revenues and create additional jobs, outcomes supported by MVP practices that emphasise rapid testing and responsiveness (Zhou & Zondo, 2023). Accelerators therefore not only promote innovation but also enhance startup performance by linking mentorship and training with MVP development.

2.2.3 Evidence from Kenya

The startup ecosystem in Kenya is vibrant and rapidly expanding. With more than 40 accelerators currently supporting hundreds of startups across the country, the entrepreneurial environment has never been more active. The construction of an MVP is at the core of most of these programmes and has become an essential, though often understated, tool in the founders' arsenal. Rather than waiting for a product to reach perfection, MVP development enables entrepreneurs to create, test and evolve, learning directly from the market at each stage (Otuko & Mathenge, 2024). This momentum has also been

recognised at the policy level. Initiatives such as Kenya Vision 2030 explicitly acknowledge the value of startups in broader economic development and, by integrating MVP practices into both entrepreneurship education and accelerator programmes, foster the transformation of ambitious ideas into enduring businesses (Mwangi & Ngugi, 2023).

Despite this, many startups continue to fail, and one of the most frequent causes is the absence of practical experience in the development of an MVP. Founders often possess strong ideas but lack the hands-on skills required to transform these ideas into products that the market will purchase (Muathe & Kiriago, 2022). Researchers suggest that bridging this divide requires a deliberate shift in the way accelerators move from theory into practical learning, mentoring and product development. Where founders are shown customer feedback and improved designs, they are better placed to develop products or services that resonate with the market. Accelerators that have embedded MVP practices into their models have produced sharper, more fundable and more sustainable startups (Omondi & Wanjohi, 2024).

2.3 Knowledge Gaps

The reviewed literature reveals several gaps that this study addressed. First, the bulk of existing scholarship evaluates accelerator effectiveness in aggregate, treating MVP development as an implicit component of training rather than isolating it as a distinct explanatory variable. Second, much of the available evidence is descriptive or case-based, with few studies quantifying the association between specific MVP practices and measurable performance outcomes such as revenue growth, job creation and market expansion. Third, emerging-market accelerator contexts, and Kenyan accelerators in particular, remain under-represented in the empirical record despite the scale of investment directed towards them. This study therefore addressed these conceptual, methodological and contextual gaps by quantifying the influence of MVP development on startup performance within the Nailab Accelerator Initiative.

3.0 METHODOLOGY

3.1 Research Design

The study adopted a quantitative, descriptive research design. Data were gathered through structured questionnaires and analysed using simple linear regression in order to explore the nature and strength of the relationship between MVP development and startup performance. The design was appropriate because the study sought to measure the magnitude and statistical significance of an association between two clearly operationalised variables rather than to explore meanings or processes.

3.2 Population and Sampling

At the time this research was conducted, Nailab had a target population of 250 trained startups. The researcher used the sample size determination table by Krejcie and Morgan (1970) to establish the required sample size; according to the table, a population of this magnitude requires 152 respondents. This number was selected as a viable compromise: large enough to make the findings representative and reliable, yet small enough to keep data collection manageable. The combination of these factors enhanced the credibility and overall applicability of the research findings, as shown in Table 1.

Table 1: Sample Size Determination Using Krejcie and Morgan (1970)

Target Population	Population	Sample Size
Trained startups	250	152

Source: Krejcie and Morgan (1970); Field Data (2026)

3.3 Data Collection Instruments

Data were collected using a structured questionnaire designed to align with the objectives of the study. Two broad areas of questions were identified: startup performance and MVP development. Within the MVP dimension, the instrument measured product iteration, responsiveness to customer feedback and the speed of testing. For startup performance, focus was placed on revenue growth, job creation and market expansion. Responses were assessed using a five-point Likert scale, ensuring that the data were quantifiable and suitable for statistical analysis. To enhance reliability, the questionnaire was validated before full implementation, which helped eliminate ambiguities and confirm its robustness.

3.4 Operationalisation of Variables

To ensure that the study's objectives could be measured accurately, each question was converted into specific and quantifiable metrics. The independent variable, MVP development, was assessed in three areas: how often startups test their products, how adaptable they are to customer feedback, and how quickly they progress through the testing process. The dependent variable, startup performance, was evaluated using revenue growth, job creation and market expansion as indicators of success. By incorporating these indicators into structured Likert-scale questionnaire items, the study translated broad and complex concepts into data points open to empirical testing.

3.5 Validity and Reliability of Research Instruments

3.5.1 Content Validity

To ensure the validity of the questionnaire, the instrument was pretested prior to full deployment and subsequently shared with subject-matter experts for

review. This process helped identify ambiguities, refine question wording and confirm that the items adequately captured the constructs under investigation.

3.5.2 Construct Validity

Construct validity was established by grounding the study's indicators firmly in contemporary entrepreneurship literature. Specifically, MVP development was operationalised through three key elements, namely customer feedback, iterative processes and rapid testing, which align closely with the frameworks described by Lortie et al. (2025). Similarly, startup performance was defined in terms of revenue growth, job creation and market expansion, all of which are recognised performance indicators discussed in van de Ven et al. (2023) and Kraus et al. (2020). By anchoring the measures in these established sources, the study ensured a high degree of theoretical consistency, which in turn enhanced the overall credibility and rigour of its findings.

3.6 Data Analysis Model

The study employed a simple linear regression model of the form:

$$Y = a + \beta_1 X_1 + \varepsilon$$

where Y is startup performance (dependent variable); a is the constant or intercept; β is the coefficient showing the influence of MVP development on startup performance; X is MVP development (independent variable); and ε is the error term.

MVP development serves as the key predictor of startup performance in this model. The coefficient β reflects the extent to which MVP practices influence performance outcomes. Where the value is positive and significant, it suggests that deliberate MVP procedures, including iteration, customer feedback and rapid testing, are strongly associated with improved results such as growth, job creation and market expansion. The constant represents the baseline level of performance, while the error term accounts for additional factors not captured within the model.

3.7 Ethical Considerations

Participation in the study was voluntary and informed. Respondents were advised of the purpose of the research, the intended use of the data and their right to withdraw at any point without penalty. No personally identifying information was collected, responses were anonymised, and the data were reported only in aggregate form, so that no individual startup or founder can be identified from the published results.

4.0 RESULTS AND FINDINGS

This section presents the response rate, descriptive statistics, correlation analysis and regression results, followed by the measurement of the dependent variable.

4.1 Response Rate

A total of 152 questionnaires were administered to respondents who had been trained at the Nailab Accelerator. Of these, 131 questionnaires were fully completed and returned, yielding a response rate of 86%. This strong participation enhances the reliability and generalisability of the study's findings and reflects high levels of respondent engagement.

4.2 Descriptive Statistics

Table 2 presents the descriptive statistics for the six items measuring MVP development within the Nailab Accelerator Initiative.

Table 2: Impact of MVP Development on Startup Performance in the Nailab Accelerator Initiative

Development of a Minimum Viable Product	N	Mean	SD
The quality of your prototype developed during the programme was excellent	131	3.34	1.014
Customer feedback was integrated into your MVP during development	131	3.58	1.116
The iteration and improvement of the MVP was done quickly	131	3.31	1.007
The improved product was accepted in the market	131	3.84	0.967
The product has continued to be iterated to suit market demands	131	4.04	1.048
The company has successfully developed new products using the MVP procedure	131	3.47	1.069
Valid N (listwise)	131		

Source: Field Data (2026)

As indicated in Table 2, participants gave positive ratings across the six MVP-related measures, with the highest score for continuous product innovation to meet market needs (M = 4.04, SD = 1.048). The second highest rating concerned market acceptance of improved products (M = 3.84, SD = 0.967). The integration of customer feedback in the MVP development process scored moderately (M = 3.58, SD = 1.116), as did new product development based on the MVP (M = 3.47, SD = 1.069). The lowest ratings were for prototype quality (M = 3.34, SD = 1.014) and speed of iteration (M = 3.31, SD = 1.007), both identified as areas for improvement. These findings contrast with

the emphasis placed by Solomon and Klyton (2020) on iterative and feedback-based approaches as central to startup development.

4.3 Correlation Analysis

Table 3: Pearson Correlation between MVP Development and Startup Performance

		Performance of startups	Development of MVP
Performance of startups	Pearson correlation	1	.795**
	Sig. (2-tailed)		<.001
	N	131	131
Development of an MVP	Pearson correlation	.795**	1
	Sig. (2-tailed)	<.001	
	N	131	131

** Correlation is significant at the 0.01 level (2-tailed). Source: Field Data (2026)

Table 3 illustrates the correlation between startup performance and the development of a Minimum Viable Product. The test revealed a positive and statistically significant relationship between MVP development and startup performance ($r = .795$, $p < .001$), indicating that startup performance improved where the MVP was introduced in the early stages of the business. These findings are consistent with Hokkanen et al. (2020), who found that MVPs are not merely technical prototypes but strategic tools that help a startup test assumptions, navigate uncertainty and build resilience.

4.4 Regression Analysis

Table 4: Model Summary of Simple Linear Regression Analysis on MVP Development

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.795[a]	.633	.630	.49249

a. Predictors: (Constant), Development of MVP. Source: Field Data (2026)

Table 4 shows a significant positive relationship between MVP development and startup performance, with a Pearson correlation of $R = 0.795$. The findings illustrate that MVP practices exert a strong influence on performance outcomes. The coefficient of determination ($R^2 = 0.633$) indicates that MVP development explains approximately 63% of the variance in startup performance, while the adjusted R^2 of 0.630 confirms the robustness of the model. These results align with Odello (2024), who frames MVP development not merely as a product activity but as a systematic practice that enables startups to test ideas, reduce risk and build genuine product-market fit.

Table 5: ANOVA Results for Simple Linear Regression on MVP Development

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	53.913	1	53.913	222.277	<.001[b]
Residual	31.289	129	.243		
Total	85.202	130			

a. Dependent variable: Performance of startups. b. Predictors: (Constant), Development of MVP. Source: Field Data (2026)

As shown in Table 5, the ANOVA results confirm that the regression model is statistically significant ($F(1, 129) = 222.277$, $p < .001$). MVP development therefore exerts a demonstrable impact on startup performance, and the model accounts for a substantial portion of the variation in outcomes, underscoring its predictive strength. These findings align with Maritz et al. (2021), who argue that MVP development is more than a technical project; it is a strategic choice that defines the trajectory of the entire startup.

Table 6: Regression Coefficients for MVP Development and Startup Performance

Model	B	Std. Error	Beta (β)	t	Sig.
(Constant)	1.002	.185		5.415	<.001
Development of MVP	.746	.050	.795	14.909	<.001

Dependent variable: Performance of startups. Source: Field Data (2026)

The findings are reinforced by the results presented in Table 6. The test statistic ($t = 14.909$, $p < .001$) confirms a significant relationship between MVP development and startup performance. The regression coefficient ($B = 0.746$, $\beta = 0.795$, $p < .001$) demonstrates a strong positive effect of MVP development on startup outcomes, indicating that a one-unit increase in MVP development is associated with a 0.746-unit increase in startup performance. These results align with Lortie et al. (2025), who describe MVP development as a tool for testing business model assumptions against real-world conditions. Taken together, the data provide a compelling rationale: applying MVP iteration enables startups to remain agile, allowing founders to adapt quickly and achieve market success.

4.5 Measurement of the Dependent Variable

The dependent variable, startup performance, was assessed using three indicators: growth in sales and revenue, employment generation, and market share expansion. To capture founders' perspectives on business growth and development, the study employed both ratio scales (such as percentages and counts) and Likert scales. The independent variable, MVP development, was evaluated through three key

activities: product iteration, responsiveness to customer feedback and rapid turnaround in testing. This approach allowed the research to examine not only whether founders engaged in these practices but also the degree to which they executed them effectively. By combining quantitative measures with perceptual insights, the study provided a comprehensive view of how MVP practices influence startup performance.

5.0 DISCUSSION OF FINDINGS

High scores on iteration reflect the lean startup philosophy, in which experimentation, rapid testing and feedback-driven learning are prioritised. Consistent with Objective 2, the results indicate that rapid cycles of improvement were a defining feature of MVP development. These iterative processes enable entrepreneurs with limited resources to test ideas and make informed strategic decisions. Customer participation also emerged as a critical dimension, aligning with Objective 1; by incorporating customer insights into MVP development, founders secured accurate feedback on market demands and reduced the risks associated with product launch. This finding resonates with Assenova and Amit (2023), who emphasise that MVPs serve a pragmatic role in mitigating risk during product launch.

At the same time, the results highlight difficulties in both the quality of prototyping and the speed of iteration. Small startups often lack the technical capacity or financial resources required, which delays the MVP process. Hokkanen et al. (2020) and Schlecht and Yang (2023) note that insufficient resources hinder startups from balancing speed with quality. These constraints slowed the release of enhanced MVPs to the market, thereby limiting adoption among target customers, a finding that directly addresses Objective 3, which examined how improved MVPs were received and adopted.

In contrast, Lortie et al. (2025) argue that MVP frameworks can succeed even in resource-constrained environments, provided startups adopt adaptive strategies and focus on core features. This perspective aligns with Objective 4, which found that MVP procedures enabled startups to prioritise key features, ultimately facilitating the development of new products despite resource limitations.

Collectively, these results suggest that MVP development is not simply a technical milestone but a strategic process that shapes a startup's success. While Odello (2024) highlights the MVP as a tool of idea validation and product-market fit, the present findings reveal a dual reality: iteration and customer insights drive success, but accelerator support is required to alleviate resource limitations. This underscores the importance of technical assistance and structured mentorship, echoing Maritz et al. (2021), while broadening their argument by stressing that accelerators must also promote adaptive strategies.

6.0 CONCLUSION

This study set out to examine the role of Minimum Viable Product development in shaping startup performance within accelerator programmes. The findings reveal that rapid iteration, customer insight and adaptive strategy collectively enhance product-market fit and competitiveness, even as resource availability remains a persistent and pressing challenge. MVP development emerged as a strong and statistically significant predictor of startup performance ($\beta = 0.795$, $p < .001$), explaining approximately 63% of the variance in performance outcomes among startups trained at the Nailab Accelerator. Taken together, these results reinforce the view that MVP development is not simply a technical exercise but a strategic process essential to entrepreneurial success more broadly. Despite certain limitations in sample size and contextual scope, the study contributes meaningfully to an understanding of how MVP practices shape early growth trajectories. The evidence affirms a simple but important principle: building smarter, rather than simply building more, is the surest route to impactful innovation.

7.0 RECOMMENDATIONS

7.1 Recommendations for Policy

This paper contributes to a broader understanding that MVP development is not merely a technical undertaking but a corporate strategy that fundamentally shapes the trajectory of startups. This insight carries significant implications for policymakers in particular. Innovation policy must move beyond conventional forms of support and begin embedding the core principles of MVP development, namely iteration, customer feedback and efficiency, into both training curricula and funding models. Where policy adopts this approach, startups stand to gain not only a greater likelihood of survival but also genuine potential to thrive. Equally important is the cultivation of an environment in which experimentation and mistakes are treated as opportunities for learning rather than as failures to be avoided. Although admittedly difficult to measure, this cultural shift remains vital to sustaining innovation over the long term. The findings further suggest that financial support alone is insufficient to sustain entrepreneurship over time; embedding MVP principles into training programmes and funding criteria would help ensure that new ventures are not only financially viable in the short term but also strategically prepared for long-term growth.

7.2 Recommendations for Accelerators

Accelerators function as a nexus of mentorship, resources and community, an environment particularly

well suited to cultivating MVP practices. Yet, despite this potential, most startups continue to face limited financial resources and technical constraints, which make prototyping and iteration especially challenging. To counter these barriers, accelerators can offer targeted mentorship, establish dedicated prototyping labs and shared co-working spaces, and integrate structured customer feedback channels directly into their programmes. In doing so, they position themselves as critical partners capable of helping founders transform early-stage MVPs into scalable, market-ready offerings, lowering barriers to entry and increasing the likelihood of success for high-potential startups.

7.3 Contribution of the Study

This study makes a notable methodological contribution by demonstrating how quantitative measures of startup performance, such as ratio-based indicators of market expansion and revenue growth, can be meaningfully compared against Likert-scale assessments of MVP-related activities, including iteration and customer feedback. This dual approach illustrates how concrete, measurable evidence and more experiential forms of learning can be evaluated side by side. By integrating these two methods, the study offers a template for future research on MVP development across diverse environments and industries, thereby providing other scholars with a replicable framework for analysis.

7.4 Recommendations for Further Research

Further research is required to explore the intricacies of MVP development across a wider range of settings. Industries such as technology, agriculture and social enterprise all stand to benefit from MVP strategies, provided these are adapted to suit their respective contexts. Longitudinal studies, in particular, could examine the sustained influence of accelerator mentorship on MVP success rates over time, while also exploring how cultural factors shape the effectiveness of these practices across different regions. Equally important is a deeper investigation into how startups balance speed, quality and resource constraints; such research would yield valuable insight into the trade-offs inherent in MVP development and, in turn, provide more robust evidence to inform both policy and practice.

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