Volume 4, No. 12 December 2025
p-ISSN 2980-4868 | e-ISSN 2980-4841
https://ajesh.ph/index.php/gp

Strategic Cost Analysis and Financial Viability Assessment of Marketing Strategies in Mental Health Startups: Evidence from Indonesia

Emanuel Damarjati*, Jagat Prirayani
Intitut Teknologi Bandung, Indonesia
Email: emanuel.damarjati@gmail.com*

ABSTRACT:
The growing services of mental health startups in recent years show that people are becoming more aware of mental health well-being and indicate that psychological services are shifting toward digital platforms. However, many of these startups still struggle with financial challenges and uncertainty, including high client acquisition costs, inefficient and ineffective marketing spending, limited funding options, and unclear paths to profitability. This study examines the financial viability of marketing strategies in mental health startups through a strategic cost analysis framework that integrates cost structure evaluation, breakeven analysis, and cost of equity assessment. Return on Investment (ROI) serves as the principal profitability indicator for assessing whether marketing expenditures (investments) yield returns exceeding the cost of equity. The sample consists of four ventures operating in Indonesia. We employ panel regression techniques to examine the impact of marketing efficiency and financial sustainability under marketing strategies on founders' decisions to allocate more marketing budget from their capital in assessing financial viability. The results demonstrate that marketing efficiency and breakeven achievement positively and significantly influence ROI, while the cost of equity—as the opportunity cost of founders' capital—negatively affects reinvestment decisions. This study contributes to the literature on startup financial management by offering an analytical framework for optimizing marketing investment decisions toward sustainable profitability, especially in the mental health sector.

Keywords: Financial viability, cost structure evaluation, break-even analysis, cost of equity assessment, marketing strategy

INTRODUCTION

The growing awareness of mental health issues and the rapid evolution of digital platforms have led to a surge in the establishment of mental health startups across the globe, including Indonesia. These ventures aim to provide accessible and affordable psychological services through online consultations or other digital platforms, making them available to clients who cannot afford such services in their areas. In Indonesia, the gap between mental health service demand and availability underscores the urgency of this study (Basrowi et al., 2024; Nasution et al., 2025; Nuryana & Herdian, 2025; Putri et al., 2021). The National Survey Report from I-NAMHS (2022) reported that one in three adolescents (34.9%) had a mental health problem, equating to 15.5 million Indonesian adolescents (Oktarianto et al., 2025; Suciati et al., 2024; Wiguna et al., 2025; Yuliastuti & Istiqomah, 2025).

Meanwhile, according to IPK Indonesia (2025), the availability of licensed psychologists remains critically low, with only 3,132 actively licensed psychologists (75%). Although public interest is increasing, only a small proportion of individuals actively seek psychological help due to limited accessibility and lingering social stigma. Startups operating in this field thus play a

crucial role in bridging this gap but must simultaneously address the challenge of financial sustainability (Clark et al., 2018; Hota et al., 2024; Kartika, 2024; Oyegbade et al., 2021).

However, many mental health startups face persistent financial instability. Limited funding sources, high customer acquisition costs (CAC), and inefficient marketing spending often hinder their ability to achieve sustainable profitability despite their social relevance and market potential. The need to balance social mission with economic viability—which distinguishes mental health startups from conventional technology enterprises—makes financial assessment frameworks even more critical. Hence, assessing the financial viability of their marketing strategies becomes essential for ensuring long-term survival in a competitive and resource-constrained industry (Abid et al., 2023; Agrawal et al., 2024; Bakashaba & Bindeeba, 2025; Thomas & Douglas, 2022).

Marketing activities represent a major expense and strategic determinant of growth in these startups. Paid advertising, digital campaigns, and even influencer partnerships can rapidly increase visibility, yet they often yield diminishing marginal returns if not properly aligned with cost management and profitability goals. Conversely, organic marketing efforts, such as content marketing and community engagement, tend to be more sustainable but slower in generating revenue. This trade-off highlights a strategic dilemma: how can startups design marketing strategies, especially in terms of investment, that maximize financial returns while minimizing cost inefficiencies? Prior studies (e.g., Barber & Grammatopoulou, 2019; Gaddy et al., 2021) show that digital mental health startups often misallocate marketing resources due to a lack of structured financial evaluation methods.

In addressing this gap, the present study introduces a strategic cost analysis framework to evaluate the financial viability of marketing strategies in mental health startups. The framework integrates three core financial tools: (1) Cost Structure Evaluation, which examines the composition of fixed and variable marketing costs as well as marketing efficiency; (2) Break-even Analysis, which assesses the ability to recover marketing investments and enhance financial performance; and (3) Cost of Equity Assessment, which measures whether the financial returns exceed the opportunity cost of founder or investor capital. Together, these tools form a comprehensive model for analyzing how marketing strategies influence both short-term performance and long-term financial health and sustainability. By applying this model to multiple case studies of Indonesian mental health startups, this research aims to generate empirically grounded insights that bridge theoretical finance and entrepreneurial marketing.

METHOD

This research adopts a mixed-methods approach, combining quantitative and qualitative methodologies to ensure both analytical rigor and contextual depth. The quantitative component emphasizes financial modeling and regression-based analysis of marketing and financial performance metrics, while the qualitative component provides interpretive depth through in-depth interviews with founders, financial officers, and marketing managers of mental health startups. This approach aligns with the study's objective to measure and explain how marketing strategies

influence financial viability in startups operating within resource constraints and high uncertainty, particularly in Indonesia's emerging mental health service sector.

The study employs a multiple case design, examining four early-stage mental health startups offering online or hybrid psychological consultation and counseling services. The multiple case approach enables comparative analysis across diverse business models, allowing the research to capture variations in marketing intensity, cost structure, and capital sources. These startups were selected using purposive sampling based on three main criteria: (1) operational activity between January 2023 and August 2025; (2) self-funded or minimally externally financed; and (3) engagement in measurable marketing activities such as paid advertising or content-based outreach. Data were drawn from financial statements, performance dashboards, and marketing reports, supplemented by interview data that provided clarity on cost classification and strategic decision-making.

To examine financial viability comprehensively, the study integrates three key analytical models: Cost Structure Evaluation, Break-even Analysis, and Cost of Equity Assessment. The first model, Cost Structure Evaluation, investigates how variations in fixed and variable costs affect Return on Marketing Investment (ROMI). This model measures marketing efficiency by identifying the optimal balance between cost flexibility and scalability. The second model, Break-even Analysis, assesses how achieving the break-even point influences Return on Investment (ROI) and long-term profitability. It considers the firm's cost behavior and contribution margin to determine the minimum performance threshold for financial sustainability. The third model, Cost of Equity Assessment, evaluates whether marketing returns surpass the implicit opportunity cost of founder capital, representing the required rate of return in self-funded ventures. This model integrates financial viability indicators into decision outcomes such as reinvestment, scaling, or withdrawal. The study employed panel regression analysis to test the relationship between financial variables across the sample period from 2023 to 2025.

There are three core equations represent the model used.

Cost Structure Evaluation Model

The objective of this model is to identify the influence of cost composition (fixed vs. variable) and marketing intensity on marketing efficiency, interpreted by ROMI. The dependent variable is the return on marketing investment. The independent variables consist of a dummy variable of cost structure index, coded as 1 for the cost composition is variable dominance, and 0 for fixed dominance, total marketing cost changes, a dummy variable for marketing strategy, coded as 1 for the marketing cost is dominantly digital, and 0 for non-digital. The empirical estimation was performed as the determinant at aggregate industry level. The regression model as follows:

$$ROMI_{i,t} = \alpha_0 + \beta_1.CSI_{i,t} + \beta_2.\Delta TMC_{i,t} + \beta_3.MS_{i,t} + \boldsymbol{Zfs'_{i,t}}.\boldsymbol{\lambda_1} + \boldsymbol{Zmi'_{i,t}}.\boldsymbol{\lambda_2} + \in_{i,t} (1)$$

,where $\boldsymbol{\alpha_0}$ is the intercept, $\boldsymbol{\beta_1}$ denotes the estimated impacts of cost structure for firm i in period t, $\boldsymbol{\beta_2}$ denotes the estimated impacts of changes of total marketing costs for firm i in period

t, $\boldsymbol{\beta_3}$ denotes the estimated impact of marketing strategy implemented for firm 1 in period t, and $\boldsymbol{\lambda_1}$ and $\boldsymbol{\lambda_2}$ denotes the estimated impact of relevant variable control.

Breakeven Analysis Model

The objective of this model is to analyze how achieving BEP influence sustainability and profitability, interpreted by ROI. The dependent variable is the return on investment. The independent variables consist of a dummy variable of breakeven achievement, coded as 1 for the achieved BEP (Qactual ≥ BEP), and 0 for unachieved BEP (Qactual < BEP), Return on Marketing Investment, and a dummy variable for marketing strategy, coded as 1 for the marketing cost is dominantly digital, and 0 for non-digital. The empirical estimation was performed as the determinant at aggregate industry level. The regression model as follows:

$$ROI_{i,t} = \alpha_0 + \beta_1.B_{i,t} + \beta_2.ROMI_{i,t} + \beta_3.MS_{i,t} + \boldsymbol{Zfs'_{i,t}}.\boldsymbol{\delta} + \epsilon_{i,t} (2)$$

,where $\boldsymbol{\alpha_0}$ is the intercept, $\boldsymbol{\beta_1}$ denotes the estimated impacts of breakeven for firm i in period t, $\boldsymbol{\beta_2}$ denotes the estimated impacts of marketing return for firm i in period t, $\boldsymbol{\beta_3}$ denotes the estimated impact of marketing strategy implemented for firm 1 in period t, and $\boldsymbol{\delta}$ denotes the estimated impact of relevant variable control.

Cost of Equity Assessment Model

The objective of this model is to determine how decision behavior is made influenced by profitability, marketing returns and efficiency, and breakeven achievement. The dependent variable is the decision outcome. The independent variables consist of a dummy variable of financial viability index, code as 1 for the financially viable (ROI ≥ CoE), and 0 for financially unviable (ROI < CoE), Return on Marketing Investment, of a dummy variable of breakeven achievement, coded as 1 for the achieved BEP (Qactual ≥ BEP), and 0 for unachieved BEP (Qactual < BEP). The empirical estimation was performed as the determinant at aggregate industry level. The regression model as follows:

$$D_{i,t} = \alpha_0 + \beta_1.H_{i,t} + \beta_2.ROMI_{i,t} + \beta_3.B_{i,t} + \boldsymbol{Zfs'_{i,t}}.\boldsymbol{\kappa_1} + \boldsymbol{Zrv'_{i,t}}.\boldsymbol{\kappa_2} + \epsilon_{i,t} (3)$$

Where $\boldsymbol{\alpha_0}$ is the intercept, $\boldsymbol{\beta_1}$ denotes the estimated impacts of financial viability for firm i in period t, $\boldsymbol{\beta_2}$ denotes the estimated impacts of marketing return for firm i in period t, $\boldsymbol{\beta_3}$ denotes the estimated impact of breakeven for firm 1 in period t, and $\boldsymbol{\kappa}$ denotes the estimated impact of relevant variable control.

To guarantee the validity of the model and ensure analytical robustness, several diagnostic tests were applied before estimation takes place. Multicollinearity tests (VIF) were conducted to verify the independence of variables, while panel unit root tests (IPS and Fisher-type ADF) confirmed data stationarity across time. This analytical rigor strengthens the reliability of the model and its generalizability to similar early-stage startups in emerging markets.

Qualitative insights were incorporated to complement the numerical findings, offering contextual understanding of managerial decision-making behind cost allocation and marketing prioritization. Furthermore, interviews revealed founder perspectives on balancing growth with

financial control, marketing effectiveness and efficiency, interpreting breakeven as a behavioral and strategic milestone rather than a purely numerical threshold. These narratives enriched the quantitative findings, helping to explain why startups modify marketing intensity after achieving breakeven or why they shift between paid and organic strategies depending on cash flow constraints.

Overall, this methodological framework establishes a coherent foundation for evaluating the financial viability of marketing strategies in mental health startups. By integrating structured financial models with contextual qualitative insights, the study provides a holistic understanding of how cost efficiency, breakeven timing, and opportunity cost interact to shape strategic outcomes. The approach ensures both empirical precision and managerial relevance, allowing the results to inform evidence-based decision-making in high-risk, socially driven entrepreneurial contexts.

RESULTS AND DISCUSSION

Table 1 summarizes the statistic on marketing and financial determinant in the sample from 2023 – 2025.

Table 1. Summary Statistic of Key Indicators

Indicator	Mean	SD	Min	Max
Revenue	9.669	18.434	0.250	85.630
Marketing Revenue	0.509	0.730	-	3.600
Variable Costs	8.619	14.556	0.150	61.255
Fixed Costs	0.597	1.092	0.046	5.250
Total Costs	9.346	15.504	0.250	64.105
Total Marketing Costs	1.079	1.503	0.035	5.730

Sources: Results of Author Data Processing (2025)

That table provides a descriptive summary of key indicators observed in the dataset, which reveal substantial variability across firms in terms of both revenues and costs. On average, firms generate revenue of Rp9.7 million, but the large standard deviation (Rp18.5 million) indicates significant disparities in income levels, with some firms earning as little as Rp0.25 million while others reach as high as Rp85.6 million. This suggests the sample has a mix of small-scale and large-scale entities. For specific activities (marketing), the revenue shows a relatively small mean (Rp0.6 million) and moderate spread (Rp0.7 million), with values approximately ranging up to 3.6. It implies that marketing efforts contribute to income generation but vary notably across firms.

In context of expenditures, firstly variable costs, which typically fluctuate with sales volume, average Rp8.7 million and exhibit wide dispersion (SD = Rp14.6 million). It suggests that firms differ greatly in their cost efficiency or scale of operations. Conversely, fixed costs display more consistency, with a mean of Rp0.6 million and lower variability (SD = Rp1.1 million). It indicates that these expenses are relatively stable and predictable across firms. Consequently, the total costs mirror the revenue trend with averaging Rp9.4 million, and a wide standard deviation Rp15.6 million. It reflects proportional cost differences among firms of varying sizes. Furthermore, total marketing costs with average Rp1.1 million, and moderate variability (SD = Rp1.6 million). Its

values ranging from 0.035 to 5.73, suggesting that marketing expenditures are an important but unevenly distributed component of total costs. Collectively, these descriptive results highlight that while firms in the sample share a general cost-revenue structure, the magnitude of their financial activities differs widely, likely influenced by operational scale, market reach, and strategic focus on marketing intensity.

Cost Structure Evaluation Estimation Results

Before estimating the dependent variables, it is essential to determine its independent variables first as the calculations results from both marketing and financial indicators. First, determining the CSI variable can be conducted with the formula as follows:

$$CSI = \frac{VC-FC}{TC} \quad (4)$$

This single measurement can describe how flexible and rigid firm's operation are. A positive value of the index indicates a more variable-cost-composition structure, which is implying higher operational flexibility. While the negative value of the index indicates a more fixed-cost-composition structure, which is implying higher operating leverage. By applying and including CSI in this context, it will help test whether cost flexibility enhances the marketing efficiency, especially when overseeing the collaborating with the strategy type. Second, determining the ΔTMC variable can be conducted with the formula as follows:

$$\Delta TMC = ln(\sum_t MC - \sum_{t-1} MC) \quad (5)$$

ΔTMC captures the dynamic nature of marketing investments, reflecting either an increase or decrease in marketing expenditure compared to previous periods. This variable helps evaluate how fluctuations in marketing costs influence return on marketing investment (ROMI) and overall financial performance. It is expressed by interpreting a positive value when marketing expenses have increased compared to the prior period, while a negative value indicates a reduction in marketing spending. Third, marketing strategy orientation (which is identified as MS) differentiates firms based on their marketing approach, for instance, digital versus conventional strategies. This may influence how cost and marketing decisions affect performance, and providing insight into strategic effectiveness. In the data analysis process, the strategy orientation, then will be defined as MR Ratio, firstly will be determined by dividing which the composition of marketing strategy dominantly spent with the total of marketing cost spent for the period. The equation to calculate as follow:

$$MS\ Ratio = \frac{MC_{Digital}}{TMC} \quad (6)$$

Then, this variable will be interpreted as "1", when the digital marketing cost/spending ratio is 50% equally or above. Whereas, the variable will be interpreted as "0", when the marketing cost/spending ratio is below 50%. It will play the role as dummy in the regression analysis.

$$MS = \begin{cases} 1, & \text{MS Ratio} \geq 50\% \\ 0, & \text{MS Ratio} < 50\% \end{cases} \quad (7)$$

At the end, it is essential to account several relevant control variables that significantly influence marketing performance outcomes in order examine the determinants of the effectiveness

measurement ROMI. First of all, firm size is widely considered and recognized determinant of marketing efficiency. The purpose of this is to control for organizational capacity and resource base that can influence ROMI. In determining data for regression analysis input, it took the natural log by using total revenue for the common measure. The equation to calculate as follow:

$$Zfs'_{i,t}.\lambda = ln\ (\sum_{t,i} Revenue) \quad (8)$$

Lastly, marketing intensity is also considered to ensure the shape firm performance outcomes by measuring the ratio of marketing expenditure to sales. The purpose is to control of the level of marketing investment relative to the firm scale. The model interpretation as follows:

$$Zmi'_{i,t}.\lambda = \frac{\sum Marketing\ Cost}{Revenue} \quad (9)$$

The estimation result for cost structure evaluation is illustrated in Table 2. The regression is conducted using panel data regressions with total observations are 104.

Table 2. Regression Results

ROMI	Coef.	Std. Err.	t-value	p-value	[95% Conf	Interval]	Sig
CSI	.6577879	.1443352	4.56	0.000	.3713593	.9442165	***
dTMC	-.1565406	.1932065	-0.81	0.420	-.5399526	.2268714	
MS	.793934	.3287228	2.42	0.018	.1415943	1.446274	**
Zfs	-.2727765	.0994817	-2.74	0.007	-.4701946	-.0753584	***
Zmi	-.781052	.3488052	-2.24	0.027	-1.473245	-.0888594	**
Constant	2.993806	1.740824	1.72	0.089	-.4608022	6.448414	*
Mean dependent var		-0.255	SD dependent var				1.192
R-squared		0.192	Number of obs				104
F-test		7.796	Prob > F				0.000
Akaike crit. (AIC)		320.457	Bayesian crit. (BIC)				336.324
*** p<.01, ** p<.05, * p<.1			*Sources: Results of Author Data Processing (2025)*				

The analysis reveals that the cost structure of mental health startups plays a decisive role in determining marketing efficiency and overall financial viability. It is shown that cost structure has the highest impact on marketing return on investment with coefficient of 0.658 ($p < 0.01$). This strong positive correlation is in line with the theory about cost structure by Horngren, Datar, and Rajan (2021), which emphasizes that greater cost flexibility enables better alignment between marketing activities and revenue fluctuations in uncertain markets like mental health services. This finding also demonstrates that one percent increase of CSI tends to increase marketing returns by 0.658%, everything else equal. This finding shows that startups with a flexible cost composition, characterized by a higher proportion of variable costs relative to fixed costs, achieved stronger ROMI and potentially maintained healthier cash flows.

Because these firms demonstrated an ability to adjust marketing expenditure in response to changes in client acquisition performance, thereby mitigating financial risk. Conversely, startups with rigid cost structures, such as continuous paid advertising contracts or unconverted client of marketing cost which remain as brand portion expense, experienced declining ROMI as marketing costs rose still higher than revenue. Likewise, the implementation of marketing strategy also has a significant impact on marketing return (coefficient = 0.794, $p < 0.05$). This finding shows that strategic approach makes marketing more effective and efficient. It is in line with Rust, Huang,

and Wyer (2024), which argue marketing productivity depends on how effectively firms convert marketing resources into financial outcomes.

In contrast, both firm size (-0.273,$p < 0.01$) and marketing intensity (-0.781,$p < 0.05$) as variable control have negative impact on ROMI, indicating that larger firm size and higher market intensity are highlighting how structural and environmental constraints can shape marketing performance outcomes. Conceptually, a firm with high annual revenue operates in a highly competitive sector since the market size and target also increase. Hence, it is associated with the higher market intensity as firms focus more on allocate marketing costs. Despite significant marketing investments, it faces diminishing marginal returns because its marketing systems are complex and costly to adjust. The intense competition also forces to create continuous discounting and promotional activity, which further erodes ROMI. Otherwise, a medium-sized firm in a less competitive niche market operates more efficiently.

With fewer competitors and simpler marketing structures, making its spending translate more directly into sales gains, then resulting in a higher ROMI. Another variable, such as changes of total marketing costs, is not significant. However, it should be considered as long as it is allocated strategically. Aligning with concept of Rust, Ambler, Carpenter, Kumar, and Srivastava (2004), which argue that the increasing of marketing expenditures will not contribute directly to improved marketing performance unless it is strategically and efficiently managed. Consequently, marketing costs should be viewed not merely as operational expenses, but as value-generating investments, especially when they are allocated toward high-performing channels and measurable outcomes.

The model account for 19.2% of the variations in return on marketing investment and F-test confirms that the included explanatory variables jointly explain a significant portion of variation in ROMI. It is reasonable for behavioral and financial performance studies, where numerous external factors typically affect marketing outcomes. Although there is limited explanatory power, the findings confirm that cost structure with strategic marketing approach plays the important role in determining the effective and efficient marketing returns. The increasing or decreasing marketing cost does not have a meaningful effect unless it is collaborated and justified with the effective strategy. At the same time, firms with higher revenue have a tendency to expand marketing activities, but again it can be controlled by the appropriate strategy to avoid diminishing return and erode ROMI, which is relevant to Hanssens & Dekimpe (2012), firms already heavily invested in marketing (digital) may face diminishing marginal returns or additional digital spending since it produces smaller incremental gains in ROMI once a certain level of exposure or engagement is reached.

Breakeven Analysis Estimation Results

Before estimating the dependent variables, it is essential to determine its independent variables first as the calculations results from financial indicators. First, in determining the B variable, it needs to calculate BEP first as the threshold before comparing with Qactual. The equation can be conducted with the formula as follows:

$$BEP = \frac{FC}{(P-VC)Q} = \frac{FC}{CM} \quad (10)$$

According to Avery and Steenburgh (2011), this BEP calculation helps founders enable to assess the financial feasibility of marketing investment, so they can ensure that the money will be well spent and lead to incremental profits for their firms. This ensures that (marketing) expenditures are grounded in measurable sales responses rather than assumptions.

The concept of determining the breakeven analysis is using CVP method. This is a foundational financial tool that determines the volume of services or sales required to recover all costs. In marketing contexts, it helps evaluate how many clients are needed to acquire, to offset expenditures related to campaigns or promotions. Horngren, Datar, and Rajan (2021) define the break-even point as where total revenue equals total costs, which is resulting in zero profit. In startup finance literature, particularly within early-stage ventures, this tool is widely recommended for planning and budgeting of marketing initiatives, also as an essential benchmark for evaluating the financial viability of marketing strategy. Then, this variable will be interpreted as "1", when the BEP above Qactual or equally. Whereas, the variable will be interpreted as "0", when BEP below Qactual. It will play the role as dummy in the regression analysis.

$$B = \begin{cases} 1, & \text{BEP} \geq \text{Q}_{\text{actual}} \\ 0, & \text{BEP} < \text{Q}_{\text{actual}} \end{cases} \quad (11)$$

ROMI is also identified to involve in this model in order to see how the effectiveness of marketing expenditure can impact in generating financial returns. The improved marketing efficiency should enhance overall ROI since a higher ROMI reflects better utilization of marketing resources to produce the incremental revenue. In this context, ROMI will act as a short-term performance driver that compliments the BEP status in order to explain sustainability outcomes. Meanwhile, marketing strategy orientation is also used in this model to see how the impact of marketing strategy to the profitability.

Digital marketing strategy is generally associated with higher adaptability and lower marginal costs, which suggest to contribute to breakeven achievement and higher ROI through data-driven optimization and better target accuracy. At the end, firm size is also essential to account as relevant control variable that potentially influence financial returns as sustainability outcomes in order examine the determinants of the effectiveness measurement ROI. This is to ensure that the observed effects of breakeven achievement on ROI is whether driven by the differences in organizational scale or not.

The estimation result for breakeven analysis is illustrated in Table 3. The regression is conducted using panel data regressions with total observations are 104.

Table 3. Regression Results

ROI	Coef.	Std. Err.	t-value	p-value	[95% Conf	Interval]	Sig
B	-.0562798	.0172841	-3.26	0.002	-.0905753	-.0219844	***
ROMI	-.0036361	.0036247	-1.00	0.318	-.0108284	.0035561	
MS	-.1568523	.0887839	-1.77	0.080	-.3330188	.0193142	*
Zfs	.0800255	.0082133	9.74	0.000	.0637286	.0963225	***
Constant	-.900865	.1573922	-5.72	0.000	-1.213165	-.5885646	***

Mean dependent var	0.092	SD dependent var	0.153

ROI	Coef.	Std. Err.	t-value	p-value	[95% Conf	Interval]	Sig
R-squared		0.760	Number of obs				104
F-test		38.990	Prob > F				0.000
Akaike crit. (AIC)		-234.225	Bayesian crit. (BIC)				-221.003
*** p<.01, ** p<.05, * p<.1					*Sources: Results of Author Data Processing (2025)*		

The analysis results reveals that the achievement of breakeven is essential role in determining profitability (ROI), which enhances the sustainability. This strong negative correlation indicates that when firms fail to achieve BEP efficiently or set a higher BEP, will lower ROI. Hence, it is important when firms set the breakeven threshold since the increasing one-unit BEP will threshold will decrease ROI by 5.6%. It is aligned with the theory concept of cost-volume-profit (CVP) structure, where a higher BEP reflects a less favorable, which can suppress ROI (Horngren et al.,2021). The higher BEP means fixed cost is higher, while contribution margin lower. It potentially makes risk higher as theoretically it need increasing composition of fixed costs. Practically, firms need to increase or have higher total cost relative to sales if they want to set a higher BEP value. In other words, firms need extra effort to gain sales for offsetting all costs even though it will be risky and potentially erode ROI.

Conversely, lower BEP potentially improves firm profitability performance, concerning more efficient cost in recovery. Furthermore, it is important to pay attention to the implementation of marketing strategy since it has a negative impact on ROI with coefficient of -0.1569 ($p < 0.1$). It means that one percent of ineffective marketing strategy implemented will decrease ROI by 15.69%. This finding may suggest that if firms do not implement marketing approach strategically, it will potentially increase some meaningless cost and decrease profitability. This is related to the principle of CAC. For simplicity, when firms implement digital marketing, paying social media ads, if there is low or even no conversions, the social ads expense does not convert into incremental revenue, so the cost value decrease lower or still exist. If this ads expenditure still exists, it will surpress net profit, which potentially erode ROI as well.

This is relevant with Rust, Huang, and Wyer (2024), which emphasizes marketing activities is typically short-term oriented, and it does not always coincide with overall firm ROI in the same period since the principle of ROI tends to the long-term orientation. This concept is actually relevant to ROMI, where it is shown the negative correlation with ROI, even though it is not significant (coefficient = -.0036). This is also supported by the justification of Rust, Huang, and Wyer (2024), where that higher marketing returns do not necessarily lead to improve overall ROI at firm level. It means, even though ROMI interprets the efficiency of marketing activities, it implies that marketing effectiveness alone does not fully explain and influence the firm-level profitability.

For instance, considering a firm launches a highly success digital marketing campaign, attracting more clients, then increasing customer engagement and sales conversions, leading to yield higher ROMI. However, the firm has to raise more costs as its operational expansion to support that activity, which in turn offset its incremental revenue gained from marketing success. As results, even though higher ROMI reported as strong performance, the firm's overall ROI may

remain unchanged or even declines slightly due to that higher operational cost. Interestingly, the strong positive impact of firm size on ROI emphasizes firms scale with higher revenue enhance profitability since the coefficient is 0.0800255 ($p<0.01$). It means that the increasing of one percent firm size potentially increases ROI by around 8%. In essence, a firm with higher annual sales receive benefits from economies of scale in service as the BEP is covered with the higher revenue gained.

Moreover, firms with higher revenue usually can cover larger market target and presence, which allow them run broader from client retention. These factors enable them to maintain ROI or even improve it. Otherwise, a firm with lower annual sales may have the issue in operating since with limited financial resources or stream to settle all costs, even operational capacity. For instance, limited and constraint revenue stream may be their inability to pay specialized marketing personels, which may impact the smaller scale of marketing campaigns due to the absence of data analytics, then lowering profitability. It is supported by the economy of scale theory by Stigler (1958), explaining how economies of scale reduce average costs as output grows (a foundation for why larger firms can achieve ROI through lower unit cost.

The model account for 76% of the variations in return on investment and F-test confirms that the included explanatory variables jointly explain a significant portion of variation in ROMI. The findings confirm that achieving the breakeven point is not merely a short-term target but a key indicator of financial sustainability. Interestingly, how to adjust BEP is by managing the cost structure effectively and strategically. It emphasizes that a lower break-even threshold enhances cost efficiency and profitability once fixed costs are covered. Firms that reach their break-even point earlier tend to shift from cost recovery to profit generation more efficiently, thereby improving financial viability. At the same time, firms with higher revenue should be conducted collaboratively with strategic marketing approach to enhance more profitability. Because, when the implementation of marketing strategy is misaligned, such as overspending or pursuing low-return campaigns, they can potentially erode the profitability despite operational success.

Cost of Equity Assessment Estimation Results

Determining the related independent variables before estimating the dependent variables is essential. First, we must find out the hurdle rate of financial viability as the key indicator of this analysis by calculating the ROI and determining the CoE. First, in determining the B variable, it needs to calculate BEP first as the threshold before comparing with Qactual. H will be denoted as "1" when ROI ≥ CoE, otherwise "0."

$$\mathrm{H} = \begin{cases} 1, & \mathrm{ROI} \geq \mathrm{CoE} \\ 0, & \mathrm{ROI} < \mathrm{CoE} \end{cases} \quad (12)$$

In calculating ROI, the equation is expressed as follows:

$$ROI = \frac{Net\ Profit}{Capital\ Investment}\ x\ 100\% \quad (13)$$

ROI can implicitly measure the efficiency and profitability of the startup's marketing and operational strategies, providing a benchmark to determine whether the returns exceed the founder's required rate of return (CoE). However, in self-funded startups, especially the firms in

mental health industry examined in this study, whether there may be no external investors demanding a return or publicly traded. Instead, the founders are using their personal capital, such as savings, side income, or diverted salary, to fund operations and marketing activities. Even though this capital does not incur a visible cost like interest on a loan, it is not free. Hence, it is essential to still apply a cost of equity benchmark to determine if the return from a marketing strategy is justified in terms of financial logic.

According to Kerins, Smith and Smith (2004), the cost of equity will be estimated using CAPM by modifying with an opportunity cost approach, as such in this study. They also explain explain the estimate using CAPM effectively are the average over business cycle and are appropriate for prospective estimation when one is agnostic about future states of the economy, and add the reliance on the CAPM for making prospective estimates of cost of capital is consistent with Jagannathan and Wang (1996), which also explain and estimate a conditional version of the CAPM where beta can vary over business cycles. The equation of CAPM as:

$$CAPM = r_f + \beta_i\ (r_m - \ r_f) \qquad (14)$$

Additionally, there is a factor needs to be adjusted with the characteristic of either startups or industry for the high uncertainty in the early-stage, which are far riskier and more volatile than established public firms. For instance, since the startups are not publicly traded in the market, estimating with Beta is not possible. Hence, the substitution for that is using the term as follow:

$$\beta_{EM} = \frac{\sigma_V}{\sigma_M} \qquad (15)$$

Where $\boldsymbol{\beta_{EM}}$ is a ratio representing how volatile the startups' returns are relative to the market, which is used as an approximation of the founders' "market exposure" in the absence of tradable equity. $\boldsymbol{\sigma_V}$ is the standard deviation of the venture's returns, which is proxied by Indonesian healthcare listed firm's volatility and adjusted upward by a factor 3x in assumption to reflect the early-stage nature, emerging market risk and service sector volatility. $\boldsymbol{\sigma_M}$ is Indonesian market annual volatility. Hence, the equation for calculating CoE expressed as:

$$\mathrm{CoE} = \mathrm{r}_f + \beta_{EM}\left(\mathrm{r}_m - \ \mathrm{r}_f\right) = \ \mathrm{r}_f + \frac{\sigma_V}{\sigma_M}\ (\mathrm{r}_m - \ \mathrm{r}_f) \qquad (16)$$

ROMI is also identified to involve in this model in order to see how the effectiveness and efficiency of marketing activities can contribute in assessing financial viability, which enhance decision for investment or allocate funds rationally. Additionally, breakeven achievement also involves in this model to see how the impact of cost management and control on decision quality and confidence. At the end, it is also essential to account several relevant control variables that potentially influence decision-making either the process or the outcomes, in order to examine the determinants of the decision quality.

There are two key control variables. First, firm size is widely considered and recognized a key determinant of financial performance, cost of capital, and decision-making behavior. Second, risk (volatility) is accounted to the performance uncertainty that could distort the relationship between cost of equity and decision measurement. The variable is determined by the deviation of ROI with the equation expressed as follows:

$$Zrv'_{i,t}.\ \kappa = \sigma\ (\textstyle\sum_{\mathrm{i}=0}^{\mathrm{n}} \mathrm{ROI}_{i,t-n+1}\ , \ldots, \mathrm{ROI}_{i,t}) \qquad (17)$$

The estimation result for cost of equity assessment is illustrated in Table 4. The regression is conducted using panel data regressions with total observations are 104.

Table 4. Regression Results

D	Coef.	Std. Err.	t-value	p-value	[95% Conf	Interval]	Sig
H	.4435383	.1220001	3.64	0	.2014332	.6856435	***
ROMI	-.0219318	.0109198	-2.01	.047	-.0436018	-.0002619	**
B	-.1363584	.0408864	-3.34	.001	-.2174961	-.0552207	***
Zfs	.1466607	.0307368	4.77	0	.0856644	.2076569	***
Zrv	.3607975	.3628588	0.99	.323	-.3592841	1.080879	
Constant	-1.962701	.4115135	-4.77	0	-2.779336	-1.146066	***

Mean dependent var	0.192	SD dependent var	0.396
R-squared	0.792	Number of obs	104
F-test	666.851	Prob > F	0.000
Akaike crit. (AIC)	-49.609	Bayesian crit. (BIC)	-33.743
*** p<.01, ** p<.05, * p<.1		*Sources: Results of Author Data Processing (2025)*	

The analysis result reveals that when profitability exceeds the required rate of return, which is interpreted as H, has the highest impact on investment decision since the coefficient is 0.4435 ($p < 0.01$). this demonstrates that one percent increase in financial viability tends to increase the decision confidence of founders to invest, allocate additional resources to marketing activities or even business expansion, by 44%, and everything else equal. This strong correlation is aligned with the theory of Venkatraman & Ramanujam, (1986), which reflects the efficiency and effectiveness of a firm's strategic and operational decisions in generating value. Furthermore, there is firm size as first variable control that has positive and significant impact on the decision outcome since the coefficient result is 0.1466 ($p < 0.011$).

It implies that when firm size is increasing one percent, it will tend to increase the decision confidence level by 14.66%. It is in line with the RBV concept by Barney (1991), which argue larger firms that possess more tangible and intangible resources such as capital, potentially enhance their strategic flexibility and decision quality. This is indicating that the larger firms possess greater financial flexibility and resource capacity, such as higher revenue, make them more likely to reinvest in marketing activities. Second control variable, risk volatility, also influences the decision outcomes in assessing financial viability as it is shown that has a strong positive but insignificant effect ($\kappa\_2 = 0.361$). It is aligned with the study of Cen and Doukas (2017), which found that CEOs' personal risk-taking behaviour influences firm risk outcomes, suggesting that risk-related traits can shape organizational decisions. This is relevant to the founders' personal risk-taking behavior context, which means when the risk volatility they face is higher, they might push them to enhance strategic and financial competencies.

In contrast, breakeven achievement shows a strong negative impact on the decision (-.1364, $p < 0.01$), indicating that a higher breakeven point increases the financial pressure on firms to generate sufficient revenue just to cover costs, leaving leflexibility for strategic investments, which may make them tend to shift toward financial security, and risk mitigation, which is supported by

the theory of Venkatraman & Ramanujam, (1986). Furthermore, it is important to overview the implementation of marketing strategy since it has a negative impact on the decision outcome with coefficient of -.0219 ($p < 0.5$).

This may appear counterintuitive since the results suggest when ROMI increases one percent, the likelihood of a favorable decision outcome decreases by 2%. This may indicate marketing activities are not yielding sufficient financial returns relative to their costs in this case or imply the inefficiency overexpenditure. Practically, this may consider reactive decision-making when correlating to the result because if firms face chronically low or negative ROMI, they become overly cautious in reinvestment decisions. They may take time to assess their marketing activities or focus instead on cost containment and survival rather than proactive growth. This is aligned with the theory that firms generate sustainable advantage when internal resources (marketing capabilities) are efficiently utilized to create value (Barney, 1991).

The model account for 79.2% of the variations in decision and F-test confirms that the model as a whole is highly significant and the joint effect of all predictors are statistically meaningful in estimating decisions outcome of financial viability. The findings confirm that assessing of cost of equity is essential for founders when deciding to expand with their personal capital, especially in marketing initiatives, after comparing with the ROI as a key indicator. Startups that view marketing as an investment requiring disciplined financial evaluation rather than merely an expense are better positioned to balance growth ambitions with fiscal responsibility, and ensure resilience in a competitive and socially impactful industry. Hence, the empirical findings demonstrate that mental health startups' financial viability depends on their ability to manage marketing expenditures within a strategic financial framework, wih effective cost management, breakeven awareness, and consideration of opportunity cost collectively, in order to drive the sustainable profitability.

CONCLUSION

This research demonstrates that financial viability in mental health startups hinges on effectively aligning marketing strategies with disciplined cost management, treating marketing as an investment that balances cost structures, breakeven timing, and opportunity costs. While digital marketing accelerates growth, it risks instability without strategic alignment; startups adopting this integrative approach achieve sustainable profitability, optimize performance, and enhance accessibility in the mental health ecosystem. By synthesizing these factors, the study contributes a practical model for early-stage ventures in resource-constrained industries, offering theoretical advancements and guidance for entrepreneurs, policymakers, and investors to bolster social innovation's financial foundations in the digital era. For future research, scholars could extend this model longitudinally across diverse emerging markets or incorporate AI-driven marketing analytics to assess real-time adaptability in volatile economic conditions.

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