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RESEARCH ARTICLE

Factors Influencing Digital Technology Adoption and Use Among MSMEs in Indonesia

Andry Manodotua Panjaitan, Niko Sudibjo, and Cahya Pulupi Meilani
Pelita Harapan University, Indonesia
andrymanodotuapanjaitan@gmail.com

The purpose of this study is to see how attitudes toward behavior, subjective norms, and digital technology literacy affect adoption intentions and their impact on digital technology usage behavior in small and medium enterprises in Indonesia. This study used 532 MSME samples and tested them using SEM PLS analysis. The test findings showed that eight proposed hypotheses were accepted, and one was rejected. Digitally literate MSME owners and leaders can increase market awareness and set clear digital transformation goals for their companies. Furthermore, with government support for technology in MSMEs, digital technology is expected to be used not just for marketing but also for innovation and company development, serving as a reference for the government to assess whether the support provided is optimal or needs improvement. Thus, the focus is on MSMEs in Indonesia, which may not apply to MSMEs in other industries or geographic areas with different economic, cultural, and regulatory environments.

Keywords: digital literacy, digital driven, MSMEs

JEL Classifications: L26, M15

This scenario will affect all sectors, particularly the micro, small, and medium enterprises (MSME) sector. MSMEs demand heightened concentration and attention. MSMEs are the primary contributors to Indonesia's GDP and economic growth. According to data given by the Ministry of Cooperatives and MSMEs, MSMEs accounted for 99.99% of all business units in Indonesia in 2019, totaling 65,465,497 (Sumaryadi, 2020). According to Muhammad Hendartyo and Akhmad (2021), approximately 30 million MSMEs collapsed and went bankrupt due to the government's social restriction policies during the pandemic. A McKinsey survey in 2020 of more than 2,200 MSMEs in five European countries (France, Germany, Italy, Spain, and the United Kingdom) showed that the COVID-19 pandemic affected almost every aspect and element of MSMEs, such as the way they work, access information, communicate, make decisions, buy or sell products, and retrain employees, all of which became digital (Dimson et al., 2020).

One of the efforts made by the government in overcoming the problem of weakening MSME strength in the midst of the pandemic is by launching a "go digital" scheme. This is not only a solution but also has sustainable value for the survival of MSMEs. The goal of this program is to encourage MSMEs to go digital by establishing a nationwide MSME digitalization program. Adopting digital technology is an appropriate strategy and can increase MSMEs' productivity, performance, and competitiveness (Dibrell et al., 2008). Similarly, research from Putra and Santoso (2020) on 325 MSMEs in Indonesia found that e-business has a

stronger positive influence on company performance. Research results from Kurniawati et al. (2021a) also concluded that e-commerce digital technology is needed in MSMEs.

The results from Hamburg's (2021) study concluded that the digitalization of MSMEs could be a key driver for long-term recovery, as well as reducing some of the impacts of the pandemic in the short term. This is in line with the results of research conducted by Purba et al. (2021) on 120 MSMEs affected by the COVID-19 pandemic in Banten Province, which shows that digital marketing has a significant effect on business sustainability, financial performance, and e-commerce. According to Kala'lembang (2021), the digitalization of MSMEs has several impacts, such as making it easier to attract and retain potential customers, improving communication, saving costs, and improving relationships with business partners; thus, it can be concluded that the digitalization of MSMEs is a smart solution to increase MSME productivity.

Employers must recognize the gap between the skills possessed by MSME personnel and the skills required in the future. The emphasis should be on improving these skills to improve the company's prospects of success. Employees must be willing to learn and gain the necessary abilities (Hamburg, 2021; Pamungkas, 2023). This study employs the Theory of Reasoned Action (TRA) method, which holds that individual behavior is predicted by their desire to engage in specific behaviors. Intention is predicted by two factors: the individual's attitude toward something and the opinion of one's social environment (Fishbein & Ajzen, 1975). TRA has been cited by numerous academics, including Al-Majali (2011), Camara et al. (2017), and Jannah dan Kholid (2020). In 1988, Ajzen expanded the TRA by including individual beliefs and perceptions of behavioral control, specifically the idea that individuals can undertake a behavior depending on their abilities to do so (Lee et al., 2011). This theory is known as the theory of planned behavior. The core concepts of the theory of planned behavior encompass three main elements: perceptions regarding potential outcomes and their assessment (behavioral beliefs), perceptions of anticipated norms and the drive to adhere to them (normative beliefs), and perceptions regarding factors that may facilitate or impede behavior, along with an understanding of their significance (control beliefs).

The theory of planned behavior (TPB) is a tool that can be used to predict individual behavior when the individual does not have full volitional control. The individual has obstacles or barriers so that his behavior cannot be arbitrary (Mahyarni, 2013). It is the reason why this study uses TRA instead of TPB. Nyandoro (2016) reinforced this opinion, stating that TRA can explain the factors that influence digital transformation in MSMEs. According to Chang (2010) and Durbhakula and Kim (2011), government support still needs to be included in the analysis of previous studies, so it is necessary to research the effect of government support on adopting digital technology in MSMEs. Another thing related to ignorance about government policies aimed at assisting MSMEs in adopting and implementing digital technology is rarely carried out research (Effendi et al., 2020). Because MSMEs have an important role in the economy, the government initiated the Go Digital small and medium enterprise program to revitalize them. Nonetheless, its execution presents challenges, as evidenced by statistics from 2019 showing that merely approximately 13% of MSMEs have adopted digital technology.

It is necessary to understand and analyze what factors influence the digitalization of MSMEs, particularly those related to human resources, which are an important factor in the implementation of digitalization of MSMEs, specifically the digital technology literacy of MSMEs' managers or leaders (including founders or owners), as well as the influence of government support for the digitalization of MSMEs. Thus, the objectives of this research are as follows:

1. Determine the influence of mindset on MSMEs' intention to advertise.
2. Assess the impact of subjective standards on MSMEs' desire to adopt.
3. Determine the influence of digital literacy on MSMEs' intention to adopt.
4. Establish the influence of government assistance on MSMEs' inclination to adopt.
5. Assess the effect of attitude on usage behavior.
6. Examine the influence of subjective norms on usage behavior.
7. Explore the effect of digital literacy on usage behavior.
8. Evaluate the impact of government support on influencing usage behavior.
9. Determine the intention to adopt usage behavior.

The results of this research will later aim to provide considerations for the world of practice in terms of digital literacy so that MSMEs are helped in the continuity of their business. Furthermore, this research may serve as a reference for government considerations to evaluate whether the support provided is optimal or needs to be improved.

Literature Review

Relationship Between Small Firms' Attitudes of Their Behavior and Their Intention to Utilize Digital Technology

This study employs the behavioral method to focus on attitudes and subjective norms, as behavioral control is not directly observable in this context. According to Davis (1989), attitude has a direct influence on the formulation of behavioral intentions. According to behavioral theory, beliefs can alter attitudes and social norms, changing the shape of the desire to conduct well-guided or simply occurring in an individual's behavior. This idea highlights the importance of a person's "intentions" in determining what type of conduct will occur. Davis's (1989) behavioral theory has two key categories of intention: (a) attitude toward conduct and (b) associated subjective norms with this behavior. The attitude toward conduct is how someone considers their decisions and the potential consequences of previous actions before deciding whether or not to engage in the behavior. This theory demonstrates that a person's motivation to behave or not in an action is determined by his beliefs and judgment of the consequences of his behavior. So, someone with faith. If the results are favorable, it will appear positive for that conduct, and vice versa. Subjective norms are social constraints that compel someone or a decision-maker to exhibit a behavior. Subjective norms are an individual's view of what other people think of his actions in a given situation; therefore, it is quite usual to confer with others before making a decision. Behavioral theory is a useful general intention research approach for predicting and understanding behavior.

Karahoca et al. (2018) studied the elements that influence individual adoption intentions of IoT technology goods for health care and discovered that attitude toward behavior has a substantial influence on the intention to use digital technology. Other research conducted by Chawla and Joshi (2019) demonstrated that attitude toward behavior has a substantial influence on the intention to adopt digital technology, particularly the use of mobile wallets. Sa'diyah (2021) demonstrated that attitude toward behavior has a substantial impact on the desire to adopt digital technology. This notion appears to be closely related to MSME digitization research. This is consistent with previous research, which employed the same principle to bring this study in line with existing knowledge.

Relationship Between Subjective Norms of Small Enterprises on Intention to Adopt Digital Technology

Studies on mobile e-commerce usage indicate that subjective norms have a significant positive impact on users' intentions (Kappos & Rivard, 2008). Subjective norm is also proven to have a positive and significant effect on the intention to use Internet banking (Nor & Pearson, 2008) and mobile banking (Xinhui et al., 2015), as well as electronic parking (Darmayanti et al., 2021). Digital literacy requires technical, cognitive, critical, and creative skills to organize clear information through writing and other media on various digital platforms (McQuillan et al., 2020). However, the success rate of Indonesian MSMEs selling through digital platforms still appears low, with some studies suggesting single-digit percentages. The same thing was also conveyed by Sasmito and Prestianto (2021). Other research related to the intention to use electronic government services (e-government) conducted by Gultom, (2020) also showed that subjective norm has a significant and positive effect on the intention to use e-government. These results are in line with previous research on technology adoption in general and e-government adoption in particular that has been conducted by Rana and Dwivedi (2015) and Zahid and Haji Din (2019).

Relationship Digital Technology Micro Enterprise Literacy Intention to Adopt Digital Technologies

Mavimbela and Dube (2016) discovered that MSME owners' poor level of digital literacy skills can act as a barrier to their desire to adopt digital technology, resulting in a low level of technology adoption in MSMEs in South Africa. According to the findings of Gono et al. (2016), who performed their research in South Africa, the digital literacy skills of owners and staff influence the intention to embrace information and computer technology (ICT) in MSMEs. Ispriandina and Sutisna (2019) believed that digital technology literacy has a significant impact

on a person's intention to use digital technology in the future, particularly mobile payment services. This opinion is supported by the research findings of Fauzi et al. (2020).

Relationship between Support from the Government and Intention to Implement Digital Technologies

According to Pu (2021), technical integration, innovative finance, and the role of government contribute to the survival of MSMEs throughout the pandemic. According to Kala'lembang (2021), one of the measures that MSMEs can take to overcome this challenge is to engage in digital transformation, namely by adopting digital technology; the same message was delivered by Purba (2021). MSMEs confront four major challenges to digital transformation: insufficient capital, a lack of digital capabilities, a lack of human resources, and technological barriers (Chen et al., 2021). A study in Singapore found that perceptions of government support for e-commerce can influence the desire to adopt it (Van Dyk, 2013; Tan & Teo, 2000). Another study in Thailand found that government support and industry regulation positively impacted Internet banking services by increasing the confidence of adopters (Jaruwachirathanakul & Fink, 2005). Research by Shao et al. (2015) was conducted in China on the cloud computing services model: SaaS with student participants from MBAK, EMBA, and EDP, who are almost all mid-level managers. Research conducted by Ahn and Ahn (2020) in Korea took participants who were company executive leaders, such as IT directors, who represented companies in Korea in adopting cloud-based systems. A study in India on electric vehicles found that government support has a moderate relationship with risk perception and willingness to adopt, so there is an inverse relationship with risk perception (Jain et al., 2022). It can be said that government support can increase the motivation or intention of MSMEs to adopt digital technology of for small enterprises more complex and broad.

Relationship Between Small Enterprises' Subjective Norms and Digital Technology Use Behavior

According to the research on reasoned behavior (Sheppard et al., 1988; Fishbein & Ajzen, 1975), subjective norms are a culturally acquired viewpoint that shapes attitudes and actions related to sustainability. According to the TPB, behavioral intention fully mediates the relationship between perceived norms and behavior. However, multiple studies on planned behavior that use norm constructions as predictors discovered that subjective norms have a direct influence on behavior (Christian & Abrams, 2004; Okun & Sloane, 2022; Trafimow & Finlay, 2001). Minton et al. (2017) explored the impact of individual and subjective criteria in forecasting sorting, which is becoming increasingly pivotal in pro-environmental actions. Contrary to this, research by Setiawan et al. (2021) provides clear evidence that subjective and personal norms can directly influence behavior without mediating intentions. From research conducted by Leong et al. (2022) that assessed the effects of TPB constructs on consumer intentions and consumptive behavior in social commerce, it has been confirmed that subjective norms directly impact consumptive behavior in social commerce.

The Relationship Between Small Firms' Attitudes Toward Digitalization and Their Use of Digital Technology

Davis' (1989) technology acceptance model (TAM) proposes that consumer attitudes influence technology utilization. Attitudes and behaviors interact reciprocally; attitudes can influence behaviors (Shrigley 1990). Comparably, the concept of planned behavior explains the hierarchical relationship of thoughts and attitudes that impact behavior. A positive attitude regarding technology is associated with higher student use (Mae & Espinosa, 2020). According to Al-Yaqoobi and Tan (2021), the use of technology emphasizes the importance of users' attitudes regarding technology in determining its actual usage.

The Relationship of Government Support to Digital Technology Uses Behavior of Small Enterprises

Government regulations can also support the development of technology and information infrastructure, influencing technological dispersion (Ghobakhloo et al., 2012). Conversely, a lack of regulatory support has a huge impact on technology uptake. According to Ulas (2019), MSMEs must use digital technology and receive government help. Mensah & Mwakapesa, (2022) found that government backing was a crucial element influencing the adoption of technological applications such as m-government and mobile banking. The government is regarded as an institution with the motive and capacity to invest

and spend resources on programs and activities that will result in excellent outcomes. Mandari et al. (2017) further stated that support relates to the availability of infrastructure, laws, investment in m-government platforms and promotional applications, as well as government incentives for the use and use of information technology. Khatib (2019) stated that the quality of government support is an important and significant factor in explaining the intentions and behavior of e-government service users. Government support has a beneficial influence on the desire to use digital technology (Junnonyang, 2021). It might be argued that government backing, embodied in codified legislation, can generalize MSMEs' behavior in employing digital technology for small businesses. MSME compliance in using digital technology among small enterprises is expected to be automatically established because MSMEs consider government regulations to be absolute and unavoidable.

The Relationship Between Digital Technologies Literacy of Small Enterprises in Digital Technology Using Behavior

As per Nikou et al. (2018), MSME leaders, whether they are digital natives or digital immigrants, are more inclined to utilize digital technology if they possess greater confidence in their ICT abilities, including digital literacy. According to Hasanah and Setiaji's (2019) research, digital literacy technology has a good impact on MSME entrepreneurs' usage of digital technology because it facilitates access to information, network expansion, and communication. According to Rusdy's (2021) research findings, digital technology literacy has a positive impact on user behavior by allowing a person to analyze, evaluate, or appraise information accessed digitally. Lestari et al. (2020) discovered that proficiency with digital technologies knowledge has quite an effect on the utilization of mobile applications. Cetindamar et al. (2021) investigated the correlation between employee digital literacy and the adoption of digital technology by MSME leaders, highlighting the crucial role of employee cognition, particularly in the context of cloud technology usage. Neumeyer et al. (2021) argued that low-income entrepreneurs' technological abilities and digital literacy, particularly in fundamental usage and application, will influence their adoption of digital technology.

The Relationship Between Small Enterprises' Intention to Use Digital Technology and Their Use of Digital Technology

According to Ayudya et al. (2018), the intention to utilize digital currencies has a beneficial impact on usage behavior. Likewise, Nurunnisha and Dalimunthe (2018) discovered that the desire to use increases e-commerce usage in Bandung. Previous studies (Jaya et al., 2017) have found that elements impacting behavioral intention in e-learning usage include performance expectations, effort expectations, social influence, and enabling environments. Other research (Fauzi et al., 2018) showed that behavioral intention influences usage behavior in online transportation apps like Go-Jek and Grab. Widyanto et al. (2020) discovered that the desire to use encourages positive usage behavior in payments via mobile devices, potentially serving as a "digital disruptor" in the future. Ikhsan and Sunaryo (2020) found that a desire to use mobile applications corresponds positively with usage behavior.

Methodology

This research is causal, or cause-and-effect, in terms of the relationship between variables, explaining the relationship between dependent and independent variables (Cooper et al., 2003). The main instrument for collecting survey data is a questionnaire. The Likert measurement scale 1–5 scales, which is part of the ordinal scale, was used in this study. The sample was 300 managers or leaders from MSMEs in Indonesia who are still actively operating and adopting digital technology in their business activities. The participants were selected via purposive sampling, focusing on MSME owners or managers engaged in digital business operations. The questionnaire was disseminated online through Google Forms utilizing social media platforms such as WhatsApp, Facebook groups, and email networks associated with MSME communities. Participants were initially posed screening questions to verify their roles and engagement with digital technology in their enterprises. It can be seen from the calculation results that the number 175 was obtained as the minimum required sample size, based on the rule of thumb proposed by Hair et al. (2019), which recommends using 5 to 10 times the number of observed indicators. However, we decided to round up the sample size to 300 respondents to better

accommodate various other expert opinions and ensure more robust statistical analysis.

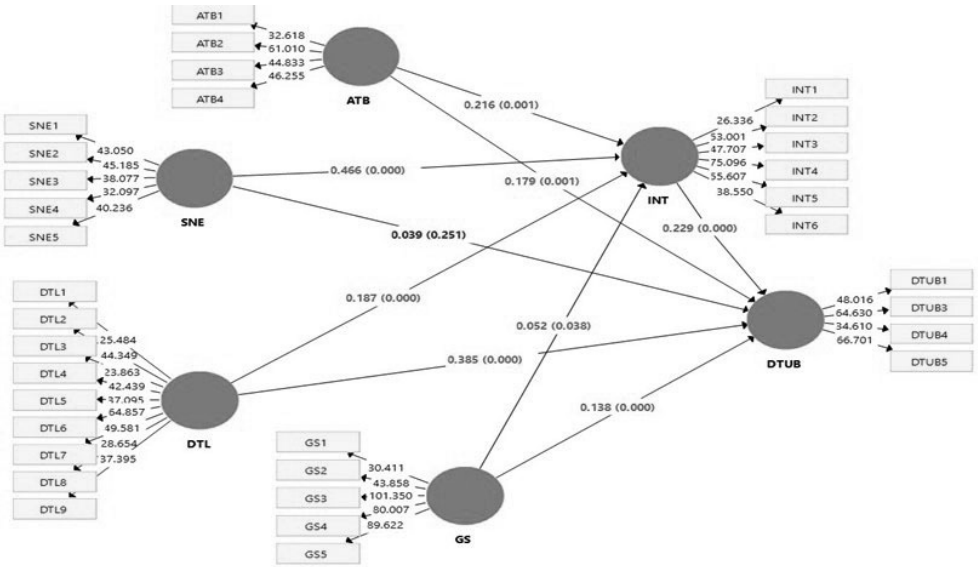
This research comes from primary data; hence, validity and reliability tests are needed. This study uses structural equation model (SEM) analysis where the minimum sample size required is often debated. SEM is a development of path analysis and multiple regression, two types of multivariate analysis models that can be used to overcome the shortcomings of regression techniques (multivariate analysis). In this research, the influence test between variables will be analyzed using the SEM analysis technique with partial least squares (SEM-PLS). SEM PLS is a multivariate statistical method for testing a series of influences between variables that are estimated simultaneously with the aim of prediction studies, exploration, or development of structural models (Hair et al., 2019).

Result and Discussion

Based on the findings of the PLS model estimation bootstrapping technique using a subsample of 500 samples, eight routes are significant, and one path is not significant. It suggests that not all interactions between variables are significant; some routes are inconsequential, implying that several relationships between variables are insignificant.

Exogenous variables have a significant effect on endogenous variables, with the direction of influence determined by the sign attached to the path coefficient. If the p-value obtained for the relationship between variables is less than 0.05, the T statistic is greater than 1.96 (two-sided t value, α 5%), and the T statistic is greater than 1.65 (one-sided test). Furthermore, if the p-value is greater than 0.05, the T statistic in the one-sided test is less than 1.65, and the T value in the two-sided test is less than 1.96 (two-sided t value, α 5%). Thus, there is no true link between exogenous and endogenous factors (Hair et al., 2019). Table 1 shows the findings of the direct effect.

Decisions are made based on test results and a significance level of 0.05 (Haryono & Wardoyo, 2016). In this study, INT mediates the effects of ATB, DTL, GS, and SNE on DTUB. To determine the mediating role of INT, a bootstrapping test was performed. The mediation test results in Table 1 reveal that INT can considerably mediate the effects of ATB, DTL, GS, and SNE on DTUB. Table 2 displays the indirect impacts of this investigation.



Note: ATB = Attitude Toward Behavior; SNE = Subjective Norms Expectation; DTL = Digital Technology Literacy; GS = Government Support; INT = Intention; DTUB = Digital Technology Use Behavior. Green values indicate significant relationships (p < 0.05); red value indicates a non-significant relationship (p > 0.05).

Figure 1
Bootstrapping Model Estimation Results

Table 1. *Direct Effect Test Results*

Path	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
ATB → DTUB	0,179	0,183	0,058	3,087	0,001
ATB → INT	0,216	0,208	0,066	3,258	0,001
DTL → DTUB	0,385	0,384	0,044	8,752	0,000
DTL → INT	0,187	0,185	0,047	3,974	0,000
GS → DTUB	0,138	0,138	0,035	3,939	0,000
GS → INT	0,052	0,055	0,029	1,773	0,038
INT → DTUB	0,229	0,232	0,057	4,047	0,000
SNE → DTUB	0,039	0,033	0,059	0,672	0,251
SNE → INT	0,466	0,471	0,071	6,537	0,000

Source: Data processed (2023)

Table 2. *Testing the Indirect Effect*

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
ATB → INT → DTUB	0.049	0.049	0.021	2.362	0.009
DTL → INT →DTUB	0.043	0.043	0.015	2.774	0.003
GS → INT → DTUB	0.012	0.013	0.008	1.531	0.063
SNE → INT → DTUB	0.107	0.109	0.031	3.465	0.000

Source: Data processed (2023)

The initial premise of this study finds support in data indicating that attitudes toward behavior significantly influence the intention to embrace digital technology. In simpler terms, the more positively MSMEs view certain behaviors, the more swiftly they integrate digital technologies. Descriptive analysis results pertaining to attitudes toward behavior reveal an overall favorable inclination toward engaging with digital technology. However, there remains room for improvement, particularly in terms of utilizing digital technology to enhance productivity, as highlighted in the findings of Xu (2022) showed that digital finance significantly boosts total factor productivity among Chinese firms. Consequently, MSMEs must intensify their efforts to leverage digital technology for productivity enhancement, which could potentially bolster intentions among MSME members to adopt it.

The findings of this study are consistent with previous research by Xu et al. (2021), which demonstrated that a positive attitude toward digital platforms significantly increases Generation Z's intention to purchase digital content in China. Similarly, what was found in this study is consistent with the findings of prior studies by Ramdani et al. (2022), who found that attitudes toward behavior substantially impacted the intention to utilize digital technology among retail firms. Furthermore, the findings of this study are corroborated by research from Akroush

and Al-Debei (2015), Chou et al. (2010), Oentoro (2020), Ramachandran and Stella (2022), Boo and Chua (2022), Malufu et al. (2016), and Mirzaeifar et al. (2020), which underscore the importance of attitudes towards behavior as a determinant of the intention to adopt digital technology. The positive outcomes resulting from digital adoptions instill confidence (behavioral belief) in the belief that embracing digital technology will yield favorable benefits for their MSMEs, thereby fostering an intention to utilize digital technology, in accordance with the TPB (Ajzen, 1991).

The findings of this study support the second hypothesis, indicating that subjective norms play a significant role in shaping MSMEs' inclination to utilize digital technology. Proposed measures to enhance this include providing training and engaging specialists, both individuals and businesses, to mentor MSME participants and enhance their digital technology skills (Almaududi et al., 2021). Subjective norms refer to individuals' perceptions of others' attitudes, which may influence their decision to engage in specific activities. Previous research has established that subjective norms impact individuals' motivation to use a system, consistent with the findings of this investigation (Yuliana, 2022; Hesniati et al., 2022; Tjahjono & Palupi, 2014; Chou et al., 2010). Furthermore, it highlights that higher subjective norms correlate with a greater willingness to adopt technology. Subjective norms represent individuals' perceptions of others' beliefs, influencing their decision to engage in a particular action. MSMEs are more inclined to embrace digital technologies if their environment does the same.

The third hypothesis of this study has been confirmed, demonstrating that digital technology literacy has a considerable impact on the decision to use digital technology. Numerous prior research has shown that being digitally literate increases people's willingness to use digital technologies. These findings align with the conclusions of other research studies (Rahmah & Gufron, 2023), which have also identified digital literacy as a predictor of people's inclination to utilize digital technologies. Managers confident in their knowledge of digital literacy are more likely and ready to use digital technology to complete challenging job tasks (Neumeyer et al., 2021). Studies from Mulyati and Hati (2021), Masbiran et al. (2021), Ollerenshaw et al. (2021), and Cynthia et al. (2023) support the idea that an individual's digital literacy influences their decision to use digital technology (Masbiran et al., 2021).

This study also reveals that government support significantly influences the intention to adopt digital technology. It echoes the findings from the Organisation for Economic Co-operation and Development (2021), which asserted that government support in the form of financial assistance and technology outreach programs, such as guides and educational material packages, fosters training and enhances the skills of MSMEs by strengthening their management capabilities (e.g., through training sessions, workshops, and coaching programs), thereby incentivizing MSMEs to embrace digital technology. These findings align with those of previous studies conducted by Kraja et al. (2014), Lamoureux et al. (2019), Mandari et al. (2017), and Pu et al. (2021).

This study lacks validation, and the inference drawn is that subjective norms do not influence the behavior of digital technology usage. This suggests that more than just strong subjective norms are necessary for the effective utilization of digital technology. The results of the descriptive analysis in this study indicate significant motivations to adopt digital technology, yet there remains room for improvement in terms of utilizing it more effectively. The intention to use digital technology has been identified as mediating the indirect impact of subjective norms on behavior related to digital technology usage. This finding is consistent with the TPB, which holds that the connection between subjective norms and conduct is affected by intentions for behavior (Ajzen, 1991; Fishbein & Ajzen, 1975).

Based on the findings of this research, subjective norms do not directly influence digital technology usage behavior, which means that owners or leaders of small and medium businesses who want to adopt digital technology are not necessarily forced to do so. According to Fishbein and Ajzen (1975), subjective norms of MSME owners or leaders are views about how and what individuals who are significant to the MSME owner or leader think, as well as the MSME owner or leader's drive to follow people who are regarded important.

Subjective norms are supposed to emerge spontaneously and naturally when people form their own normative views, which, according to some experts, are followed by human conduct that is often automatic, thoughtless, or habitual (Aarts et al., 1998; and Ouellette & Wood, 1998). However,

subjective norms can guide behavior only if they become activated automatically and easily. There is little evidence that complex sequences of events or behaviors automatically become habits without cognitive intervention (Ajzen & Fishbein, 2000).

The subsequent hypothesis in this study is confirmed, revealing that attitude towards behavior significantly affects digital technology usage behavior; a favorable attitude towards behavior can facilitate MSMEs' comprehensive adoption of digital technology. This finding aligns with Set (2014), who conducted research on TSMEs in Malaysia's tourism industry and found that both organizational and individual readiness—akin to mindset—influenced their decision to adopt Internet technology. Furthermore, the results of this study are consistent with findings from research conducted by Baber and Baki Billah (2022), Buba et al. (2022), Cynthia et al. (2023), Mat Dawi et al. (2021), and Zeballos Rivas et al. (2021), indicating that technology adoption behavior is influenced by users' motivation to learn the technology.

This study demonstrated and concluded that government support has a major impact on digital technology use behavior. This finding is consistent with study findings (Junnonyang, 2021; Mensah et al., 2022), which demonstrated that government assistance is a crucial factor influencing the adoption of technology applications. Similarly, research findings (Khatib, 2019) indicated that the quality of government assistance is a crucial and major component in the adoption of digital technology. Coco et al. (2023) discovered that government support in the form of training for MSMEs promotes digital literacy for MSME management, encouraging them to use digital technology. According to Chen et al. (2021), there are four major impediments to digital transformation in small service businesses: a lack of money, a lack of digital capabilities, a lack of human resources, and technical obstacles. The Indonesian government does it as a sort of support for MSMEs to assist them in adopting digital technologies (Andarningtyas, 2021). The outcomes of this study are congruent with previous research findings (Senshaw & Twinomurinzi, 2021), which suggested that government support is required to enhance digital technology usage behavior. The more the government supports MSMEs in adopting digital technology, the more likely they are to employ it. This is consistent with the Organisation of Economic Co-operation and Development (2021) research, which stated that government support and assistance in the form of finance, technology outreach programs (guides and learning material packages), and encouraging training and improving MSME skills by strengthening MSME management capabilities (for example, through training, workshops, and program coaching) will encourage MSMEs to adopt digital technology.

Moreover, this study illustrates and suggests that digital technology literacy significantly influences behavior related to digital technology usage; the greater the digital literacy of MSMEs, the more proficient their utilization of digital technology. To improve the behavior of MSMEs using digital technology, the digital literacy of MSME leaders must be taught in such a way that MSMEs can quickly and precisely access the information they require (Aida, 2021). Someone who has good digital literacy is expected to be able to use the internet responsibly, be a critical thinker (McQuillan et al., 2020), and have the ability to choose the right software applications and use information technology capabilities to find and share digital information to learn or complete tasks (Tejedor et al., 2020). The majority of MSME owners and operators have very good digital literacy. In terms of problem-solving, technicians have worked well, but in solving problems related to web-based activities, for example, cyber security, search problems still need improvement.

In the end, this study proved and indicated that intention to use behavior has a substantial impact on digital technology use. According to reason action theory, a person's purpose in utilizing digital technology influences their behavior when utilizing it. The results of this study are in line with research results (Arts et al., 2011; Hassan & Gupta (2020); Rausch & Kopplin, 2021; Conner & Norman, 2022). This also shows how a person's level of technology use influences their behavior when using it.

After conducting the importance performance map analysis (IPMA), it was discovered that digital technology literacy is the factor with the highest level of importance for digital technology use behavior, but the performance so far is still not good, as shown by the performance value (78,468), which is smaller than the mean (83,427). As a result, MSME owners and leaders must develop their digital literacy to get the expertise required to properly employ digital technologies. Digital technology use behavior can be described as volitional behavior because no one expects or requires MSMEs to adopt digital technology. The adoption of

digital technology is driven by the understanding and desire of MSMEs' owners or leaders to ensure that the MSMEs they lead survive, expand, and develop in accordance with the times.

Digitalization is critical in bringing these six components together (policy, financial access, markets, human resource capability, mentoring, and culture) and expediting MSME development programs. It also benefits the community/consumers by providing access to MSME products as well as lower transaction costs for financial services. To enhance the MSME ecosystem and digitalization, the government needs greater private sector participation in the form of fintech, crowdfunding, electronic trading, mentoring for newly established MSMEs, and increasing business networks.

Conclusion

Digital literacy helps MSME owners or leaders to become more aware of changes in market competitiveness, allowing them to set clear digital transformation goals for their enterprises. Successful digital technology adoption will have an impact on MSMEs' competitiveness, performance, and productivity, as well as business growth. Based on the findings of this study, MSME owners/leaders are advised to engage with parties such as educational institutions to develop training and mentoring programs for human resources in MSMEs. MSME owners or leaders make the decisions to address the issue of low digital literacy. MSMEs are also recommended to work together through associations or business groups. This collaboration enables MSMEs to share information and knowledge to solve business difficulties.

The Indonesian government has implemented numerous schemes to help MSMEs go digital. Efforts to empower MSMEs are critical to the economy. MSME development necessitates a comprehensive and ecosystemic approach that includes at least six components: legislation, financial access, markets, human resource capability, mentoring, and culture. Digitalization is predicted to boost MSMEs' contributions to regional development, job creation, economic growth, and poverty alleviation.

This research found that the digital literacy skills of MSME owners or leaders will determine how they can use digital technology to obtain the necessary information, including information for access to support from the government. The findings of this research imply that the government needs to expand its reach to micro and small MSMEs, especially those with limited access to financial assistance, marketing access, and information. The MSME digital transformation process will be realized by increasing and perfecting existing government support programs. Suggestions for future research could include analyzing the differences between MSMEs in Indonesia and other countries, which can provide additional insight. By analyzing what factors can influence how people use digital technology and what differences there are in government support or not.

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