

## Leadership Analysis on the Financial Well-Being of MSME Entrepreneurs with Diffusion of Innovations as a Moderating Variable

Novia Utami<sup>1</sup>, Marsiana Luciana Sitanggang<sup>2</sup>

<sup>1,2</sup> Atma Jaya Catholic University of Indonesia, Jl. Jend. Soedirman No. 51, South Jakarta, Indonesia, 12930  
[novia.utami@atmajaya.ac.id](mailto:novia.utami@atmajaya.ac.id), [marsiana.luciana@atmajaya.ac.id](mailto:marsiana.luciana@atmajaya.ac.id)

### ARTICLE INFO

### ABSTRACT



This research aims to analyze the influence of leadership on the financial well-being of Micro, Small, and Medium Enterprises (MSMEs) entrepreneurs in Indonesia, with innovation diffusion as a moderating variable. Data were collected by surveying 400 MSME entrepreneurs who have been in business for at least six months. Data were analyzed using the Structural Equation Model (SEM) with the SEM-PLS program. The analysis results indicate that innovation adoption and leadership positively and significantly influence the financial well-being of MSME entrepreneurs. Additionally, innovation diffusion plays a significant moderating role in the relationship between leadership and financial well-being. The practical implication is that MSME entrepreneurs can enhance their financial well-being by adopting innovation and having effective leadership.

**Received:** (June 24, 2024)

**Received in revised:**  
(September 20, 2024)

**Accepted:** (December 16, 2024)

**Published:** (December 30, 2024)

**Keywords:** MSMEs, leadership, diffusion of innovation, financial well-being

### Open Access

## 1. Introduction

To achieve a state of prosperity, particularly financial well-being, individuals must possess the ability to innovate and adapt in order to advance and thrive, even in the face of unexpected challenges. The world is full of uncertainties, and countless unforeseen events can disrupt even the most well-laid plans (Llena-Nozal et al., 2019). One such event was the COVID-19 pandemic, which no one could have predicted would affect every corner of the globe. The pandemic emerged suddenly and swiftly, becoming a global crisis that overwhelmed societies and economies alike. It underscored how interconnected the world has become and how vulnerable many sectors, especially the economy, are to disruptions (Ibn-Mohammed et al., 2021).

The economic impact was profound, with industries worldwide experiencing unprecedented disruptions. Many businesses faced closures, workers lost their jobs, and supply chains were severely affected. Individuals and communities that lacked the ability to adapt or innovate during these trying times found themselves in financial difficulty. This situation highlighted the critical importance of innovation and resilience—not just for businesses but also for individuals striving to

maintain their financial well-being in the face of adversity (Brem et al., 2021).

Financial well-being is not just about having wealth but also about having the capacity to manage resources effectively, adapt to changes, and seize new opportunities, even when external conditions are unfavorable (Anvari-Clark & Ansong, 2022). The COVID-19 pandemic serves as a stark reminder that the ability to navigate uncertainty and remain flexible in a rapidly changing world is essential for long-term prosperity.

The ability to innovate becomes increasingly critical during times of crisis, such as the COVID-19 pandemic. Innovation not only empowers individuals and businesses to adapt swiftly to rapidly changing conditions but also helps them find new solutions to emerging challenges and seize opportunities for growth and resilience. In unpredictable scenarios, like a global pandemic, the role of innovation is amplified, serving as a crucial tool for navigating uncertainties and safeguarding financial well-being (Hynes et al., 2020).

Businesses that have embraced innovation have demonstrated greater agility and resilience during such crises. These businesses have been able to pivot their operations, adopt new business

\* Novia Utami

E-mail addresses: [novia.utami@atmajaya.ac.id](mailto:novia.utami@atmajaya.ac.id) (Atma Jaya Catholic University of Indonesia)  
2614-6983/ © 2024 P3M Politeknik Negeri Bengkalis. All rights reserved.

models, and leverage technology to continue serving customers and maintain their financial health (Kyrdoda et al., 2023). For example, companies that successfully transitioned to remote work environments were able to ensure business continuity while protecting employee safety. Similarly, businesses that implemented contactless delivery systems and expanded online sales channels could meet the evolving needs of their customers while adhering to safety protocols.

By adopting these innovative approaches, many businesses not only weathered the storm but also discovered new pathways for growth during adversity. Innovation, in this sense, has proven to be a key driver in sustaining both short-term survival and long-term prosperity, reinforcing the importance of adaptability and creativity in overcoming crises.

Moreover, innovation extends beyond mere technological advancements; it encompasses creative problem-solving, entrepreneurial thinking, and adaptability. These qualities allow individuals to confront challenges head-on, explore untapped opportunities, and secure financial well-being in an increasingly unpredictable world. People who possess innovative traits, such as flexibility and the willingness to embrace change, are better equipped to navigate disruptions, whether in their personal lives or within the broader economy (Corvello et al., 2023).

In times of crisis, such as the COVID-19 pandemic, these innovative capacities become even more crucial. The pandemic has laid bare the vulnerabilities of many sectors while simultaneously highlighting the strength of those who were able to innovate. Innovation has proven to be not only a survival mechanism but also a pathway to growth, enabling individuals and businesses alike to adapt swiftly to shifting market conditions and consumer needs. Entrepreneurs who have creatively rethought their business strategies, or individuals who have found new ways to manage their finances or generate income, are prime examples of how innovation can be a lifeline during uncertain times (Faulks et al., 2021).

The COVID-19 pandemic has underscored the importance of fostering a culture of innovation as a critical component in achieving and maintaining financial well-being. As individuals and businesses continue to grapple with the pandemic's long-lasting repercussions, it becomes evident that innovation is not simply a short-term solution but a long-term strategy for building resilience (Zighan & Ruel, 2023). By nurturing an environment that encourages creative thinking, adaptability, and entrepreneurial spirit, individuals and businesses can position themselves to not only survive in the present but also thrive in the future.

In essence, fostering innovation helps individuals and businesses overcome immediate challenges, capitalize on emerging opportunities, and strengthen their ability to weather future crises. By embracing innovation in all its forms—whether through technological tools, creative

solutions, or new business models—people and organizations can enhance their resilience, drive growth, and secure a path toward long-term prosperity. Innovation, therefore, becomes a cornerstone in building a sustainable and financially secure future, allowing individuals to thrive amid uncertainty and emerge stronger on the other side (Patterson et al., 2022).



Figure 1. Growth Rate of the Indonesian Economy (Year on Year)

The graph above shows the Gross Domestic Product (GDP) growth trend from 2020 to 2022, illustrating the profound economic downturn in Indonesia. For instance, based on the provided statistical data, Indonesia's GDP growth reached a staggering -5.32% in the second quarter of 2020. This decline in GDP is directly attributable to the panic induced by the onset of the COVID-19 pandemic. During this period, circumstances compelled individuals to alter their lifestyles instinctively with the primary goal of survival (Venkatesh et al., 2021).

This event and its associated circumstances warn all economic stakeholders to be prepared for any situation, particularly for Micro, Small, and Medium Enterprises (MSMEs). Currently, MSMEs are at the forefront of economic growth (Irikefe & Opusunju, 2021; Tusianti et al., 2019). In Indonesia, MSMEs contribute over 60% of the national GDP (Doni, 2022). Before the COVID-19 pandemic, Indonesia had approximately 64.7 million MSMEs, but since the onset of the pandemic, more than 30 million MSMEs have been forced to close down (Sembiring, 2021). This is one of the primary reasons for the drastic decline seen in Indonesia's GDP graph.

The impact of economic crises, such as the COVID-19 pandemic, on Micro, Small, and Medium Enterprises (MSMEs) is profound, given their inherent vulnerability to economic shocks. MSMEs often lack the financial resilience, access to credit, and digital infrastructure needed to withstand prolonged disruptions. With limited reserves and resources, they face significant challenges in maintaining their operations during periods of lockdown, supply chain disruptions, and decreased consumer demand. Unlike larger corporations with diversified portfolios and access to capital, MSMEs are particularly susceptible to cash flow problems, making it difficult for them to navigate periods of economic uncertainty (Anwana, 2024).

The collapse of MSMEs has far-reaching consequences, not only for the businesses themselves but also for the broader economy. MSMEs are critical drivers of employment, income generation, and poverty alleviation, particularly in developing economies. When these enterprises are forced to close, it leads to widespread job losses, reduced household incomes, and increased pov-

erty rates, further exacerbating the economic downturn. Moreover, the closure of MSMEs results in lost entrepreneurial opportunities, stifling innovation and entrepreneurship—the very lifeblood of long-term economic growth. Without the dynamism and creativity of small and medium-sized businesses, economic recovery is slowed, and the prospects for sustainable growth are hindered (Ma et al., 2023).

Recognizing the vital role of MSMEs in the economy, governments and policymakers have introduced various support measures to mitigate the impact on these businesses. Financial assistance programs have been rolled out to provide immediate relief, helping MSMEs cover operational costs, retain employees, and weather the storm of reduced revenue. Access to credit facilities has also been expanded, allowing businesses to obtain the necessary capital to maintain liquidity and invest in recovery efforts. In addition, many governments have launched capacity-building initiatives to equip MSMEs with the skills needed to adapt to new market realities, such as the growing importance of digitalization (Mujianto et al., 2021). By enhancing digital infrastructure, these initiatives aim to improve market access and resilience, enabling MSMEs to reach new customers through e-commerce platforms and digital marketing strategies.

Looking ahead, it is crucial that economic recovery efforts prioritize the resilience and sustainability of MSMEs. To ensure that these businesses are better prepared for future disruptions, an enabling environment must be created. This includes supportive policies that reduce barriers to entry, infrastructure development that enhances connectivity and access to markets, and skill enhancement programs that empower MSMEs to innovate and thrive in an ever-changing economic landscape. Furthermore, efforts to strengthen digital literacy and adoption are essential for helping MSMEs tap into the growing digital economy, enabling them to remain competitive and responsive to shifting consumer preferences (Loo et al., 2023).

In addition to government intervention, collaboration between the public sector, private sector, and civil society is essential to fostering a coordinated and effective response to future crises. By working together, these stakeholders can ensure that MSMEs receive the resources, support, and guidance needed to navigate uncertainties and capitalize on emerging opportunities. Strengthening this collaboration will safeguard the resilience and dynamism of MSMEs, allowing them to continue serving as engines of economic growth, innovation, and development. As the world faces an increasingly unpredictable future, empowering MSMEs to adapt and thrive is critical to building a more inclusive, sustainable, and resilient global economy.

The Government has taken proactive steps to support the strengthening of MSMEs through initiatives led by the Ministry of Tourism and Creative Economy and the Ministry of Cooperatives and Small and Medium Enterprises. However, the success of these efforts relies heavily on the willingness of MSME entrepreneurs to continue learning and innovating, particularly in business

operations. Ultimately, while the Government serves as a mentor to facilitate the continuous growth of MSMEs, the entrepreneurs themselves are the primary drivers of MSME development (Rosyadi et al., 2020).

One critical aspect that MSME entrepreneurs must possess is leadership skills. Effective leadership enables MSME entrepreneurs to make careful decisions even in challenging circumstances. Leadership emphasizes hard and soft skills, ensuring that decisions align with prevailing situations and conditions (Marques & Dhiman, 2017a). Additionally, MSME entrepreneurs must articulate innovative products to the public through specific methods, utilizing the principles of diffusion of innovation to ensure acceptance within the community (Rogers et al., 2014).

While government support initiatives aim to empower MSMEs to overcome challenges and seize opportunities, their success ultimately hinges on their entrepreneurs' determination, resilience, and innovation. Therefore, continuous learning, adaptability, and effective leadership are essential for MSMEs to thrive in today's dynamic business environment.

In previous research, it was found that for entrepreneurs of Micro, Small, and Medium Enterprises (MSMEs) to succeed in developing their businesses, they must apply leadership principles that are suitable for the prevailing situations and conditions (Akca, 2021; Rumangkit & Hadi, 2022; Thamrin & Wahyudi, 2022). Additionally, MSME entrepreneurs must continuously innovate because innovation is necessary for any company or business to endure for long (Christensen et al., 2016; Greenacre et al., 2012). One common issue that often leads to the failure of many MSME entrepreneurs is the need for more implementation of the implemented innovations. Furthermore, governance policy errors also contribute to hindering their businesses, preventing the achievement of financial well-being.

Therefore, to achieve financial well-being, MSME entrepreneurs must be able to market their products effectively. Moreover, the innovations pursued by MSME entrepreneurs also need to be delivered (diffused) so that society can receive their products well. Based on the above explanation, the researcher formulates research questions to be addressed in this study:

1. How does leadership influence the financial well-being of MSME entrepreneurs?
2. What forms of diffusion of innovation are appropriate for MSME entrepreneurs?
3. How do variables within leadership and diffusion of innovation affect the financial well-being of MSME entrepreneurs?

## 2. Literature Review

### 2.1. Financial Well-being

Financial well-being is a psychological state or disposition of feeling secure in current and future financial aspects (Sang, 2021). In other words, financial well-being encompasses the ability to meet unexpected needs that may arise at any time. Financial well-being also indicates

that individuals or families have sufficient funds to lead a comfortable life. PricewaterhouseCoopers conducted a study on financial well-being in 2019 (PricewaterhouseCoopers, 2023). The study results indicated that a person can be considered to have achieved financial well-being when they do not feel stressed about money, have no debt, can afford to pay routine living expenses, and are free to make choices regarding desired improvements in their standard of living. Therefore, achieving financial well-being requires a deep understanding of finances. Understanding financial matters is crucial to be learned from an early age because (Sang, 2021):

1. To achieve financial well-being, one must have the ability to manage finances within a specific timeframe, and it should be done routinely.
2. One must adapt appropriately to uncertain (ambiguous) realities to achieve financial well-being.
3. To achieve financial well-being and prosperous financial goals, one must plan meticulously.
4. To achieve financial well-being, one must have financial freedom to choose and fulfill what is needed.

Financial well-being is not solely about having a significant income but rather about managing finances wisely, being prepared for unexpected situations, and having a sense of security and freedom in financial decision-making. It requires individuals to develop financial literacy, cultivate responsible financial habits, and prioritize long-term financial goals over short-term desires. Ultimately, achieving financial well-being leads to greater peace of mind, reduced stress, and increased overall satisfaction with life.

## 2.2. Leadership

Leadership is crucial in building an organization, whether on a small or large scale. The book "Leadership Today" by Joan Marques (2017) mentions that leadership is not merely an abstract concept but goes beyond that; it is a skill that every leader must possess. A good leader can lead with a specific leadership model. This implies that leadership is not just about being in charge but involves possessing the necessary skills to guide and inspire others effectively. Leaders must have a clear understanding of different leadership styles and be able to adapt their approach to suit various situations and individuals within their organization (Marques & Dhiman, 2017b).

The book "Leadership Today" covers two main aspects: leadership viewed from the perspective of soft skills and leadership viewed from the perspective of hard skills (Marques & Dhiman, 2017). Nineteen key elements constitute soft skills: purpose, trust, moral behavior, values, vision, authenticity, emotional intelligence, spirituality, sustainability, mindfulness, empathy, motivation, communication, dependability, creativity, initiative, self-confidence, resilience, and perseverance. Meanwhile, within the realm of hard skills are four key elements: ambition, global

understanding, information technology, and planning (Marques & Dhiman, 2017b).

The Soft Skills and Hard Skills articulated by Marques are essentially a synthesis of all leadership theories (Marques & Dhiman, 2017b). This is because only some leadership theories can encompass all aspects of leadership, as there is no absolute formulation among scholars and practitioners regarding it. The term "leadership" itself has been attempted to be defined by academics and practitioners for over a century, yet without universal consensus (Northouse, 2021). Disagreements over its definition stem from differences in character and approach to viewing leadership models. Furthermore, Northouse suggests that definitions of leadership are influenced by factors ranging from global issues and politics to perspectives within the discipline where the topic is studied (Northouse, 2021). Building upon Northouse's assumptions, Marques compiles a treatise on leadership that attempts to inventory all aspects related to leadership models.

The Academy of Leadership Sciences Switzerland successfully compiled several definitions of leadership from various prominent academics. Good leadership is executed wholeheartedly, utilizing heart, empathy, feelings, and not just ambition, reason, and common sense. Leadership occurs when one person motivates others to work towards predetermined goals. As quoted by Diena (2021), John Maxwell states that leadership is influence - nothing more, nothing less (Dwidienawati & Ratnasari, 2021). In other words, leadership is a complex moral relationship between people based on trust.

## 2.3. Diffusion of Innovations

Gabriel Tarde proposed the innovation diffusion theory in 1903 (Rogers et al., 2014). It is one of the oldest social theories in the world. Initially, the theory described innovation as being adopted by individuals over time, represented by an S-shaped diffusion curve. This curve has two axes, depicting the adoption rate and time (Rogers et al., 2014).

The focus of this theory lies in the adoption of innovations, including ideas, concepts, knowledge, and so forth. Therefore, within innovation diffusion, there are four characteristics, namely (Rogers et al., 2014):

1. Relative Advantage: Relative advantage assumes an evaluation of how an innovation can be considered better or worse than previous products. Satisfaction is the key indicator. The greater the advantage gained, the faster the innovation is accepted by a particular social group.
2. Compatibility: Compatibility here refers to the acceptance of innovation caused by the innovation product being in line with societal conditions.
3. Complexity: Complexity is the difficulty level in implementing an innovation.
4. Trialability: Innovation will make it easier or more beneficial for an individual. However,

society will accept it more quickly when the innovation can be tested first.

These four characteristics are crucial in determining the rate and extent of innovation adoption within a given social system. The level of relative advantage, compatibility with existing norms, complexity, and trialability collectively influence how quickly and extensively an innovation spreads within a community or society.

### 3. Methods

This study adopts a quantitative approach and focuses on the population of micro, small, and medium enterprises (MSMEs) in Indonesia. Furthermore, it is designed as survey research. In survey research, researchers quantitatively describe a population's trends, behaviors, or opinions by examining a sample drawn from that population. For this study, a total of 626 MSMEs were randomly selected as the sample, representing various regions across Indonesia. The random sampling method ensures that the sample is representative of the broader MSME population, allowing for generalizable insights into the challenges and opportunities faced by these enterprises. From the sample, researchers then generalize or make claims about the entire population (Creswell & Creswell, 2017). Data analysis in this study will utilize Structural Equation Modeling-Partial Least Squares (SEM-PLS).

The influencing factors in this study are limited to the following variables: (1) Leadership, encompassing both soft and hard skills. (2) Financial Well-being, including Satisfaction with the current financial situation, Comfort level with the present financial state, and current financial pressure. (3) Diffusion of innovation, which will be employed as a moderating variable.

The study aims to investigate the relationships between leadership, financial well-being, and the moderating effect of diffusion of innovation among MSMEs in Indonesia. Specifically, it seeks to understand how leadership qualities (soft and hard skills) influence the financial well-being of MSME owners and how the diffusion of innovation moderates this relationship.

Table 1. Matrix of instruments used in this research

No	Variable	Indicator	Reference
1	Financial Well-being	1. Satisfaction with the current financial situation 2. Comfort level on the present financial state 3. current financial pressure	(Mallick & Debasish, 2021)
2	Leadership	1. Soft skill 2. Hard skill	(Marques & Dhiman, 2017b)
3	Diffusion of Innovations	1. Relative advantage 2. Compatibility 3. Complexity 4. Triability	(Rogers et al., 2014)

Source: Data Processed (2024)

The sample characteristics outlined by the researcher entail individuals who have been engaged in entrepreneurship or running a business for a minimum of the past 6 months. Additionally, their businesses should already be digitalized, indicating an adaptation to modern technological trends. Furthermore, the sample must reside within Indonesia, ensuring geographical relevance to the study's focus. These criteria serve to establish a targeted and contextually appropriate sample for the research endeavor.

### 4. Result and Discussion

#### Characteristic of Respondents

Table 2. Data of Respondents

Capital below 1 Billion			
		Frequency	Percent
Valid	No	62	9.9
	Yes	564	90.1
	Total	626	100.0
Annual sales below 2 Billion			
		Frequency	Percent
Valid	No	65	10.4
	Yes	561	89.6
	Total	626	100.0
Business area			
		Frequency	Percent
Valid	Others	38	6.1
	Jawa	294	47.0
	Kalimantan	82	13.1
	Papua	30	4.8
	Sulawesi	70	11.2
	Sumatra	112	17.9
	Total	626	100.0

Source: Data Processed (2024)

Based on the distribution of respondent characteristics above, most MSMEs are those with capital below 1 billion and annual sales below 2 billion, indicating a significant presence of micro and small businesses. Regarding geographical location, most MSME respondents in this study operate on Java Island, totaling 294 MSMEs, followed by Sumatra Island with 112 MSMEs, Kalimantan with 82, and the least from Papua with 30 MSMEs. This indicates that the largest concentration is on Java Island, considering Java is the center of industry and the most populous region in Indonesia.

#### Validity and Reliability

Table 3. Convergent Validity Test

Items	Diffusion	Financial Well-being	Leadership
D11	0.838		
D12	0.750		
D13	0.852		
D14	0.773		
D15	0.800		
D16	0.809		
D17	0.821		

DI8	0.802	
FWB1	0.741	
FWB2	0.824	
FWB3	0.860	
FWB4	0.840	
FWB5	0.522	
FWB6	0.506	
FWB7	0.763	
L1		0.708
L10		0.768
L11		0.689
L12		0.770
L13		0.713
L14		0.782
L15		0.801
L16		0.571
L17		0.566
L18		0.654
L19		0.777
L2		0.739
L20		0.793
L21		0.552
L22		0.648
L23		0.777
L24		0.703
L25		0.771
L26		0.682
L27		0.752
L28		0.657
L29		0.773
L3		0.753
L30		0.754
L4		0.773
L5		0.678
L6		0.757
L7		0.706
L8		0.768
L9		0.813

Source: Data Processed (2024)

The analysis results shown in the table above indicate that all items of the variables have loading factor values > 0.50. Therefore, it can be concluded that all items of the research variables have passed the convergent validity test. In addition to using loading factor values, the convergent validity test can also be conducted by observing the Average Variance Extracted (AVE) values.

Table 5. Average Variance Extracted (AVE) Test

Variable	Average Variance Extracted (AVE)
Diffusion	0.650
Financial Well-being	0.540
Leadership	0.525

Source: Data Processed (2024)

The results above indicate that all research variables have AVE values > 0.50. Therefore, it can be concluded that all variables have good convergent validity.

Table 6. Reliable Test

Variable	Cronbach's Alpha	rho_A	Composite Reliability
Diffusion	0.923	0.928	0.937
Financial Well-being	0.850	0.869	0.888
Leadership	0.968	0.968	0.971

Source: Data Processed (2024)

Based on the results above, it can be observed that the values of Cronbach's alpha and composite reliability for each variable are > 0.70. This indicates that all research variables exhibit good reliability, qualifying them as instruments for subsequent research. The high values of Cronbach's alpha and composite reliability signify internal consistency among the items within each variable, suggesting that they measure the same underlying construct reliably. Therefore, these variables can be dependable and suitable for further research endeavors.

Hypothesis Test

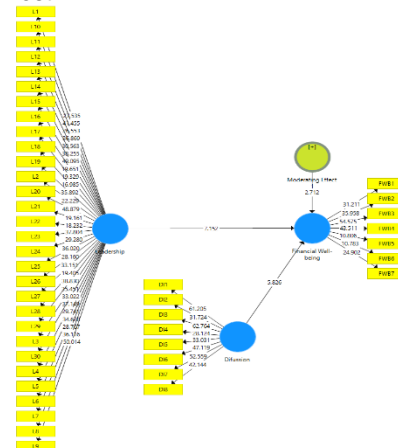


Figure 2. Inner Model Test  
Source: Data Processed (2024)

Table 7. Path Coefficient Test

Model	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
Diffusion -> Financial Well-being	0.266	0.264	0.046	5.826	0.000
Leadership -> Financial Well-being	0.325	0.329	0.045	7.152	0.000
Moderating Effect 1 -> Financial Well-being	0.110	0.110	0.041	2.712	0.007

Source: Data Processed (2024)

The coefficient of influence of Diffusion on Financial Well-being is 0.266, with a t-statistic of

5.826 and a p-value of 0.000. Since the coefficient is positive, and the t-statistic > t-table (5.826 > 1.96) or p-value < alpha 5% (0.000 < 0.05), it can be concluded that Diffusion proves to have a positive and significant effect on Financial Well-being.

The coefficient of influence of Leadership on Financial Well-being is 0.325, with a t-statistic of 7.152 and a p-value of 0.000. Since the coefficient is positive, and the t-statistic > t-table (7.152 > 1.96) or p-value < alpha 5% (0.000 < 0.05), it can be concluded that Leadership proves to have a positive and significant effect on Financial Well-being.

The coefficient of influence of Moderating Effect 1, Diffusion on Financial Well-being, is 0.110 with a t-statistic of 2.712 and a p-value of 0.007. Since the coefficient is positive, and the t-statistic > t-table (2.712 > 1.96) or p-value < alpha 5% (0.007 < 0.05), it can be concluded that Moderating Effect 1, Diffusion proves to have a positive and significant effect on Financial Well-being. This implies that the Diffusion of technology proves capable of moderating the influence of Leadership on Financial Well-being.

These results provide evidence of the positive and significant effects of Diffusion, Leadership, and the moderating effect of Diffusion on Financial Well-being, thereby contributing valuable insights into the relationship between these variables and their impact on the financial well-being of the studied entities.

## Discussion

The influence of leadership and innovation adoption on the financial well-being of MSME entrepreneurs in Indonesia is a critical topic in economic growth and MSME development. The research findings demonstrate that both factors significantly impact financial well-being, with moderation by innovation adoption.

Firstly, the role of leadership in enhancing the financial well-being of MSME entrepreneurs has been established in this study. Leadership theories emphasize the importance of a combination of soft and hard skills for an effective leader (Marques & Dhiman, 2017b). Soft skills such as honesty, empathy, and good communication enable a leader to build strong relationships with employees and business partners. On the other hand, hard skills such as strategic planning and decision-making abilities enable a leader to manage the business efficiently and overcome challenges. In the context of MSMEs, entrepreneurs who demonstrate effective leadership tend to manage their business finances wisely, capitalize on market opportunities effectively, and run business operations efficiently, ultimately contributing to their financial well-being.

Secondly, innovation adoption has also been proven to impact the financial well-being of MSME entrepreneurs positively. Innovation diffusion theory emphasizes that innovation adoption can benefit users significantly, including improved operational efficiency and competitive advantage (Rogers et al., 2014). Innovation

adoption can involve using new technologies, innovative marketing strategies, or developing new products that meet market needs. By adopting the right innovations, MSME entrepreneurs can increase productivity, reduce operational costs, and enhance competitiveness, positively impacting their financial well-being.

Thirdly, the finding that innovation adoption plays a significant moderating role in the relationship between leadership and financial well-being provides deep insights into the complexity of interactions between these factors. This suggests that innovation adoption can act as a catalyst to enhance the positive impact of leadership on the financial well-being of MSME entrepreneurs. In this context, MSME entrepreneurs with effective leadership are likelier to identify, adopt, and implement innovations suitable for their business needs and conditions. Thus, innovation adoption can strengthen the positive influence of leadership on financial well-being, helping MSME entrepreneurs achieve better financial goals.

Overall, these research findings provide a deeper understanding of the importance of effective leadership and innovation adoption in enhancing the financial well-being of MSME entrepreneurs in Indonesia. The practical implications are that MSME entrepreneurs can improve their financial well-being by strengthening leadership and adopting innovations suitable for their business context and needs. This also provides profound insights into the interaction between leadership, innovation adoption, and financial well-being in the MSME context, which can assist in developing more effective strategies and policies to support the growth and success of MSMEs in Indonesia.

## 5. Conclusion and Recommendation

The conclusion of this study reaffirms that leadership and innovation adoption play crucial roles in determining the financial well-being of MSME entrepreneurs in Indonesia. Effective leadership, combining soft and hard skills, has been proven to influence managing MSME businesses wisely and making appropriate decisions significantly. On the other hand, innovation adoption also substantially contributes by enhancing operational efficiency and business competitiveness for MSME entrepreneurs.

The finding that innovation adoption plays a significant moderating role in the relationship between leadership and financial well-being indicates that successful MSME entrepreneurs are those who can integrate effective leadership practices with appropriate innovation adoption strategies. Thus, this research provides profound insights into the complexity of interactions among leadership, innovation adoption, and financial well-being in the context of MSMEs in Indonesia.

However, this study has several limitations that must be considered for future research. These include limitations in generalizing results only to the Indonesian context, vulnerability to biases in data collection methods, and

considerations of additional moderating factors that may influence the relationship between leadership and financial well-being.

For future research, it is recommended to broaden the geographical scope, employ a more holistic approach to data collection, consider additional moderating variables, and enhance sample size and sampling methods. Consequently, future research can provide a deeper and more relevant understanding of the factors influencing the financial well-being of MSME entrepreneurs and their practical implications in a broader context.

## References

- Akca, M. (2021). Strategic Leadership, Readiness for Change, and Innovative Work Behavior: A Field Study From Turkey. In *Research Anthology on Digital Transformation, Organizational Change, and the Impact of Remote Work* (pp. 1177–1198). IGI Global.
- Anvari-Clark, J., & Ansong, D. (2022). Predicting financial well-being using the financial capability perspective: The roles of financial shocks, income volatility, financial products, and savings behaviors. *Journal of Family and Economic Issues*, 43(4), 730–743.
- Anwana, E. (2024). Fostering Global Competitiveness of SMEs in the Supply Chain Post-COVID-19. In *SMEs and Economic Development in Africa* (pp. 47–57). Routledge.
- Badan Pusat Statistik. (2022, May 9). Berita Resmi Statistik. *Badan Pusat Statistik*.
- Brem, A., Viardot, E., & Nylund, P. A. (2021). Implications of the coronavirus (COVID-19) outbreak for innovation: Which technologies will improve our lives? *Technological Forecasting and Social Change*, 163, 120451.
- Christensen, C. M., McDonald, R., Altman, E. J., & Palmer, J. (2016). *Disruptive innovation: Intellectual history and future paths*. Harvard Business School Cambridge, MA.
- Corvello, V., Verteramo, S., Nocella, I., & Ammirato, S. (2023). Thrive during a crisis: the role of digital technologies in fostering antifragility in small and medium-sized enterprises. *Journal of Ambient Intelligence and Humanized Computing*, 14(11), 14681–14693.
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
- Doni. (2022, April 8). *UMKM Naik Kelas, UMKM Go Digital*. <https://www.kominfo.go.id/content/detail/41205/umkm-naik-kelas-umkm-go-digital/0/artikel>.
- Dwidienawati, D., & Ratnasari, E. (2021). Kepemimpinan-Fundamental Teori. *Angewandte Chemie International Edition*, 6(11), 951–952.
- Faulks, B., Song, Y., Waiganjo, M., Obrenovic, B., & Godinic, D. (2021). Impact of empowering leadership, innovative work, and organizational learning readiness on sustainable economic performance: an empirical study of companies in Russia during the COVID-19 pandemic. *Sustainability*, 13(22), 12465.
- Greenacre, P., Gross, R., & Speirs, J. (2012). Innovation Theory: A review of the literature. *Imperial College Centre for Energy Policy and Technology, London*.
- Hynes, W., Trump, B., Love, P., & Linkov, I. (2020). Bouncing forward: a resilience approach to dealing with COVID-19 and future systemic shocks. *Environment Systems and Decisions*, 40, 174–184.
- Ibn-Mohammed, T., Mustapha, K. B., Godsell, J., Adamu, Z., Babatunde, K. A., Akintade, D. D., Acquaye, A., Fujii, H., Ndiaye, M. M., & Yamoah, F. A. (2021). A critical analysis of the impacts of COVID-19 on the global economy and ecosystems and opportunities for circular economy strategies. *Resources, Conservation and Recycling*, 164, 105169.
- Irikefe, P. O., & Opusunju, M. I. (2021). Effect of financial literacy on the growth of micro, small, and medium enterprises (MSMEs). *International Journal of Research Publications (IJRP. ORG)*, 384.
- Kyrdoda, Y., Balzano, M., & Marzi, G. (2023). Learn to survive crises: The role of firm resilience, innovation capabilities, and environmental dynamism. *Technology in Society*, 74, 102285.
- Llena-Nozal, A., Martin, N., & Murtin, F. (2019). *The economy of well-being: Creating opportunities for people's well-being and economic growth*.
- Loo, M. K., Ramachandran, S., & Raja Yusof, R. N. (2023). Unleashing the potential: Enhancing technology adoption and innovation for micro, small and medium-sized enterprises (MSMEs). *Cogent Economics & Finance*, 11(2), 2267748.



- Ma, C., Cheok, M. Y., & Chok, N. V. (2023). Economic recovery through multisector management resources in small and medium businesses in China. *Resources Policy*, 80, 103181.
- Mallick, S. K., & Debasish, S. S. (2021). A Study on the Relationship between Financial Well-Being and Self-Control. *Orissa Journal of Commerce*, 42(3), 120–133.
- Marques, J., & Dhiman, S. (2017a). *Leadership today: Practices for personal and professional performance*. Springer.
- Marques, J., & Dhiman, S. (2017b). *Leadership today: Practices for personal and professional performance*. Springer.
- Mujiyanto, M., Ramaditya, M., Mustika, M., Tanuraharjo, H. H., & Maronrong, R. (2021). Dampak pandemi COVID-19 pada UMKM warung ritel tradisional di Indonesia dan strategi bertahannya. *Jurnal STEI Ekonomi*, 30(02), 60–74.
- Northouse, P. G. (2021). *Leadership: Theory and practice*. Sage publications.
- Patterson, E., Pugalia, S., & Agarwal, R. (2022). Innovation management is a dynamic capability for a volatile, uncertain, complex, and ambiguous world. In *Innovation* (pp. 378–396). Routledge.
- PricewaterhouseCoopers. (2023). *PwC's 2023 Employee Financial Wellness Survey*. <https://www.pwc.com/us/en/services/consulting/business-transformation/library/employee-financial-wellness-survey.html>.
- Rogers, E. M., Singhal, A., & Quinlan, M. M. (2014). Diffusion of innovations. In *An integrated approach to communication theory and research* (pp. 432–448). Routledge.
- Rosyadi, S., Kusuma, A. S., Fitrah, E., Haryanto, A., & Adawiyah, W. (2020). The multi-stakeholder's role in an integrated mentoring model for SMEs in the creative economy sector. *SAGE Open*, 10(4), 2158244020963604.
- Rumangkit, S., & Hadi, A. S. (2022). The role of digital leadership to improve innovation capabilities and TQM of MSMEs in Indonesia. *Management*, 2, H3.
- Sang, N. M. (2021). *Financial Well-Being of Vietnamese Students*. *Investment Management and Financial Innovations*, 18 (4), 355–365.
- Sembiring, L. J. (2021). Sad! 30 Juta UMKM Gulung Tikar Karena Corona. *CNBC Indonesia*.
- Thamrin, M. H., & Wahyudi, S. (2022). Building Transformational Leadership, Learning, Innovation, Competitiveness, Environment affect the Performance of Handicraft SMEs in Medan City. *WSEAS Transactions on Business and Economics*, 19, 505–520.
- Tusianti, E., Prihatiningsih, D. R., & Santoso, D. H. (2019). Analisis Hasil SE2016 Lanjutan Potensi Peningkatan Kinerja Usaha Mikro Kecil. *Jakarta: Badan Pusat Statistik*.
- Venkatesh, V., Ganster, D. C., Schuetz, S. W., & Sykes, T. A. (2021). Risks and rewards of conscientiousness during the COVID-19 pandemic. *Journal of Applied Psychology*, 106(5), 643.
- Zighan, S., & Ruel, S. (2023). SMEs' resilience from continuous improvement lenses. *Journal of Entrepreneurship in Emerging Economies*, 15(2), 233–253.