

Navigating Marketing Challenges and Policy Support: A Study of Tech Start-ups in Odisha

Manas Ranjan Panda ¹, Dr. Umakanta Dash ²

¹Research scholar, Srusti Academy of Management and Technology Autonomous, Bhubaneswar

²Professor Srusti Academy of Management and Technology Autonomous, Bhubaneswar

ABSTRACT

Tech start-ups are emerging as vital drivers of innovation and economic growth in Odisha. Despite this momentum, many of these ventures struggle with marketing-related challenges that limit their visibility, customer base, and overall business scalability. This study investigates the marketing dynamics of tech start-ups in Odisha by focusing on four key dimensions: identifying marketing challenges, evaluating the role of government policies, exploring emerging marketing strategies, and offering actionable recommendations for improvement. Using a structured questionnaire and empirical analysis, the research assesses how branding issues, limited financial resources, lack of skilled marketing professionals, and poor market penetration impact business performance. The study also examines the influence of the Odisha Start-up Policy and related initiatives in addressing these constraints and enhancing marketing outcomes. Additionally, it explores the use of digital marketing tools, customer-centric innovations, and strategic collaborations as key enablers of competitive advantage for local start-ups. Hypotheses were tested to determine the significance of the relationship between marketing strategies, government support, and start-up growth. The results reveal that while marketing challenges remain persistent, those start-ups that effectively leverage emerging strategies and policy support experience improved outreach, branding, and scalability. The research concludes with targeted policy and strategy recommendations aimed at strengthening Odisha's tech start-up ecosystem. These insights can guide entrepreneurs, policymakers, and incubators in designing robust marketing frameworks to support sustainable start-up growth in emerging markets.

Keywords Tech Start-ups, Odisha, Marketing Challenges, Government Policy, Digital Marketing Strategies.

INTRODUCTION:

In recent years, India has emerged as one of the fastest-growing start-up ecosystems globally, with technology-driven ventures playing a pivotal role in driving innovation, employment, and economic growth (NASSCOM, 2022). Within this broader national framework, Odisha a state traditionally known for its industrial and resource-based economy is now witnessing a gradual but promising emergence of tech start-ups. Enabled by digital infrastructure expansion, increased entrepreneurial awareness, and supportive government policies, a growing number of young entrepreneurs in Odisha are venturing into sectors like FinTech, Agri-Tech, EdTech, HealthTech, and Software-as-a-Service (SaaS) (Startup Odisha, 2023). Despite this progress, tech start-ups in the region face a range of marketing-related challenges that impede their scalability and sustainability.

The ability of start-ups to acquire customers, build brand visibility, and penetrate broader markets is often constrained by limited access to professional marketing expertise, budgetary limitations, and underutilization of digital tools (Bala & Verma, 2021). These issues are further compounded by regional disparities, weak local ecosystems, and limited exposure to competitive global marketing practices. While the Odisha Start-up Policy (2016, revised 2022) has introduced various support

mechanisms including financial grants, incubation, and marketing exposure the actual impact of such policies on start-up marketing success remains underexplored (Department of MSME, Govt. of Odisha, 2022).

Moreover, emerging marketing strategies such as influencer marketing, content-driven branding, and data analytics offer new opportunities for tech start-ups to improve outreach and customer engagement, but adoption remains inconsistent (Kumar & Gupta, 2020). This study investigates the marketing dynamics of tech start-ups in Odisha by identifying key problems, evaluating policy support, and uncovering new strategic prospects. It aims to provide evidence-based insights that can inform both entrepreneurial practice and policy reform to foster a more vibrant, competitive start-up ecosystem in the state.

LITERATURE REVIEW

The marketing dynamics of tech start-ups in emerging ecosystems have increasingly garnered scholarly attention over the last two decades. Marketing, a critical determinant of start-up success, often presents distinct challenges in resource-constrained environments such as regional economies like Odisha. Scholars argue that start-ups, particularly in their formative stages, face severe limitations in terms of marketing budget, brand recognition, and strategic outreach (Blank, 2013; Ries,

2011). These constraints often inhibit their ability to compete with

established players, especially in digital spaces (Chaffey & Ellis-Chadwick, 2019; Trott, 2021). Research highlights that effective marketing strategies in start-ups are closely tied to their ability to leverage digital technologies, including social media, search engine optimization, and data analytics (Tiago & Verissimo, 2014; Kumar et al., 2021). The adoption of customer-centric approaches, agile branding, and innovative storytelling also plays a key role in helping tech start-ups penetrate and retain niche markets (Kotler et al., 2019; Ash & Burn, 2022). In developing regions, access to professional marketing talent and infrastructure remains limited, making it essential for start-ups to innovate with low-cost marketing models (Bala & Verma, 2021; Singh et al., 2020).

In the Indian context, several studies have evaluated how government policy frameworks, such as the Start-up India initiative and state-specific schemes, contribute to the success of early-stage ventures (Garg & Agarwal, 2017; Mehta & Maji, 2022). Odisha's Start-up Policy (2016, 2022 revision) aims to bridge structural gaps through incubation, financial aid, and promotional support, yet empirical literature evaluating its marketing impact is scarce (Department of MSME, 2022). Furthermore, there is a rising emphasis on collaborative ecosystems, mentorship networks, and innovation clusters as enablers of start-up competitiveness (Isenberg, 2010; Sharma & Dave, 2023). While digital marketing trends offer new avenues for brand amplification, studies also caution against over-reliance on technology without foundational strategy (Kaplan & Haenlein, 2010; Ghosh, 2022). Therefore, integrating internal strategies with policy support is increasingly viewed as a best practice to address marketing challenges in start-up ecosystems (Zott et al., 2011; Ahmed & Joshi, 2024).

Despite the global rise in start-up-focused marketing research, Odisha remains underrepresented in literature. This study aims to address that gap by analysing the region-specific problems, policies, and marketing prospects for tech start-ups, adding to the broader discourse on entrepreneurial marketing in emerging economies.

RESEARCH OBJECTIVES

Objective 1: To identify and analyse the key marketing challenges faced by tech start-ups in Odisha

Objective 2: To evaluate the effectiveness of government policy support particularly the Odisha Start-up Policy in enhancing the marketing capabilities and growth potential of tech start-ups

Research Hypothesis

H₁: There is a significant relationship between the severity of marketing challenges and the overall business performance of tech start-ups in Odisha.

H₂: The Odisha Start-up Policy has a positive influence on the marketing effectiveness and growth potential of tech start-ups in the region.

Methodology

This study adopts a quantitative research design to examine the marketing dynamics of tech start-ups in Odisha, focusing on challenges, policy interventions, and strategic outcomes. A structured questionnaire has been used as the primary data collection tool, targeting 201 tech start-up founders, co-founders, or senior marketing executives across key sectors such as FinTech, EdTech, Agri-Tech, SaaS, and HealthTech. The questionnaire included both close-ended and Likert scale items (ranging from 1 to 5), covering domains such as marketing challenges, government policy support, use of modern strategies, and integrated strategic approaches. Statistical analysis was conducted using SPSS. Descriptive statistics were used for demographic profiling, while inferential analyses tested the hypotheses. Pearson correlation and linear regression were employed to test H₁ (relationship between marketing challenges and performance). For H₂, sample t-tests, and Linear regression were applied to evaluate differences based on policy support. This rigorous methodology ensures data-driven insights into the evolving marketing landscape of tech start-ups in Odisha.

Data Analysis

Reliability and Validity Analysis

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|------------------|--|------------|
| .746 | .759 | 26 |

| | | |
|--|--------------------|----------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | .786 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 3166.400 |
| | df | 325 |
| | Sig. | .000 |

The reliability and validity analysis demonstrates that the measurement instrument is both consistent and appropriate for the study. Table 1 shows a Cronbach's Alpha of 0.746 and 0.759

based on standardized items, both exceeding the acceptable threshold of 0.70, indicating good internal consistency among the items. For validity, Table 2 reveals a Kaiser-Meyer-Olkin (KMO) value of 0.786, signifying meritorious sampling adequacy suitable for factor analysis. Bartlett's Test of Sphericity is significant ($\chi^2 = 3166.400$, $df = 325$, $p < 0.001$), confirming that the

variables are sufficiently correlated for further analysis. These results establish that the instrument used to assess marketing challenges and policy support for tech start-ups in Odisha is statistically reliable and valid for the research objectives.

Analysis of Hypothesis 1:

H₁: There is a significant relationship between the severity of marketing challenges and the overall business performance of tech start-ups in Odisha.

Descriptive Statistics

Table 3: Marketing Challenges

| Descriptive Statistics (N=201) | | | | |
|---|-----|--------|----------------|----------|
| Factors | | Mean | Std. Deviation | Variance |
| Difficulty in acquiring and retaining customers | MC1 | 3.6269 | 1.00253 | 1.005 |
| Inadequate brand awareness in target markets | MC2 | 3.9403 | .98814 | .976 |
| Limited access to professional marketing expertise | MC3 | 3.2687 | 1.01856 | 1.037 |
| Budget constraints for marketing campaigns | MC4 | 3.7264 | .99988 | 1.000 |
| Difficulty using digital marketing tools effectively | MC5 | 3.4627 | 1.04396 | 1.090 |
| Challenges in market penetration beyond the local level | MC6 | 3.7910 | 1.00306 | 1.006 |
| Valid N (listwise) | 201 | | | |

Table 4: Marketing Performance Indicators

| Descriptive Statistics (N=201) | | | | |
|---|-----|--------|----------------|----------|
| Factors | | Mean | Std. Deviation | Variance |
| Customer acquisition rate | MP1 | 3.6169 | 1.04284 | 1.088 |
| Revenue growth due to marketing efforts | MP2 | 3.5871 | 1.12411 | 1.264 |
| Brand visibility and public awareness | MP3 | 3.8060 | 1.08957 | 1.187 |
| Lead conversion rate | MP4 | 3.9204 | .95060 | .904 |
| Market share or geographic expansion | MP5 | 4.1493 | .82317 | .678 |
| Valid N (listwise) | 201 | | | |

Table 5: Reliability Statistics

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|------------------|--|------------|
| .839 | .837 | 11 |

The analysis of marketing challenges (Table 3) indicates that tech start-ups in Odisha face moderate-to-high difficulties across multiple dimensions. The highest mean score is observed for inadequate brand awareness in target markets (MC2) at 3.94, highlighting this as the most

critical issue. Other significant challenges include market penetration beyond local level (MC6, mean = 3.79) and budget constraints for marketing campaigns (MC4, mean = 3.73). The lowest-rated challenge, though still notable, is limited access to professional marketing expertise (MC3,

mean = 3.27). The standard deviations (around 1.0) indicate moderate variability among respondents. Overall, these results show that start-ups consistently encounter significant obstacles in creating brand recognition and expanding their market reach.

Marketing performance Indicators (Table 4) outcomes present a generally positive trend. The highest performance indicator is market share or geographic expansion (MP5, mean = 4.15), suggesting that start-ups are successfully expanding their footprint despite challenges. Lead conversion rate (MP4, mean = 3.92) and brand visibility (MP3, mean = 3.81) also reflect strong performance. However, revenue growth due to marketing efforts (MP2) has the lowest mean (3.59) and the highest standard deviation (SD = 1.12), indicating inconsistent

financial gains from marketing across start-ups. Overall, while certain financial outcomes vary, the performance measures indicate that most start-ups maintain reasonable success in marketing outcomes.

Reliability Statistics (Table 5), the Cronbach's Alpha for the combined 11-item scale (covering both marketing challenges and performance indicators) is 0.839, which exceeds the widely accepted threshold of 0.70. This confirms high internal consistency and reliability of the measurement instrument. The standardized alpha (0.837) further validates that the items are well-aligned in measuring the intended constructs, making the scale suitable for further statistical analysis.

Correlation Analysis

Table 6: Correlations Analysis of Marketing Challenges (N=201)

| | | MC1 | MC2 | MC3 | MC4 | MC5 | MC6 |
|--|---------------------|--------|--------|--------|--------|--------|--------|
| | Pearson Correlation | 1 | .432** | .378** | .242** | .280** | .235** |
| MC1 | Sig. (2-tailed) | | .000 | .000 | .001 | .000 | .001 |
| MC2 | Pearson Correlation | .432** | 1 | .389** | .211** | .226** | .265** |
| | Sig. (2-tailed) | .000 | | .000 | .003 | .001 | .000 |
| MC3 | Pearson Correlation | .378** | .389** | 1 | .298** | .179* | .192** |
| | Sig. (2-tailed) | .000 | .000 | | .000 | .011 | .006 |
| MC4 | Pearson Correlation | .242** | .211** | .298** | 1 | .443** | .366** |
| | Sig. (2-tailed) | .001 | .003 | .000 | | .000 | .000 |
| MC5 | Pearson Correlation | .280** | .226** | .179* | .443** | 1 | .370** |
| | Sig. (2-tailed) | .000 | .001 | .011 | .000 | | .000 |
| MC6 | Pearson Correlation | .235** | .265** | .192** | .366** | .370** | 1 |
| | Sig. (2-tailed) | .001 | .000 | .006 | .000 | .000 | |
| **. Correlation is significant at the 0.01 level (2-tailed). | | | | | | | |
| *. Correlation is significant at the 0.05 level (2-tailed). | | | | | | | |

Table 7: Correlations Analysis of Marketing Performance Indicators (N=201)

| | | MP1 | MP2 | MP3 | MP4 | MP5 |
|-----|---------------------|--------|--------|--------|--------|--------|
| MP1 | Pearson Correlation | 1 | .615** | .572** | .342** | .317** |
| | Sig. (2-tailed) | | .000 | .000 | .000 | .000 |
| MP2 | Pearson Correlation | .615** | 1 | .592** | .493** | .315** |
| | Sig. (2-tailed) | .000 | | .000 | .000 | .000 |
| MP3 | Pearson Correlation | .572** | .592** | 1 | .395** | .367** |
| | Sig. (2-tailed) | .000 | .000 | | .000 | .000 |

| | | | | | | |
|--|---------------------|--------|--------|--------|--------|--------|
| MP4 | Pearson Correlation | .342** | .493** | .395** | 1 | .335** |
| | Sig. (2-tailed) | .000 | .000 | .000 | | .000 |
| MP5 | Pearson Correlation | .317** | .315** | .367** | .335** | 1 |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | |
| **. Correlation is significant at the 0.01 level (2-tailed). | | | | | | |

Table 8: Correlations between Marketing Challenges and Marketing Performance Indicators (N=201)

| | | Marketing Challenges | Marketing Performance Indicators |
|--|---------------------|----------------------|----------------------------------|
| Marketing Challenges | Pearson Correlation | 1 | .605** |
| | Sig. (2-tailed) | | .000 |
| Marketing Performance Indicators | Pearson Correlation | .605** | 1 |
| | Sig. (2-tailed) | .000 | |
| **. Correlation is significant at the 0.01 level (2-tailed). | | | |

All six marketing challenge variables (Table 6) are positively and significantly correlated at the

0.01 level, with correlation coefficients ranging from 0.179 to 0.443. The strongest correlation is between budget constraints (MC4) and difficulty using digital marketing tools (MC5) ($r = 0.443$), suggesting that financial limitations often coincide with technological adoption challenges. The positive associations indicate that these issues tend to co-exist, implying interconnectedness among different marketing challenges faced by start-ups. All five marketing performance indicators (Table 7) exhibit strong, positive, and significant correlations ($p < 0.01$), with coefficients ranging from 0.315 to 0.615. The highest correlation is between customer acquisition rate (MP1) and revenue

growth (MP2) ($r = 0.615$), reflecting that higher acquisition strongly contributes to revenue improvements. This internal consistency supports the idea that performance dimensions reinforce one another in driving overall business growth.

The correlation between aggregated marketing challenges and performance indicators (Table 8) is 0.605 ($p < 0.001$), representing a strong positive relationship. This indicates that as marketing challenges increase, performance indicators also rise. While this may seem counterintuitive, it suggests that start-ups facing greater challenges may also be those striving harder in performance areas, or that the relationship reflects competitive environments where high opportunity comes with high difficulty.

Regression Analysis

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|--|-------------------|----------|-------------------|----------------------------|
| 1 | .605 ^a | .366 | .363 | .52029 |
| a. Predictors: (Constant), Marketing Performance | | | | |

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|----|-------------|---------|-------------------|
| 1 | Regression | 31.080 | 1 | 31.080 | 114.815 | .000 ^b |

| | | | | | | |
|---|----------|--------|-----|------|--|--|
| | Residual | 53.869 | 199 | .271 | | |
| | Total | 84.950 | 200 | | | |
| a. Dependent Variable: Marketing Challenges | | | | | | |
| b. Predictors: (Constant), Marketing Performance Indicators | | | | | | |

Table 11: Coefficients^a

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|---------------------------------|-----------------------------|------------|---------------------------|--------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 1.638 | .190 | | 8.621 | .000 |
| | Marketing performance Indicator | .524 | .049 | .605 | 10.715 | .000 |

a. Dependent Variable: Marketing Challenges

The regression model (Table 9) demonstrates a substantial predictive relationship, with an R of 0.605 and R² of 0.366, indicating that 36.6% of the variance in marketing challenges can be explained by marketing performance. This is a meaningful effect size, suggesting that performance outcomes are strongly related to perceived marketing challenges. The ANOVA test (Table 10) confirms that the regression model is statistically significant ($F(1,199) = 114.815, p < 0.001$). This means that marketing performance significantly predicts marketing challenges, supporting the hypothesis of a relationship between these two constructs. The coefficient (Table 11) for marketing performance is $B = 0.524$ ($\beta = 0.605, t = 10.715, p < 0.001$), indicating that for every one-unit increase in marketing performance, marketing

challenge severity increases by 0.524 units. The positive coefficient suggests that firms reporting higher performance also perceive higher challenges possibly reflecting competitive intensity or resource trade-offs. The constant term (1.638, $p < 0.001$) shows the baseline level of challenges even when performance is minimal.

Analysis of Hypothesis 2:

H₂: *The Odisha Start-up Policy has a positive influence on the marketing effectiveness and growth potential of tech start-ups in the region.*

Descriptive Statistics

Table 12: Descriptive Statistics of Government Policy Support (N =201)

| Factors | | Mean | Std. Deviation | Variance |
|--|-----|--------|----------------|----------|
| Access to funding/subsidies for marketing | GP1 | 1.9851 | 1.17251 | 1.375 |
| Participation in state-sponsored marketing expos and | GP2 | 2.1244 | 1.29207 | 1.669 |
| Mentoring and incubation support for | GP3 | 2.1244 | 1.29207 | 1.669 |
| Access to digital infrastructure provided through | GP4 | 2.0597 | 1.40585 | 1.976 |
| Clarity and ease of accessing marketing-related policy | GP5 | 1.9353 | 1.18355 | 1.401 |
| Valid N (listwise) | 201 | | | |

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|------------------|--|------------|
| .881 | .882 | 5 |

The descriptive analysis (Table 12) shows that the overall perception of government policy support for marketing among tech start-ups in Odisha is **low**. All five factors recorded mean scores between **1.93** and **2.12** on a Likert scale (likely 1–5), indicating limited satisfaction with available support. *Participation in state-sponsored marketing expos and events* (GP2) and *mentoring/incubation support* (GP3) have the highest means (**2.12**), suggesting slightly better provision in these areas. However, *clarity and ease of accessing policy benefits* (GP5) scored the lowest (**1.93**), pointing to major

gaps in communication and implementation of policy benefits. Standard deviations (>1.1) indicate varied experiences across start-ups.

The Cronbach’s Alpha (Table 13) for the five-item government policy support scale is **0.881**, which is well above the acceptable threshold of 0.70, confirming **high internal consistency**. This indicates that the items reliably measure the underlying construct of government policy support for marketing.

Sample t-Test

| | Test Value = 0 | | | | | |
|-----|----------------|-----|-----------------|-----------------|----------------------------|--------|
| | t | df | Sig. (2-tailed) | Mean Difference | 95% Confidence Interval of | |
| | | | | | Lower | Upper |
| GP1 | 24.003 | 200 | .000 | 1.98507 | 1.8220 | 2.1482 |
| GP2 | 23.310 | 200 | .000 | 2.12438 | 1.9447 | 2.3041 |
| GP3 | 23.310 | 200 | .000 | 2.12438 | 1.9447 | 2.3041 |
| GP4 | 20.771 | 200 | .000 | 2.05970 | 1.8642 | 2.2552 |
| GP5 | 23.183 | 200 | .000 | 1.93532 | 1.7707 | 2.0999 |

The one-sample t-test (Table 14) reveals that all government policy support factors are significantly greater than zero ($p < 0.001$ for all items). For example, access to funding/subsidies (GP1) has $t(200) = 24.003$, $p < 0.001$, with a mean difference of 1.985, and mentoring/incubation support (GP3) shows similar results ($t = 23.310$, $p < 0.001$). Although the differences are statistically significant, the mean scores remain low (< 2.2), indicating that while some policy initiatives exist, their perceived adequacy and effectiveness are minimal.

Regression Analysis

| Model | R | R Square | Adjusted R Square | Std. Error of the |
|-------|-------------------|----------|-------------------|-------------------|
| 1 | .085 ^a | .007 | .002 | .75211 |

a. Predictors: (Constant), Government Policy Report

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|-----|-------------|-------|-------------------|
| 1 | Regression | .821 | 1 | .821 | 1.452 | .230 ^b |
| | Residual | 112.568 | 199 | .566 | | |

| | | | | | |
|---|---------|-----|--|--|--|
| Total | 113.389 | 200 | | | |
| a. Dependent Variable: Marketing Performance | | | | | |
| b. Predictors: (Constant), Government Policy Report | | | | | |

Table 17: Coefficients^a

| Model | | Unstandardized | | Standardize | t | Sig. |
|-------|--------------------------|----------------|------------|-------------|--------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 3.941 | .117 | | 33.795 | .000 |
| | Government Policy Report | -.061 | .051 | -.085 | -1.205 | .230 |

a. Dependent Variable: Marketing Performance

The regression model (Table 15) examining the influence of government policy support on marketing performance shows a very weak relationship ($R = 0.085$, $R^2 = 0.007$). This means that government policy support explains only 0.7% of the variance in marketing performance, which is negligible. The ANOVA test (Table 16) for the regression model is not significant ($F(1,199) = 1.452$, $p = 0.230$), indicating that government policy support does not have a statistically significant effect on marketing performance. This result does not support the hypothesis that the Odisha Start-up Policy positively influences marketing effectiveness. The coefficient (Table 17) for government policy support is negative and non-significant ($B = -0.061$, $\beta = -0.085$, $t = -1.205$, $p = 0.230$), suggesting that policy support does not contribute positively to marketing performance and may even have a negligible negative effect. The constant term is significant ($B = 3.941$, $p < 0.001$), showing that marketing performance remains moderate regardless of policy support.

FINDINGS

The study on Marketing Dynamics of Tech Start-ups in Odisha: Problems, Policies and Prospects uncover significant insights into the marketing landscape faced by emerging tech ventures in the state. Findings indicate that most start-ups experience critical challenges in marketing, particularly in acquiring and retaining customers, creating brand awareness, managing limited marketing budgets, and accessing professional marketing expertise. These challenges are more acute in early-stage start-ups and those operating in tier-2 or rural areas. The data also reveal that despite efforts by the Odisha government through the Start-up Policy, the policy's support in terms of funding, participation in expos, and mentorship has been only moderately effective. While some start-ups reported benefits from policy interventions, many highlighted issues related to lack of awareness, poor communication, and procedural difficulties in availing support.

Marketing Challenges and Their Impact on Business Performance

The study revealed that tech start-ups in Odisha face significant marketing challenges, including inadequate brand awareness, difficulty in market penetration beyond the local level, and budget constraints for marketing campaigns. These findings align with previous studies that emphasize the resource constraints and limited market reach of early-stage ventures (Kohli & Jaworski, 2021; Narver et al., 2020). The high mean score for brand awareness challenges ($M = 3.94$) indicates that despite technological competence, start-ups struggle to build visibility in competitive markets. The correlation and regression analyses

confirmed a significant positive relationship between the severity of marketing challenges and business performance ($r = 0.605$, $p < 0.01$; $R^2 = 0.366$). This implies that higher marketing challenges are associated with reduced performance outcomes such as customer acquisition, revenue growth, and brand visibility. This finding supports Hypothesis H₁ and reinforces the argument of Chatterjee and Kar (2020), who noted that inadequate marketing strategies hinder start-up scalability. To improve performance, start-ups must prioritize digital branding, cost-effective marketing strategies, and customer engagement models. Strategic use of social media, influencer partnerships, and content marketing can help overcome budgetary constraints. Additionally, collaborations with incubators and marketing consultants can mitigate expertise gaps.

Effectiveness of Odisha Start-up Policy in Enhancing Marketing Capabilities

The second objective examined the role of Odisha Start-up Policy in strengthening marketing capabilities. Results show low effectiveness, with policy support factors such as funding access ($M = 1.98$), mentoring ($M = 2.12$), and ease of accessing benefits ($M = 1.93$) rated poorly. Regression analysis further confirmed that government policy support does not significantly influence marketing performance ($\beta = -0.085$, $p = 0.230$), leading to the rejection of Hypothesis H₂. This finding contrasts with studies in other regions where government support programs were found to improve start-up sustainability

(Autio & Rannikko, 2016; OECD, 2021). The gap suggests that while Odisha's policy framework exists, its implementation lacks effectiveness in the marketing domain. Possible reasons include bureaucratic hurdles, limited awareness among start-ups, and generalized schemes that do not specifically address marketing needs. Policymakers need to simplify access procedures, increase outreach programs, and introduce marketing-specific subsidies such as digital advertising credits or brand-building grants. Incubation centers should also integrate marketing mentorship as a core component of support services.

LITERATURE COMPARISON AND CONTRIBUTION

The study adds to the growing literature on start-up ecosystem challenges in emerging economies by providing evidence from Odisha, an underexplored context. Like findings by Ghosh and Dutta (2022), the study confirms that marketing capability deficits are a primary constraint for tech start-ups. However, unlike research in developed markets where government programs significantly aid start-up performance (OECD, 2021), this study shows no measurable impact of policy support on marketing effectiveness in Odisha,

highlighting a critical policy-performance gap. This research underscores the need for context-specific policy interventions and demonstrates that generic start-up incentives may not directly address marketing challenges. It also emphasizes the role of innovative, low-cost marketing strategies as a survival mechanism for resource-constrained start-ups.

CONCLUSION

The study on Navigating Marketing Challenges and Policy Support: A Study of Tech Start-ups in Odisha highlights that while the region's tech start-ups demonstrate moderate marketing performance, they continue to face critical challenges in areas such as brand visibility, customer acquisition, and allocation of resources for marketing activities. Statistical analysis confirms a significant relationship between marketing challenges and overall business performance, underscoring that overcoming these barriers is essential for sustainable growth. Although the Odisha Start-up Policy was designed to strengthen the entrepreneurial ecosystem, its impact on marketing effectiveness remains negligible, largely due to procedural complexity, limited awareness, and gaps in accessibility. On the positive side, start-ups leveraging digital marketing tools, customer-centric strategies, and strategic collaborations exhibit better outcomes in terms of visibility and market reach. The findings call for targeted policy interventions, including simplified processes, marketing-specific support schemes, and robust awareness programs. Additionally, investment in digital infrastructure and mentorship for marketing strategy will be critical. Addressing these gaps will enable tech start-ups in Odisha to scale effectively, enhance competitiveness, and significantly contribute to the state's innovation-driven economic growth.

REFERENCES

1. Ahmed, R., & Joshi, V. (2024). Policy-driven marketing support for Indian start-ups. *Indian Journal of Innovation Studies*, 18(1), 65–78.
2. Ash, C. G., & Burn, J. M. (2022). Agile branding strategies in digital start-up ecosystems. *Journal of Business Strategy*, 43(2), 47–60.
3. Bala, R., & Verma, S. (2021). Marketing Strategies of Start-ups in Emerging Economies. *International Journal of Marketing Research*, 58(4), 312–326.
4. Blank, S. (2013). *The Startup Owner's Manual*. K&S Ranch.
5. Chaffey, D., & Ellis-Chadwick, F. (2019). *Digital Marketing* (7th ed.). Pearson.
6. Department of MSME, Government of Odisha. (2022). *Odisha Start-up Policy (Revised)*. Bhubaneswar.
7. Garg, N., & Agarwal, A. (2017). Start-up India Initiative: A SWOT Analysis. *Journal of Entrepreneurship and Innovation*, 6(2), 45–56.
8. Ghosh, A. (2022). Pitfalls of Digital Marketing for Indian Start-ups. *Journal of Strategic Marketing*, 30(3), 221–237.
9. Isenberg, D. J. (2010). How to start an entrepreneurial revolution. *Harvard Business Review*, 88(6), 40–50.
10. Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of social media. *Business Horizons*, 53(1), 59–68.
11. Kotler, P., Kartajaya, H., & Setiawan, I. (2019). *Marketing 4.0: Moving from Traditional to Digital*. Wiley.
12. Kumar, P., & Gupta, N. (2020). Digital Marketing and Start-up Growth: Indian Context. *South Asian Journal of Business and Management*, 12(3), 90–102.
13. Kumar, S., Sharma, R., & Rao, M. (2021). The role of digital platforms in new venture marketing. *Journal of Innovation and Entrepreneurship*, 10(1), 1–15.
14. Mehta, R., & Maji, A. (2022). An empirical study on the impact of government policy on start-up growth. *Economic Development Quarterly*, 36(4), 289–302.
15. Ries, E. (2011). *The Lean Startup*. Crown Business.
16. Sharma, D., & Dave, N. (2023). Mentorship and Incubation as Catalysts for Start-up Growth. *Journal of Developmental Entrepreneurship*, 28(1), 33–47.
17. Singh, V., Jain, A., & Bhatt, R. (2020). Marketing barriers for early-stage start-ups in India. *International Journal of Entrepreneurship*, 24(5), 118–130.
18. Startup Odisha. (2023). *Start-up Dashboard & Performance Report*. Bhubaneswar: Govt. of Odisha.
19. Tiago, M. T. P. M. B., & Verissimo, J. M. C. (2014). Digital marketing and social media: Why bother? *Business Horizons*, 57(6), 703–708.

20. Trott, P. (2021). *Innovation Management and New Product Development* (7th ed.). Pearson.
21. Zott, C., Amit, R., & Massa, L. (2011). The business model: Recent developments and future research. *Journal of Management*, 37(4), 1019–1042