"Ambidextrous leadership and financial performance of Indonesian microfinance institutions: The role of business model and environmental dynamism"

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AMBIDEXTROUS LEADERSHIP AND FINANCIAL PERFORMANCE OF INDONESIAN MICROFINANCE INSTITUTIONS: THE ROLE OF BUSINESS MODEL AND ENVIRONMENTAL DYNAMISM

Abstract

This study aims to investigate the relationship between ambidextrous leadership, business models, and financial performance of Indonesia's microfinance institutions (MFIs) while also exploring the mediating role of business models and the moderating effect of environmental dynamism in this relationship. Data were collected from 104 microfinance institutions in Indonesia and analyzed using the mediation moderation procedure (ModMed) with macro Process 4.0. The results indicate a positive relationship between ambidextrous leadership, business model, and financial performance. As expected, the study also reveals that the MFI business model is positively related to financial performance and mediates the relationship between ambidextrous leadership and financial performance. The moderating analysis has confirmed the role of environmental dynamism in the relationship between business models and financial performance. The findings provide valuable insights for practitioners in the microfinance sector, suggesting that fostering ambidextrous leadership can enhance the effectiveness of business models, ultimately leading to improved financial performance. Moreover, this paper contributes to the existing literature by examining complex models on the relationship between ambidextrous leadership and financial performance by integrating business models and environmental dynamism within Indonesia's microfinance institutions.

Keywords

ambidextrous leadership, business model, environmental dynamism, financial performance, microfinance, Indonesia

JEL Classification G30, G32, J23

INTRODUCTION

The global focus on microfinance significantly increased after the United Nations declared 2005 the Year of Microcredit. These events drew widespread attention from academics and practitioners, leading to an exploration of the role of microfinance in reducing poverty and promoting financial inclusion. In 2006, the Microcredit Summit in Halifax marked a significant milestone by celebrating reaching 100 million borrowers, highlighting the scale of microfinance initiatives globally. However, these microfinance institutions have many limitations that can hamper their reach to poor communities. They face financial, technological, and human resource constraints and still only reach a fraction of the world's poverty. Moreover, the gap between the number of individuals served by microfinance institutions and the vast population living in poverty underscores the industry's challenges and limitations. Addressing these challenges is essential for advancing financial inclusion, poverty reduction, and sustainable development goals on a broader scale. In Indonesia, as in many other developing nations, the government is becoming increasingly aware of the importance of microfinance in addressing the challenges posed by a large population, high poverty levels, and a considerable number of unbanked and underbanked individuals. The Indonesian Financial Services Authority (OJK) has highlighted that 203 million Indonesians lack access to financial services, primarily due to obstacles such as a sparse network of formal financial institutions, a widely dispersed population, inadequate collateral, and low levels of financial literacy.

Although there are opportunities in this underserved market, the rapid growth of microfinance in Indonesia has brought about management and governance challenges. Consequently, over 40 microfinance companies have gone bankrupt between 2020 and 2024. Therefore, there is an urgent need to understand the factors that determine the sustainability of microfinance institutions. By identifying and addressing these factors, policymakers, regulators, and microfinance providers can improve the sector's resilience and ability to serve underserved populations' financial needs effectively. It is crucial to focus on improving management capabilities, governance practices, risk management frameworks, and financial literacy initiatives to ensure the long-term sustainability and impact of microfinance institutions in Indonesia.

1. LITERATURE REVIEW AND HYPOTHESES

Financial performance within organizations refers to evaluating their achievements in terms of goals, policies, and operations, expressed in monetary terms. It is a benchmark for assessing an organization's financial health. It allows for comparisons with similar entities in the same industry (Ngumo et al., 2020). For microfinance institutions (MFIs), financial performance is determined by their ability to progress toward microfinance objectives independently of donor assistance (Ngumo et al., 2020). The primary aim of microfinance was to alleviate poverty and improve the welfare of marginalized people who do not have access to finance in the conventional financial sector (Daher & Le Saout, 2015; Iqbal et al., 2019). However, studies have indicated that the evidence supporting the effectiveness of microfinance in achieving this fundamental goal needs to be more conclusive (Daher & Le Saout, 2013; Tuan Luu, 2017). As a result, researchers have redirected their focus toward evaluating microfinance institutions' outreach and social impact by identifying and assessing social performance indicators (SPIs) (Daher & Le Saout, 2013, 2015; Fadikpe et al., 2022; Iqbal et al., 2019). A growing focus is on monitoring and analyzing financial performance indicators (FPIs) to provide added value to microfinance lenders and investors. Measuring the financial performance in microfinance should be similar to measuring the financial performance of other financial institutions, such as banks.

Over the past two decades, researchers have identified leadership as vital to organizational success and overall effectiveness. Ambidextrous leadership is characterized by its ability to balance two fundamental behaviors: opening behaviors that promote exploration and creativity and closing behaviors that facilitate the exploitation and implementation of ideas. This dual approach is intended to boost innovative performance within organizations (Martínez-Climent et al., 2019; Rosing & Zacher, 2023; Zacher & Wilden, 2014). The relevance of this style has grown in dynamic environments (Gerlach et al., 2020; Samimi et al., 2022; Sattayaraksa & Boon-itt, 2018; Schulze & Pinkow, 2020), highlighting its importance in formulating strategies to tackle current challenges and prepare organizations for future opportunities (Kafetzopoulos, 2022). Drawing on the principles of dynamic capability theory (Teece, 2007, 2014), this study posits that ambidextrous leadership is directly linked to financial performance and indirectly influences it through a business model.

According to dynamic capability theory (Teece, 2010), ambidextrous leadership can be instrumental in developing strategic vision and direction. Ambidextrous leaders align exploration and exploitation efforts with the organization's overall goals, ensuring that new business models are both innovative and consistent with the organization's mission and market positioning (Kafetzopoulos et al., 2023; Payán-Sánchez et al., 2021). Furthermore, dynamic capability theory emphasizes organiza-

tions' need to reconfigure resources in response to changing conditions. Ambidextrous leaders excel at determining when to allocate resources to new initiatives or when to reinforce existing operations. This adaptability is crucial for developing and sustaining innovative business models that can evolve. Consequently, ambidextrous leaders inspire teams to devise innovative solutions that enhance microfinance services and address customer needs (Gerlach et al., 2020). With ambidextrous leadership, microfinance institutions can balance exploration (innovation) (Gerlach et al., 2020; Lyu et al., 2022; Yang et al., 2023) and exploitation (operational efficiency) (Tuan Luu, 2017), which will influence the development of their strategy model. In other words, ambidextrous leadership enhances strategic flexibility in microfinance institutions, enabling them to respond quickly to market changes and competitive dynamics (Gibson & Birkinshaw, 2004). Hence, ambidextrous leadership enhances an organization's dynamic capabilities by fostering a culture of innovation, balancing exploration and exploitation, and enabling responsiveness to market changes.

Ambidextrous leadership plays a vital role in shaping organizational performance by effectively balancing encouraging creativity with enforcing norms and objectives. This leadership style is associated with favorable outcomes, particularly in financial performance (Katou et al., 2023; Sahyaja & Rao, 2019; Tuan Luu, 2017; J. Zheng et al., 2017). Ambidextrous leadership significantly boosts firm performance in the IT sector (Sahyaja & Rao, 2019). It also promotes entrepreneurial orientation, subsequently enhancing operational performance. This connection is further amplified by organizational social capital, indicating that companies with robust social networks can more effectively utilize ambidextrous leadership to achieve financial benefits (Tuan Luu, 2017). In project-based organizations, ambidextrous leadership has been shown to improve project performance by cultivating a culture that integrates both transformational and transactional leadership styles, thereby enhancing overall outcomes (Zheng et al., 2017). Furthermore, ambidextrous leadership contributes to sustainable performance, including economic success, through strategies such as organizational ambidexterity and circular economy practices (Katou et al., 2023). Moreover, ambidextrous leadership is

essential for MFIs to effectively manage financial performance and operational efficiency challenges (Fadikpe et al., 2022). Moreover, they are known for fostering innovation while ensuring operational efficiency (Gerlach et al., 2020; Lyu et al., 2022; Tuan Luu, 2017; Yang et al., 2023; Zacher & Rosing, 2015). This balance is crucial for organizations that adapt to changing market conditions while maintaining strong performance metrics.

Research on the concept of ambidexterity has been explored from various perspectives. Ambidexterity balances two seemingly contradictory activities: exploration, which involves innovating and seeking new opportunities, and exploitation, which focuses on optimizing and refining existing capabilities. This balance is generally associated with improved organizational performance, enabling firms to adapt to changing environments and sustain competitive advantages. For example, several studies have investigated organizational ambidexterity as a precursor to financial performance (Ambilichu et al., 2023; Ansah et al., 2022; Dranev et al., 2020; Shuwaikh et al., 2022; Taha et al., 2024). Other research has focused on specific aspects such as marketing ambidexterity (Josephson et al., 2016) and dynamic ambidexterity (Shuwaikh et al., 2022). In the same vein, previous studies suggest that ambidextrous leadership can indirectly affect company performance through the development of business models (Bawono et al., 2022; Lyu et al., 2022; Saputra et al., 2022). For instance, ambidextrous leadership promotes digital business model innovation, significantly enhancing organizational performance. This connection was particularly evident in the telecommunications sector during the COVID-19 pandemic, where digital business models mediate ambidextrous leadership and performance outcomes (Bawono et al., 2022). Additionally, ambidextrous leadership improves organizational agility, a critical factor for firm performance.

Furthermore, the relationship between ambidextrous leadership and sustainability performance is mediated by employees' green creativity and product innovation, which collectively enhance organizational sustainability outcomes (Lyu et al., 2022). Based on these findings, ambidextrous leadership is vital in enhancing company performance through business model innovation and Problems and Perspectives in Management, Volume 22, Issue 4, 2024

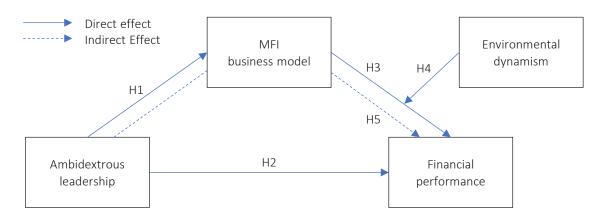


Figure 1. Research model

improving organizational strategy. Specifically, ambidextrous leadership positively impacts company performance, both directly and indirectly, by mediating business model development.

This study also posits that environmental dynamism is a crucial boundary condition influencing the relationship between business models and the financial performance of microfinance institutions. Environmental dynamism refers to the uncertainty, complexity, and rapid change in the external environment in which organizations operate (Miller & Friesen, 1983; Seo et al., 2020). This dynamism can stem from various factors, including regulatory shifts, competitive market conditions, and evolving socioeconomic landscapes. According to dynamic capability theory (Teece, 2007, 2014), an organization's ability to swiftly respond to external changes is crucial for maintaining competitiveness. This theory underscores the necessity of strategic flexibility, which allows organizations to adapt their business models in response to environmental shifts. In highly dynamic environments, MFIs may face pressures to innovate and differentiate their business models to remain relevant and effective in achieving financial objectives (He et al., 2020; Wen et al., 2022).

Moreover, empirical studies have supported the notion that environmental uncertainty acts as a moderator in the relationship between organizational capabilities, strategy, and performance outcomes (Agyapong et al., 2020; Chaudhuri et al., 2023; Onngam & Charoensukmongkol, 2024; Teng et al., 2022; Zhang et al., 2020). This suggests that the effectiveness of a business model in driving financial performance is not solely dependent on the model itself but is also significantly influenced by the degree of dynamism in the environment. Thus, environmental dynamism serves as a critical boundary condition that shapes how business models operate and their effectiveness in enhancing the financial performance of MFIs.

This study aims to evaluate the connection between ambidextrous leadership, business models, and the financial performance of microfinance institutions in Indonesia. Furthermore, this study explores the mediating role of business models in the relationship between ambidextrous leadership and financial performance and the moderating effect of environmental dynamism on the relationship between business models and financial performance (Figure 1). The following hypotheses are proposed for this study:

- H1: There is a significant positive relationship between ambidextrous leadership and MFI's business model.
- H2: There is a significant positive relationship between ambidextrous leadership and MFI's financial performance.
- H3: There is a significant positive relationship between MFI's business model and financial performance.
- H4: MFIs' business model mediates the relationship between ambidextrous leadership and financial performance.
- H5: Environmental dynamism moderates the relationship between MFI's business model and financial performance.

2. METHODOLOGY

This study surveyed leaders and top management from microfinance institutions in Indonesia using purposive sampling methods. The research was conducted according to local law and received ethical approval from the Binus University ethical committee to ensure its quality. Participation in the study was completely voluntary and did not involve any compensation. Participants expressed their informed consent to participate in the survey by completing the questionnaire. This study aimed to collect detailed information about the organization's strategy, business model, and financial performance; thus, the target respondents are MFI employees at the managerial level and above.

As of December 2023, there were 245 MFIs in Indonesia, with 104 expressing their willingness to participate in the research. Among the 104 respondents, the majority were in the 40-49 age group (39.4%), followed by the 30-39 age group (23.1%), and those over 50 years old (22.1%). Most respondents held a Bachelor's (56.7%) or a Master's (12.5%) degree. Regarding work experience, 17.3% of respondents had worked at MFIs for over five years, 39.4% for 3-5 years, and 17.3% for less than three years. The majority of respondents held positions as managers (34.6%), followed by main directors (29.8%), treasurers/secretaries (15.4%), and deputy directors (10.6%).

The measurement variables and minor revisions from previous studies have been adapted to adjust the context. For ambidextrous leadership, the study used a 14-item scale measuring two dimensions (opening leader behavior and closing leader behavior) from Rosing et al. (2011). The business model, adapted from Teece (2010), includes technological innovation, collaboration, market segment, and cost efficiency. Environmental dynamism, adapted from Zheng and Zhang (2021), includes market uncertainty, technological changes, changes in market tastes, and regulations. Finally, financial performance is measured using growth in capital, liabilities, and nonperforming loans (Kamukama et al., 2017). All respondents were asked to provide answers based on a five-point Likert scale, ranging from "strongly disagree/very low" (1) to "strongly agree/very high" (5). All constructs exhibit Cronbach's Alpha (CA) internal

consistency (see Table 1), meeting the cut-off value of 0.70 (Nunnally & Bernstein, 1994): ambidextrous leadership (CA = 0.93), business model (CA = 0.88), and environmental dynamism (CA = 0.90).

3. RESULTS AND DISCUSSION

The first stage involves assessing and controlling for common method variance (CMV), which refers to the potential bias from using a single data source (e.g., self-report surveys). CMV testing is crucial for ensuring the quality and integrity of research data by identifying and mitigating sources of bias or error associated with common method sources. Control over common method variance can be achieved through two main approaches. First, in control methods, survey items are randomized and not placed sequentially to minimize the impact of method effects on responses. Second, the Harman single-factor model as a statistical control approach (Podsakoff et al., 2012) involves using a factor analysis technique to assess the extent of common method variance in the data. After addressing common method variance, the ModMed procedure was developed by Hayes (2017) to test hypotheses related to mediation and moderation effects in the present model.

Table 1 presents the results of the Harman Onefactor test, indicating that no single factor was dominant, with the maximum variance explained by one factor being 41.911%. Since no individual factor accounted for more than 50% of the variance, it is unlikely that common method variance significantly influenced the data (Podsakoff et al., 2003, 2012). Additionally, the findings in Table 1 confirm convergent validity, as all indicator load factors range from 0.588 to 0.876, surpassing the recommended cut-off value of 0.50, according to Hair et al. (2019).

Table 2 presents the mean scores for each variable in the study. The mean score of 3.50 for ambidextrous leadership indicates a moderate presence of ambidextrous leadership practices within the organization, as perceived by the respondents. The mean score of 3.71 for the MFI business model suggests a relatively high alignment with the MFI business model within the organization. The mean score of 3.61 for environmental dynamism Problems and Perspectives in Management, Volume 22, Issue 4, 2024

Variable	Number of items	SLF	CA	% of variance	
Ambidextrous Leadership	14	.703–.810	0.93	41.91	
MFI Business Model	5	.646–.786	0.88	13.41	
Environmental Dynamism	5	.588–.703	0.90	11.50	
Cumulative %	66.822				
KMO and Bartlett's test	.885				

Table 2. Descriptive statistics and correlations between variables

No.	Variable	Mean	SE	1	2	3	4
1	Ambidextrous leadership	3.50	0.93	1			
	MFI business model	3.71	0.76	.490**	1		
3	Environmental dynamism	3.61	0.76	.555**	.500**	1	
4	Financial performance	1.96	0.80	.606**	.888**	.586**	1

Note: **. Correlation is significant at the 0.01 level (2-tailed).

indicates a moderate level of perceived external environmental dynamism or change. Lastly, the mean score of 1.96 for financial performance suggests a relatively low perception of the organization's financial performance.

In addition, Table 2 presents details about the connections among the variables in the study. Ambidextrous leadership was found to have a significant positive relationship with the MFI business model (r = 0.490, p < 0.01) and financial performance (r = 0.606, p < 0.01). The MFI business model also exhibited a strong positive correlation with financial performance (r = 0.888, p < 0.01) and environmental dynamism (r = 0.500, p < 0.01). Overall, the correlations outlined in Table 2 offer initial evidence supporting the proposed relationships between ambidextrous leadership, MFI business model, financial performance, and environmental dynamism.

Table 3 provides a detailed overview of the connections between ambidextrous leadership, business models, financial performance, and the mediating and moderating role of business models and environmental dynamism. Hypothesis 1 states that ambidextrous leadership is positively related to business models. The results confirmed H1, showing a significant positive relationship between ambidextrous leadership and business models $(\beta = 0.398, p < 0.01)$. Hypothesis 2 proposed that ambidextrous leadership is positively related to financial performance. The results supported H2, demonstrating a significant positive relationship between ambidextrous leadership and financial performance ($\beta = 0.090$, p < 0.05). Hypothesis 3 suggested that the business model is positively related to financial performance. The results validated H3, indicating a strong positive relationship between the business model and financial performance ($\beta = 0.811$, p < 0.01). Hypothesis 4 proposed

Variable	Coefficient	SE	t-value	p-value	LLCI	ULCI
	Model 1	: Outcome BN	1. <i>R</i> ² = 0.240			
Ambidextrous leadership	0.398	0.070	5.678	0.000	0.259	0.537
	Model 2	2: Outcome Fl	P. <i>R</i> ² = 0.877			
Ambidextrous leadership	0.090	0.039	2.278	0.025	0.012	0.168
MFI business model	0.811	0.045	17.974	0.000	0.722	0.901
	Γ	Moderating E	fect			
BM x ED	0.295	0.051	5.751	0.000	0.193	0.397
		Mediating eff	ect			<u>.</u>
	Effect	BootSE	BootLLCI	BootULCI		
Indirect effect	0.323	0.054	0.218	0.431		

Table 3. Moderation and mediation results (PROCESS: Model 14)

Note: BM = Business model, ED = environment dynamism, FR = Financial performance, LLCI = Lower-level of confidence interval; ULCI = Upper-level of confidence interval.

that the business model mediates ambidextrous leadership and financial performance. The results supported H4, with the business model as a significant mediator of the relationship between ambidextrous leadership and financial performance $(\beta = 0.323, p < 0.05)$. Hypothesis 5 states that environmental dynamism moderates the relationships in the model. The results confirmed H5, indicating that environmental dynamism significantly moderates the relationships examined ($\beta = 0.295$, p < 0.2950.05). Overall, the study's findings provide valuable insights into the complex interplay among ambidextrous leadership, business models, financial performance, and environmental dynamism, shedding light on how these factors influence organizational outcomes.

This study found that ambidextrous leadership is significantly related to business models, indicating that effective ambidextrous leadership is essential for developing and implementing successful business models in Indonesian MFIs. The findings support the dynamic capability theory (Teece, 2010) and align with previous research highlighting the crucial role of ambidextrous leadership in shaping strategic vision and direction (Kafetzopoulos et al., 2023; Payán-Sánchez et al., 2021). This relationship is logical, as ambidextrous leadership simultaneously fosters innovation and exploitation (Gerlach et al., 2020; Lyu et al., 2022; Tuan Luu, 2017; Yang et al., 2023), enabling the development of effective strategy models that can swiftly adapt to market changes and competitive dynamics (Gibson & Birkinshaw, 2004). This study builds upon prior research (Bawono et al., 2022; Sahyaja & Rao, 2019) that explored the connection between ambidextrous leadership and business models and strategies within the IT and communications sectors.

The analysis also revealed a notable positive correlation between ambidextrous leadership and financial performance, suggesting that strong ambidextrous leadership in microfinance institutions (MFIs) leads to improved financial outcomes. This study specifically supports the idea that ambidexterity enhances organizational performance (Ambilichu et al., 2023; Ansah et al., 2022; Dranev et al., 2020; Josephson et al., 2016; Shuwaikh et al., 2022; Taha et al., 2024). Additionally, the findings indicate that ambidextrous leadership can have a direct effect on company performance, a connection that has primarily been explored through indirect mechanisms (Bawono et al., 2022; Lyu et al., 2022; Saputra et al., 2022). The connection between ambidextrous leadership and financial performance can be understood logically, as this leadership style is known for effectively managing innovation while addressing challenges related to operational efficiency (Fadikpe et al., 2022; Gerlach et al., 2020; Lyu et al., 2022; Tuan Luu, 2017; Yang et al., 2023; Zacher & Rosing, 2015). In other words, ambidextrous leaders excel at balancing the competing demands of utilizing existing resources for immediate operational efficiency while exploring innovation opportunities, which are two critical components that form financial performance.

The findings further reveal that the business model is significantly associated with financial performance, mediating the relationship between ambidextrous leadership and financial performance. This study reinforces the ambidextrous leadership process model and its impact on organizational performance, as evidenced in previous research (Bawono et al., 2022; Lyu et al., 2022; Saputra et al., 2022). A well-functioning business model is a crucial mechanism through which ambidextrous leadership influences financial performance within these institutions. Consequently, this study contributes to the existing literature by exploring business models' intermediary role in ambidextrous leadership and financial performance, specifically within Indonesia's microfinance institutions.

Finally, this study further supports the dynamic capability theory (Teece, 2010, 2014), which suggests that a combination of internal and external changes plays a key role in determining organizational success (Kumar & Bhatia, 2021; Seo et al., 2020; Sharma et al., 2022). The study's results confirm that changes in the external environment significantly affect the relationships between business models and financial performance. This statistical significance indicates that the level of environmental changes, reflecting the rate of change and uncertainty in the external environment, plays a crucial role in influencing how business models affect the financial performance of MFIs. The positive direction of the impact suggests that environmental changes can amplify the influence of business models on financial performance, treating the external environment as an opportunity rather than a barrier for MFIs.

Despite its contributions, this study has several limitations. First, it specifically examines microfinance institutions (MFIs) in Indonesia, which may restrict the generalizability of the findings to microfinance contexts in other countries or regions. Second, the reliance on cross-sectional data limits the ability to establish causal relationships over time between ambidextrous leadership, business models, environmental dynamism, and financial performance. Third, measuring ambidextrous leadership and environmental dynamism can be challenging due to their complex and multifaceted nature.

Several suggestions for future research are proposed. First, longitudinal research designs could provide insights into the dynamic relationships between ambidextrous leadership, business models, environmental factors, and financial performance in MFIs over an extended period. Second, comparative studies across different countries or regions could shed light on how contextual factors influence the relationships between leadership, business models, and financial outcomes in microfinance institutions.

Additionally, exploring other mediating and moderating factors – such as organizational culture, technology adoption, or regulatory environments – could enhance understanding of the determinants of financial performance in MFIs. Finally, future research could investigate the implications of ambidextrous leadership and business model innovation on the sustainability and social impact of MFIs. This exploration should consider aspects beyond financial performance, including social inclusion, poverty alleviation, and community development, thereby providing a more comprehensive view of the role of MFIs in society.

CONCLUSION

This study aims to explore the relationship between ambidextrous leadership, business models, and the financial performance of microfinance institutions in Indonesia while also examining the mediating role of business models and the moderating effect of environmental dynamism within this framework. Data from 104 MFIs were collected and analyzed using the mediation-moderation procedure (ModMed) with the Macro Process 4.0 tool. The results show a positive correlation between ambidextrous leadership, business models, and financial performance. Additionally, the study reveals that the business model of MFIs is positively connected to financial performance and acts as a mediator in the relationship between ambidextrous leadership and financial performance. The moderating analysis also confirms that environmental dynamism impacts the relationship between business models and financial performance.

This study specifically contributes to the literature on ambidextrous leadership by examining its impact on financial performance through the development of a business model within microfinance institutions. Furthermore, the findings offer valuable insights for managing financial performance in the microfinance sector by highlighting the importance of creating a business model that takes into account the dynamics of the external environment. This approach enhances the understanding of how ambidextrous leadership can drive financial success by implementing adaptive strategies that align with changing market conditions and stakeholder expectations.

The study highlights several practical implications for microfinance institutions, especially in Indonesia. Firstly, MFIs should focus on developing ambidextrous leadership qualities within their management teams through targeted training programs that enhance leaders' abilities to balance exploration and exploitation, fostering innovation while maintaining operational efficiency. Second, it is essential for MFIs to continuously refine and adapt their business models to meet changing market conditions and customer needs, incorporating innovative practices and leveraging technology to remain competitive. Comparative studies with similar sectors, such as banking, can provide valuable insights for strategy de-

velopment. Additionally, MFIs must remain vigilant and responsive to external changes, including economic shifts and regulatory updates, to enhance the effectiveness of their business models and improve financial performance. Finally, integrating leadership practices with business strategies is essential for guiding the organization toward its financial goals. Management should encourage innovation and flexibility by promoting open communication, collaboration, and a readiness to experiment with new ideas. This approach will enhance the organization's adaptability to a dynamic environment.

AUTHOR CONTRIBUTIONS

Conceptualization: Syahrul Effendi, Idris Gautama So, Nugroho Juli Setiadi, Gatot Soepriyanto. Data curation: Syahrul Effendi, Idris Gautama So, Nugroho Juli Setiadi, Gatot Soepriyanto. Formal analysis: Syahrul Effendi, Idris Gautama So, Nugroho Juli Setiadi, Gatot Soepriyanto. Funding acquisition: Syahrul Effendi. Investigation: Syahrul Effendi. Methodology: Syahrul Effendi, Idris Gautama So, Nugroho Juli Setiadi, Gatot Soepriyanto. Project administration: Syahrul Effendi. Resources: Syahrul Effendi. Software: Syahrul Effendi. Supervision: Idris Gautama So, Nugroho Juli Setiadi, Gatot Soepriyanto. Validation: Syahrul Effendi, Idris Gautama So, Nugroho Juli Setiadi, Gatot Soepriyanto.

Visualization: Syahrul Effendi, Idris Gautama So, Nugroho Juli Setiadi, Gatot Soepriyanto.

Writing – original draft: Syahrul Effendi.

Writing - review & editing: Syahrul Effendi, Idris Gautama So, Nugroho Juli Setiadi, Gatot Soepriyanto.

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