

Visionary Leadership Boosting Innovation and Digital Transformation in Technology-Based MSMEs

Visionary Leadership
Boosting
Innovation

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ABSTRACT

This study aims to analyze the relationship between visionary leadership and the level of innovation in technology-based MSMEs in Medan City. The approach used is quantitative with a correlational descriptive design. The research sample consisted of 93 MSME actors who were selected using stratified random sampling techniques. The data collection instrument is a closed questionnaire with a Likert scale, which has been tested for validity and reliability. The results of the analysis show that visionary leadership is in the high category, while the level of innovation of MSMEs is in the medium to high category. The Pearson correlation test yielded a value of $r = 0.671$ which showed a strong and positive relationship between the two variables. The t -test showed that the relationship was statistically significant ($t\text{-count} = 8.63 > t\text{-table} = 1.99$). These findings confirm that visionary leadership plays an important role in driving the adoption of innovation in the MSME sector, especially in the use of digital technology. Thus, strengthening the capacity of visionary leadership is a key strategy to increase the competitiveness and sustainability of MSMEs in the era of digital transformation.

Keywords: Digital Transformation, MSME Innovation, Technology Adaption, Visionary Leadership.

ABSTRAK

Penelitian ini bertujuan untuk menganalisis hubungan antara kepemimpinan visioner dan tingkat inovasi pada UMKM berbasis teknologi di Kota Medan. Pendekatan yang digunakan adalah kuantitatif dengan desain deskriptif korelasional. Sampel penelitian terdiri dari 93 pelaku UMKM yang dipilih menggunakan teknik stratified random sampling. Instrumen pengumpulan data berupa kuesioner tertutup dengan skala Likert, yang telah diuji validitas dan reliabilitasnya. Hasil analisis menunjukkan bahwa kepemimpinan visioner berada pada kategori tinggi, sedangkan tingkat inovasi UMKM berada pada kategori sedang hingga tinggi. Uji korelasi Pearson menghasilkan nilai $r = 0,671$ yang menunjukkan hubungan kuat dan positif antara kedua variabel. Uji t menunjukkan bahwa hubungan tersebut signifikan secara statistik ($t\text{-hitung} = 8,63 > t\text{-tabel} = 1,99$). Temuan ini menegaskan bahwa kepemimpinan visioner berperan penting dalam mendorong adopsi inovasi di sektor UMKM, terutama dalam pemanfaatan teknologi digital. Dengan demikian, penguatan kapasitas kepemimpinan visioner menjadi strategi kunci untuk meningkatkan daya saing dan keberlanjutan UMKM di era transformasi digital.

Kata kunci: Transformasi Digital, Inovasi UMKM, Adaptasi Teknologi, Kepemimpinan Visioner.

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INTRODUCTION

The city of Medan, the economic center of North Sumatra, recorded economic growth of 5.07% in 2024, up from 5.04% in the previous year (Sudiantini et al., 2023; Muslihah & Ginting, 2024). This confirms the potential of MSMEs as the backbone of the local economy. The MSME sector dominates the urban economy with a significant contribution to job creation to absorb hundreds of thousands of workers, in line with the contribution of MSMEs throughout Indonesia to the national GDP of more than 60% (Ardiansyah, 2023; Masithoh & Rohmah, 2025). However, the transformation of MSMEs to be more productive and competitive requires the adoption of information and digital technology in operations and marketing. A study from Universitas Muslim Nusantara found that the use of information technology has been proven to significantly increase the income of Medan MSMEs (Handayani et al., 2022). In addition, the quality of human resources, digital marketing, and financial technology has proven to be driving factors for the development of MSMEs in Medan (Chinsuvapala 2017; Indra et al., 2024). This condition shows that MSME leaders who integrate a digital vision are an important key in motivating innovation and overcoming human resource weaknesses and capital limitations.

The Medan City Government is actively encouraging digitalization through programs such as Smart City, MSME training, bazaars, and Culinary Festivals to increase capacity and market exposure for MSME actors. This initiative provides an opportunity for MSME leaders to test innovative ideas in the field, both through digital marketing, financial applications, and e-commerce platforms (Gunarty, 2023; Aggarwal & Joshi, 2024). A real example, culinary MSMEs that adopt digital financial recording applications are able to compile reports more efficiently and support tax compliance, which has a positive impact on business sustainability (Safitri et al., 2025). However, access to technology and internet infrastructure in some areas is still limited, so visionary leadership needs to find creative solutions, such as partnering with providers or creating internal training. On the other hand, Medan's digital infrastructure is also in the spotlight as an area for improvement to accelerate the transition to the digital economy. The digital ecosystem that grows with the emergence of local technology startups increasingly needs leadership figures who are innovative, adaptive, and able to bridge MSMEs to a wide digital market (Carvalho et al., 2021). Visionary leadership is not just about big vision, but also tangible steps such as integrating cloud management systems, customer data analytics, and financial automation to support day-to-day operations (Clinton & Vanomy, 2023; Napisah et al., 2024). Although various initiatives have been implemented, it is not yet known to what extent visionary leadership is able to influence the acceleration of digitalization and innovation in the MSME sector in Medan.

This strategy allows MSMEs to achieve efficiency, expand market segments, and expand their wings into the national and international e-commerce realm (Subardjo & Rahmawati, 2022; Rahmat et al., 2022). The challenge is that there are still gaps in the distribution of digital training, a lack of motivation for MSMEs for transformation, and related agency resources that are not optimal. Therefore, MSME leaders need to innovate in designing independent training for MSME communities, to create locally-based digital modules to improve the literacy and technical capacity of business actors. Visionary leadership must also form an organizational culture that is adaptive, open to experimentation, and data-oriented for rapid decision-making.

As a city center with more than 2.4 million residents and multimodal infrastructure, the port of Belawan, Kualanamu Airport, and transportation facilities in Medan are very strategic for technology-based MSMEs. With these demographic and geographical position advantages, the role of visionary leaders will spur local product innovation, ranging from digital crafts to creative content, to penetrate the global market. In conclusion, visionary leadership is a major factor in accelerating the digitalization and innovation of Medan MSMEs, with empirical data supporting that technology, superior human resources, and a conducive digital ecosystem will result in sustainable growth. Previous research has focused more on technology and human resource aspects, but not

many have examined the role of visionary leadership as a key factor in driving the digital transformation of MSMEs, especially in the city of Medan. This research aims to analyze the role of visionary leadership in encouraging digital transformation and innovation in the MSME sector in Medan City.

LITERATURE REVIEW & HYPOTHESIS DEVELOPMENT

Visionary Leadership and Role in Driving Innovation in MSMEs

Visionary leadership is a leadership style defined by the ability to formulate a compelling long-term vision and inspire organizational members to work collectively toward achieving it. According to Nanus (1992) and Kirom et al. (2022), visionary leaders are those who can foresee future trends, articulate their vision effectively, and mobilize teams through innovative strategies. Attributes of this leadership style include strategic thinking, future orientation, openness to change, and a readiness to take calculated risks (Kotler et al., 2021; Holiseh & Izzatusholekha, 2023). In small and medium-sized enterprises (MSMEs), although limited resources may pose challenges, visionary leadership remains pivotal. When MSME leaders use vision as a guiding force, they foster sustainable and adaptive business practices.

Innovation in MSMEs encompasses more than just product development; it also includes innovations in processes, marketing, distribution, and customer service. Sijabat and Ikhsan (2024) define innovation as the development of new ideas that add economic value. Given the dynamic nature of current markets, innovation is essential for MSMEs to remain competitive. Research by Mavilinda et al. (2021) and Lubis et al. (2024) shows that innovation in MSMEs can be enhanced through digital technology integration, capacity building in human resources, and transformative leadership. In cities like Medan, innovation is increasingly evident in diversified local products, the adoption of digital platforms, and the use of modern marketing techniques (Haddad et al., 2020).

Visionary leadership is closely linked to increased innovation within MSMEs. Leaders who envision long-term growth tend to be proactive in identifying opportunities and willing to embrace risk. Bass and Avolio (1994) emphasize that visionary leaders inspire and empower teams to innovate and adapt. In the Medan context, MSME leaders who drive innovation typically exhibit technological awareness, market foresight, and the ability to lead change effectively. Ramadhani and Josiah (2022) found that MSMEs led by visionary individuals often experience higher turnover growth, highlighting the tangible impact of such leadership on organizational success.

H1: Visionary leadership has a significant effect on MSME innovation.

Digital Transformation and Leadership in Medan's MSME Ecosystem

Digital technology plays a pivotal role in driving the growth of MSMEs across various regions, including Medan (Sari et al., 2021). Through digital transformation, businesses can expand market reach, enhance operational efficiency, and access essential services such as financing and logistics with greater ease. A study by Anisah et al. (2024) indicates that MSMEs adopting information technology experience productivity increases of up to 30% in the medium term. Common technological tools used by MSMEs in Medan include e-commerce platforms, social media, digital payment systems, and online accounting applications. Despite these advancements, challenges persist—such as limited digital literacy, inadequate internet infrastructure, and a lack of technical training opportunities (Akhmad & Purnomo, 2021).

In the midst of this promising digital landscape, MSME leaders in Medan face significant hurdles (Khan et al., 2021; Fahmie et al., 2025). One key issue is the low level of digital readiness, both in skills and infrastructure. According to the North Sumatra Communication and Informatics Agency, only around 48% of MSME actors in Medan actively use digital platforms in their business operations. Administrative burdens, time constraints that limit participation in training, and insufficient support from government and private institutions hinder the pace of digital transformation. In this context, the role

of visionary leadership becomes essential in initiating internal organizational changes, bridging gaps in resources and capabilities, and leading MSMEs toward sustainable innovation (Trottier et al., 2008; Saunila, 2020).

Recognizing the potential of Medan's MSME sector, the local government and relevant stakeholders have launched initiatives to strengthen the MSME ecosystem. Programs such as digital training, entrepreneurial mentoring, and integration into local and national marketplace platforms have been introduced (Barus, 2020; Satria et al., 2021). Notably, the "MSMEs Go Digital" program by the Medan Cooperatives and SMEs Office aims to equip business actors with essential digital literacy skills. However, for these initiatives to be truly effective, synergy between MSME leaders, the government, and the private sector is vital. Visionary leadership will serve as a driving force in aligning such programs with the actual needs of MSMEs, thus fostering a more inclusive and innovation-oriented ecosystem.

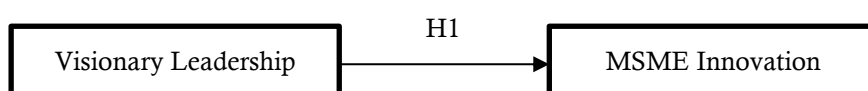


Figure 1. Research Framework

Figure 1 shows a simple context model that illustrates the direct relationship between Visionary Leadership and MSME Innovation. The one-way arrow from "Visionary Leadership" to "MSME Innovation" indicates that visionary leadership acts as an independent variable that influences the level of innovation in micro, small, and medium enterprises (MSMEs). This model represents the hypothesis that the stronger the visionary leadership capabilities possessed by MSMEs, the greater the potential for increased innovation in aspects of products, processes, and business strategies implemented.

RESEARCH METHODS

This study employs a quantitative approach with a correlational descriptive research design, as outlined by Santoso and Madiistriyatno (2021). The primary objective is to examine the relationship between visionary leadership (variable X) and the level of technology-based MSME business innovation (variable Y) in Medan City. The population targeted in this research consists of all technology-based MSME actors registered with the Medan City Cooperatives and MSMEs Office in 2024, totaling approximately 1,250 business units. To ensure balanced representation across different business sectors, the sample was selected using a stratified random sampling technique, covering various MSME subsectors such as culinary, fashion, digital services, and handicrafts. Research by Retnawati (2017) determines the number of samples using the Slovin formula as follows:

$$\begin{aligned}
 n &= \frac{N}{1+N(e^2)} \\
 n &= \frac{1250}{1+1250(0.1^2)} \\
 n &= \frac{1250}{13.5} \\
 n &= 92.59 \text{ (93)}
 \end{aligned}$$

So, the number of respondents in this study is 93 MSME actors. Data collection in this study used multiple instruments to ensure comprehensive and valid findings. A questionnaire with a Likert scale of 1 to 5 was used to assess respondents' perceptions of visionary leadership and business innovation in MSMEs. Partially, interviews with key respondents provided deeper qualitative insights, while a documentation study utilized secondary data from the Medan City Cooperative Office, BPS Medan, and relevant

scholarly articles. This multi-method approach enriched the analysis and strengthened the research's credibility.

Table 1. Operational Variables

Variable	Key Indicators
Visionary Leadership (X)	Long-term vision, inspirational, innovative, able to manage change, future-oriented
MSME Innovation (Y)	Use of technology, product/service development, process changes, new business models

Table 1 presents the key indicators for measuring the study's two main variables: visionary leadership (X) and MSME innovation (Y). Visionary leadership is indicated by a long-term vision, the ability to inspire, foster innovation, manage change, and maintain a future-oriented mindset. These traits reflect leaders' capacity to navigate dynamic environments. MSME innovation is measured through the use of technology, product or service development, process changes, and new business models, highlighting how MSMEs adapt and compete in the digital economy. The data in this study were analyzed through two main stages (Marwan et al., 2023). The first stage involved validity testing using the Pearson product-moment to assess how well each item measured the intended variable. The second stage was reliability testing using Cronbach's Alpha to evaluate the internal consistency of the items. These steps ensured that the instruments were accurate and dependable for data collection.

$$\alpha = \left(\frac{k}{k-1} \left(1 - \frac{\sum \sigma_i^2}{\sigma_{total}^2} \right) \right)$$

To test the relationship between visionary leadership (X) and MSME innovation (Y), Pearson's correlation (r) was used:

$$r = \frac{n\sum XY - (\sum X)(\sum Y)}{\sqrt{[n\sum X^2 - (\sum X)^2][n\sum Y^2 - (\sum Y)^2]}}$$

Table 2. R value

Interpretation	Coefficient Range
Very Low	0.00 – 0.19
Low	0.20 – 0.39
Medium	0.40 – 0.59
Strong	0.60 – 0.79
Very Strong	0.80 – 1.00

Table 2 presents an interpretation of the correlation coefficient range to measure the strength of the relationship between variables. Values of 0.00–0.19 indicate a very weak relationship, 0.20–0.39 weak, 0.40–0.59 moderate, 0.60–0.79 strong, and 0.80–1.00 very strong. These interpretations are used to assess the significance of correlation in data analysis. To find out if the relationship is statistically significant, the t-test formula is used:

$$t = \frac{r \sqrt{n-2}}{\sqrt{1-r^2}}$$

The results were compared with the t-table value at degrees of freedom (df) = n - 2 with a significance level (α) = 0.05. The instrument used was a closed questionnaire, consisting of 10 items for visionary leadership and 10 items for innovation. Prior to distribution to the main respondents, all items were tested on 15 trial respondents, MSME actors, to ensure their validity and reliability in accurately measuring the intended variables.

RESULTS

The findings of this study confirm the significant role of visionary leadership in enhancing the innovation level of technology-based MSMEs in Medan. As the economic hub of North Sumatra, Medan recorded a growth rate of 5.07% in 2024 (Muslihah & Ginting, 2024), supported strongly by the MSME sector, which contributes to employment and economic resilience. However, the transition to digital-based competitiveness remains a challenge, requiring leadership that is future-oriented and capable of driving innovation. There are 10 statement items used to measure visionary leadership. The total score of each respondent was processed to obtain average scores, standard deviations, and categorization.

Table 3. Descriptive Statistics of Visionary Leadership Variables (X)

Statistics	Value
N	93
Minimum Score	27
Maximum Score	50
Average	41.3
Std. Error	5.2
Category	Hight

Table 3 presents descriptive statistics from the research results of 93 respondents (N = 93). The minimum score obtained by respondents was 27, while the maximum score reached 50, indicating a fairly wide range in perception or assessment of the measured variables. The average (mean) score of respondents was 41.3, indicating a general tendency of respondents to have a high level of assessment of the variable. The standard deviation value of 5.2 indicates moderate variation in the data, meaning that most respondents' scores were not too far from the average value. Based on the distribution of scores, most respondents fell into the high category, indicating that respondents generally had a positive assessment of the aspects studied.

Most of the respondents showed high scores, indicating that MSME leaders in Medan have a long-term orientation, inspiration, and are open to innovation. MSME innovation is measured through 10 items that include the use of technology, product diversification, process changes, and digital business models.

Table 4. Descriptive Statistics of MSME Innovation Variables (Y)

Statistics	Value
N	93
Minimum Score	24
Maximum Score	49
Average	38.7
Std. Error	4.9
Category	Medium – High

Table 4 shows descriptive statistics from data obtained from 93 respondents (N = 93). The minimum score achieved by respondents was 24, while the maximum score reached 49, reflecting a fairly wide variation in the level of assessment of the variables measured. The average value (mean) of 38.7 indicates that most respondents have a relatively good level of assessment. The standard deviation value (standard deviation) of 4.9 indicates that the data has a moderate distribution, meaning that most scores are not too far from the average value. Overall, most respondents are in the medium-high category, which indicates a fairly strong level of perception or response to the aspects studied. Most MSME players have begun to adopt technology such as e-commerce, digital payments, and social media in promoting their products.

Table 5. Validity and Reliability Tests

Variable	Number of Items	Item-Total Correlation	Validity Status	Cronbach's Alpha	Reliability Status
Visionary Leadership (X)	10	> 0.30	Valid	0.823	Very Good (Reliable)
MSME Innovation (Y)	10	> 0.30	Valid	0.798	Good (Reliable)

Table 5 presents the results of validity and reliability tests for the two main variables in this study, namely Visionary Leadership (X) and MSME Innovation (Y). Each variable was measured using 10 questions, with an item-total correlation value of more than 0.30, so that all items were declared valid because they were able to measure the intended variables accurately. The results of the reliability test showed that the Cronbach's Alpha value for the Visionary Leadership variable was 0.823, which falls into the very good category, while for the MSME Innovation variable, it was 0.798, which falls into the good category. Thus, the instrument used in this study was declared to have strong validity and reliability, and is suitable for use in measuring the relationship between variables statistically.

All questions in the questionnaire had an item-total correlation value above 0.3; thus, it was declared valid because it was able to accurately measure the intended variables. Furthermore, the results of the reliability test showed that the Cronbach's Alpha value for variable X (visionary leadership) was 0.823, and for variable Y (innovation) was 0.798. Both values are in the reliable category, which means that this research instrument has good internal consistency and can be trusted to consistently measure both variables. Based on the results of the validity test, all items in the questionnaire show an item-total correlation value above 0.3, which means that each item in the instrument has adequate ability to measure the variable in question. This shows that the instruments used in this study have been able to accurately describe the concept of visionary leadership and innovation of MSMEs as defined in the theory.

In addition, the results of the reliability test produced a Cronbach's Alpha value of 0.823 for the visionary leadership variable and 0.798 for the MSME innovation variable. According to Nunnally (1978), Cronbach's Alpha value ≥ 0.7 is considered quite good, while values above 0.8 are in the very good category. Therefore, it can be concluded that the instruments used in this study are not only valid but also reliable, so it is feasible to measure the relationship between variables statistically. The correlation test was used to determine the relationship between visionary leadership and MSME innovation:

$$r = 0.671$$

The r value of 0.671 indicates the Pearson correlation coefficient between two variables, namely visionary leadership and MSME innovation in the context of this study. This value is in the range of 0.60–0.79, which, according to the correlation classification, is included in the strong category. This means there is a strong positive relationship between visionary leadership and the level of innovation among MSME actors. The higher the level of visionary leadership, the higher the level of business innovation. Interpretation: An R-squared value of 0.671 indicates a strong and positive relationship between visionary leadership and MSME innovation.

The results of the Pearson correlation test showed a value of $r = 0.671$, which indicates a strong and positive relationship between visionary leadership and technology-based MSME innovation in Medan City. This correlation value provides an understanding that the higher the level of visionary leadership possessed by business actors, the higher the tendency to innovate in their business. This positive relationship illustrates that leaders who have a long-term vision, the ability to inspire, and an openness to technology tend to encourage the adoption of new ideas, whether in the form of products, processes, or digital marketing approaches. In other words, the visionary leadership variable has proven to

play an important role in supporting the transformation and increasing the competitiveness of MSMEs in the digital era.

$$t = 8.63 \frac{r \cdot \sqrt{n-2}}{\sqrt{1-r^2}} = \frac{0.671 \cdot \sqrt{91}}{\sqrt{1-0.450}} = \frac{6.398}{0.741}$$

The t-calculated value = 8.63 > the t-table (df = 91, $\alpha = 0.05$) $\approx 1.99 \rightarrow$ Significant.

To test the significance of the relationship, a t-test was carried out, with the results showing a t-calculated value of 8.63, which is much greater than the t-table value of 1.99 at a significance level of 5% and a degree of freedom of 91 (n-2). This means that the relationship between visionary leadership and MSME innovation is statistically significant. This means that the findings of strong relationships are not the result of chance but reflect a real relationship in the population of MSME actors in Medan. This interpretation of the significance test reinforces the empirical evidence that MSME leaders with a clear vision and an inspirational leadership approach actually drive innovation. This implies that leadership capacity strengthening programs for MSME actors will have a positive impact on improving the performance and sustainability of their businesses in the digital era.

DISCUSSION

The results of the study show that there is a strong and significant relationship between visionary leadership and the level of innovation in technology-based MSMEs in Medan City. These findings reinforce the assertion that leadership qualities, especially visionary ones, play a central role in driving innovation adaptation among micro, small, and medium enterprises. The average high visionary leadership score (41.3 out of a maximum score of 50) shows that most MSME leaders in Medan already have the characteristics of visionary leaders. Not only do they have a long-term vision, but they are also able to motivate their team, be open to change, and encourage the use of technology as part of their business development strategy. This is in accordance with the view of Nanus (1992), which states that a visionary leader is a figure who is able to create a picture of the future of the organization and move all members to achieve it through innovative strategies.

The link between visionary leadership and innovation is reinforced by the Pearson correlation value of 0.671, which is in the strong and positive category. This means that the higher the level of visionary leadership you have, the higher the tendency of MSMEs to innovate. These results are in line with the findings of Bass and Avolio (1994), which mentions that transformational leaders, including visionaries, significantly influence the innovative culture within the organization. In terms of innovation, the majority of MSMEs have begun to implement forms of digital innovation, such as the use of e-commerce platforms, digital payments, and social media as marketing tools. Visionary leadership is related to both team creativity and innovation through goal alignment (Mascareño et al., 2020; Mohammed & Attabi, 2022). However, the innovations carried out are still on a modest scale, indicating that the role of leaders in encouraging deeper innovations, such as changes in business processes or the development of new business models, still needs to be improved. This is in line with the results of the research by Tambunan (2021), who found that innovation in Indonesian MSMEs still tends to be adaptive, not disruptive, and depends on the initiative of its leaders.

These findings also reinforce the results of a study from Ramadhani and Josiah (2022), which shows that visionary leadership in MSMEs has a direct influence on the creation of innovative strategies in managing products, processes, and services to customers. In the context of the city of Medan, where the digitalization of MSMEs is the strategic agenda of the local government, leadership that is able to align the organization's vision with external policies is an important factor for the success of technology-based business transformation.

One of the important contributions of visionary leadership is its ability to create a culture of learning within the organization. Visionary leaders actively facilitate training,

encourage the use of new apps, and open up space for the exploration of fresh ideas from the team. Leaders build work environments that encourage innovation through inspiring vision, flexible organizational structures, and a commitment to sustainable change. On the other hand, there are still structural constraints such as low digital literacy, limited capital, and limited access to infrastructure. However, future-oriented MSME leaders are able to overcome these obstacles through various strategies, including collaboration with the digital community, business incubators, and the use of financial technology (fintech) services. This kind of strategy is also described in the research Ndraha et al. (2024), which shows that digitally oriented MSME leaders have a better ability to take advantage of opportunities in the industrial era 4.0.

Thus, this discussion strengthens the understanding that visionary leadership is not only a tool of organizational control but also the foundation for the success of innovation and digital transformation of MSMEs. Leaders with high vision, strategy, and adaptability have the potential to bring Medan MSMEs to a higher level of competitiveness, both nationally and internationally.

CONCLUSION

The main finding of this study shows that visionary leadership has a strong and significant positive relationship with the level of innovation among technology-based MSMEs in Medan City. Leaders who demonstrate visionary traits such as having a long-term vision, openness to change, and the ability to inspire their teams tend to encourage greater innovation, particularly in areas such as digital marketing, product development, and business process transformation. From a practical perspective, these findings emphasize the importance of strengthening leadership capacity among MSME actors as a key strategy to enhance innovation. Programs such as visionary leadership training, digital literacy development, and the formation of collaborative innovation ecosystems are recommended to improve MSME competitiveness and adaptability in the digital economy. The data also shows that most MSME leaders in Medan already exhibit high visionary leadership scores, and their innovation levels range from medium to high.

Theoretically, this research supports previous literature that highlights the role of leadership in fostering innovation within organizations, particularly in dynamic environments. Visionary leadership emerges as a critical enabler of innovation, allowing MSMEs to not only survive but thrive in an increasingly digital and competitive market. However, this study has limitations, including a limited geographic scope and the use of a cross-sectional design. Future research could expand the sample to other regions and adopt a longitudinal approach to examine how visionary leadership influences innovation over time. Additionally, further studies could explore mediating or moderating variables, such as organizational culture or access to technology, to deepen understanding of the leadership–innovation relationship

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