



ISSN: 2617-6548

URL: www.ijirss.com



Cultural heritage meets digital innovation: Technology adoption in Minangkabau's traditional SMEs

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Abstract

This study explores the integration of cultural heritage and digital transformation through the lens of technology adoption in traditional SMEs in Minangkabau, specifically Kampung Rendang in Payakumbuh and Kampung Tenun Pandai Sikek. Traditional SMEs, deeply rooted in Minangkabau's rich cultural values, face challenges in adapting to digital technology while maintaining their unique identity. The research aims to analyze the role of digital capital in this transformation, highlighting access to and competency in digital technologies. A qualitative comparative method was used to examine the experiences of 35 informants, including SME owners, workers, and relevant stakeholders. Data were collected through in-depth interviews, observations, and document reviews. The findings revealed that while 83% of Rendang SMEs and 73% of Tenun SMEs have adopted digital technologies, their usage often focuses on social media and e-commerce for marketing and promotion rather than full operational integration. Significant barriers remain, including limited digital competence, insufficient training, and concerns about digital security. The study also identified how Minangkabau's cultural context influences adoption decisions. Kampung Rendang actively integrates technology to expand its global market reach, while Kampung Tenun prioritizes maintaining traditional crafting methods, limiting digital adoption to promotional activities. This research provided insights into how digital technology supports the sustainability of traditional SMEs while preserving cultural values. Recommendations include sustained training programs, government support, and collaborative efforts to enhance digital competency and market access. By bridging cultural heritage with innovation, Minangkabau SMEs can achieve global competitiveness while honoring their traditions.

Keywords: Cultural heritage, digital capital, digital transformation, Kampung Rendang, Kampung Tenun, Minangkabau, technology adoption, traditional SMEs.

DOI: 10.53894/ijirss.v8i3.7278

Funding: This study received no specific financial support.

History: Received: 31 March 2025 / Revised: 6 May 2025 / Accepted: 8 May 2025 / Published: 22 May 2025

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Competing Interests: The authors declare that they have no competing interests.

Authors' Contributions: All authors contributed equally to the conception and design of the study. All authors have read and agreed to the published version of the manuscript.

Transparency: The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

Publisher: Innovative Research Publishing

1. Introduction

Indonesia has a vision *Golden Indonesia 2045*, which aims to improve better and more equitable welfare with higher human quality, enhancing the Indonesian economy and becoming a developed country, ensuring equitable distribution in all areas of development within the framework of the sovereign and democratic Republic of Indonesia. In realizing this dream, Indonesia focuses on four pillars, namely: 1) Human development and mastery of science and technology; 2) Sustainable economic development; 3) Equal development; 4) Strengthening national resilience and governance [1]. When referring to one of the pillars, namely sustainable economic development, MSMEs are an important focus for realizing this vision.

Micro, Small, and Medium Enterprises (MSMEs) are the backbone of the economy, so the government is trying to encourage MSMEs through funding programs and other initiatives [2]. Based on data from kemenkopukm.go.id for 2015-2019, Indonesia's economic growth was also dominated by the MSME sector at 99.9%, with only 0.01% attributed to large-scale businesses. This shows that attention still needs to be paid to improving the Indonesian economy.

Table 1.
Number of MSMEs in Indonesia 2015-2019.

Type of Business	2015 (%)	2016 (%)	2017 (%)	2018 (%)	2019 (%)
Micro	98.78	98.71	98.70	98.68	98.67
Small	1.15	1.19	1.20	1.22	1.22
Secondary	0.10	0.09	0.09	0.09	0.10
Big	0.01	0.01	0.01	0.01	0.01

Source: Processed from data from kemenkopukm.go.id, 2022

MSMEs face more difficult challenges than before to develop and "move up". Moreover, since the existence of PP Number 7 of 2021 concerning Ease, Protection and Empowerment of Micro, Small and Medium Enterprises, there have been changes regarding the criteria for MSMEs. MSME criteria based on net worth and sales have changed, and there is a tendency to increase standards compared to Law Number 20 of 2008, so that there are more changes in criteria related to business capital and sales results.

Table 2.
MSME criteria.

No	Types of MSMEs	Law No. 20 of 2008		PP Number 7 of 2021	
		Net Worth*	Sales results (yearly)	Venture capital*	Sales results (Yearly)
1	Micro	maximum IDR 50 million	maximum IDR 300 million	most widely Rp1 billion	most widely IDR 2 billion
2	Small	> IDR 50 million to IDR 500 million	>Rp. 300 million to Rp. 2.5 billion	>Rp 1 billion to Rp. 5 billion	>Rp 2 billion up to Rp15 billion
3	Secondary	>Rp. 500 million to Rp. 10 billion	>Rp. 2.5 billion to Rp. 50 billion	have business capital of more than > IDR 5 billion to IDR 10 billion	>Rp. 15 billion to Rp. 50 billion

Source: Primary data processing, 2022.

Note: *Not including the land and building of the place of business.

Entering the era of globalization, local MSMEs must be ready to compete and compete in the global market [3, 4]. This provides an opportunity for MSMEs to expand their markets globally. However, local MSMEs have limitations in terms of finances, inadequate information, lack of negotiating power, insufficient resources, little international experience, lack of protection from the government, and insufficient demand for MSME products [3]. Additionally, the COVID-19 pandemic in the 2020-2022 period has had an impact on the sustainability of MSMEs. During the 1998 economic crisis, MSMEs were still able to survive when large-scale businesses collapsed. However, during the COVID-19 pandemic, especially when the Large-Scale Social Restrictions (PSBB) policy was implemented, it made it difficult for MSMEs to survive due to restrictions on economic activity [5, 6]. MSMEs experienced a decline in performance and sales during the COVID-19 pandemic [7-9]. The MSMEs most affected are MSMEs operating in the food and beverage sector, creative industries and agriculture [10].

Digital-related studies related to MSMEs, such as the importance of using digital platforms for MSMEs [11], the adoption of digital technology with *e-commerce* is a strategy for the sustainability of MSMEs [12-14] the use of social media has a positive impact on increasing marketing [15]. The need for collaboration *stakeholder* (individuals, communities and governments) can expand the MSME market with digital markets and digital financing [16] the adoption of digital technology

improves the performance of MSMEs, especially in increasing new domestic customers and increasing sales [17] the use of digital technology (*e-commerce* and social media) can increase the influence of business strategy and MSME performance [18]. Based on previous research, it appears that the adoption of digital technology is an important part in developing MSMEs for sustainability and improving MSME performance.

In West Sumatra, there are potential MSMEs that can be developed to penetrate the international market, namely Rendang Village in Payakumbuh City and Weaving/Songket Village in Nagari Pandai Sikek. The context of *village* here is the same as a center or cluster, which is a concentration of various similar businesses, especially small-scale businesses. It focuses on developing the small business industry. It is hoped that the business center can be useful for market development, fast and cheap procurement of raw materials, and competitive prices [19]. Interestingly, Kampung Rendang and Kampung Weaving each have their own characteristics, which also highlight elements of typical Minangkabau culture.

First, Rendang Village in Payakumbuh City, which is known as *the city of rendang* is the only Rendang Village in West Sumatra. Apart from that, this area also has potential as a tourist village [20]. Rendang Village has various rendang variants. The variants that are most in demand are beef rendang, egg, lung, beef tumbuak, *suir* (chicken and beef), mushroom and eel [21]. This typical Minang food was once ranked first in the world's *50 most delicious foods* CNN International version from 2011-2019. In 2018, rendang was designated as one of Indonesia's five national culinary delights. So, rendang is widely known and has received international recognition. Apart from that, rendang is one of the cultural heritages that is being sought to be recorded by UNESCO as one of the world's intangible cultural heritages [22]. Therefore, Rendang Village has global potential and is also attractive as a tourist destination.

Rendang Village in Payakumbuh City was initially formed based on the decision of the mayor of Payakumbuh number 530/763/WK-KUPP/VI/2015 concerning the Establishment of 4 Production Centers in Payakumbuh City, namely the weaving industry center (Kampung Tenun), the bamboo craft industry center (bamboo craft village), rendang industrial center (Kampung Rendang), and snack food industrial center. Therefore, Kampung Rendang is used as a term to describe the rendang industrial center in Payakumbuh City, which is specifically located in Sungai Durian Lampasi Tigo Nagari Village. Rendang Village was inaugurated in 2015 and is the only Rendang Village in West Sumatra [23]. Therefore, the term "village" is used to describe the MSME center in the area, which directly refers to what is the superior product of the area.

Second, Kampung Weaving / Songket Pandai Sikek is a woven cloth-producing area in West Sumatra. This Weaving Village also has the potential to become a songket craft tourism village [24]. Although there are other songket-producing areas in West Sumatra, such as Koto Gadang, Kubang, Silungkang, Batipuh, and Sungayang, Pandai Sikek weaving has been developing since 1850 [25]. The unique aspect of Pandai Sikek weaving is that weaving skills are shared by both the younger and older generations. Skills cannot be passed on to generations who are not from the Pandai Sikek area, as it is the message of their ancestors. There are certain methods used by their ancestors, namely using handlooms (non-machine looms) [25, 26]. The art of songket weaving is a cultural product of the collective activities of the community and the heritage of Nagari Pandai Sikek. The unique aspect of Pandai Sikek woven fabric is that the fabric is made manually and traditionally. The songket cloth produced has historical and characteristic Minangkabau motifs such as *pucuak rabuang*, *biteh*, *tampuak manggih*, *saluak laka*, *amaranth*, *areca nut*, *sirangkak*, *ula gerang*, *gobah*, *pucuak sikaka*, and *ulek tantadu barantai putih*. The decorative patterns on the Pandai Sikek songket woven cloth are also inspired by the philosophy of the Minangkabau people, namely *Alam Takambang becomes a Teacher* [27]. Maintaining traditions and culture in preserving Pandai Sikek songket weaving is certainly not easy, especially with the development of globalization. However, the Pandai Sikek Weaving Village is still trying to exist while maintaining the uniqueness of the fabric motifs, which are made manually and traditionally. During challenges, there is also an opportunity for weaving MSMEs located in the Pandai Sikek Weaving Village to expand the market internationally, considering that the fabrics produced from Pandai Sikek are quality woven fabrics.

This research aims to: 1) Analyze the role of digital capital in the adoption of digital technology by traditional MSMEs in Minangkabau; 2) Explore the digital technology adoption process that occurs in traditional MSMEs in Minangkabau;

This research is novel, namely the discussion of MSMEs, especially digital capital and the adoption process, taking into account the local context and the specifics of Minangkabau culture. This research presents a more in-depth analysis of the technology adoption process which occurs gradually, from awareness to full acceptance by traditional MSME players. Most previous studies tend to assess adoption rates without delving into more detailed processes. This research shows how cultural, economic, and social challenges in Minangkabau influence the stages of digital technology adoption, providing a new picture of local factors that also influence business decisions to adopt technology. In contrast to many studies that focus on urban areas or more modern business sectors, this research highlights the Minangkabau cultural context as a case study. This research explains how local social and cultural values can strongly influence the adoption and use of digital technology in traditional MSMEs. By considering the unique cultural characteristics of Minangkabau, this research provides a new view on how traditional values and digital technology can work together to support the development of MSMEs.

Apart from that, this research also focuses on the context of traditional MSMEs. So that gives a new perspective in understanding how digital transformation can be achieved by traditional MSMEs by utilizing modal digital that they have. It provides a practical approach for MSMEs to understand and implement digital technology as a tool for accessing global markets, improving operational efficiency, and expanding their market coverage. This aspect is rarely emphasized in traditional MSME studies, which are more focused on adapting technology on a small scale.

2. Literature Review

2.1. Digital Sociology in General

One of the sociologists who discusses digital sociology is Lupton [28]. Sociological research related to computer technology has various terms such as cyber sociology, internet sociology, e-sociology, online community sociology, online community sociology, social media sociology and cyber culture sociology. We now live in a digital society, where there have been major changes with the introduction of devices and platforms, especially in the last few decades. Just as personal computers were introduced in 1980, the World Wide Web (www) was discovered in 1989 and became easily accessible to the public in 1994. Since 2001, many important platforms have released tools that have an impact on social life. Moreover, there are also various social media used today [28].

There are four typologies in discussing digital sociology, namely; 1) professional digital practice, namely using digital tools as part of sociological practice such as building networks, building online profiles, publishing and sharing research and conducting teaching; 2) Analysis of the use of digital technology (analysis of digital technology use), namely examining the ways in which digital technology is used by people, shaping their self-awareness, its manifestations and social relationships, as well as the role of digital media in the creation and reproduction of social institutions and social structures; 3) Digital data analysis, namely using digital data that appears naturally for social research, both quantitative and qualitative; 4) Critical digital sociology, namely carrying out a reflective analysis of digital technology based on social and cultural theory [28].

In his book, Lupton [28] also outlines the theory of digital sociology in the sub-chapter The Global Information Economy and New Forms of Power. It is explained that one of the influential sociologists, Castells, had a concept related to the network society. The position of the network as a societal force in relationships is discussed. One of the discussions relates to the information era, where industrial processes have been replaced by electronic communications facilitated by new information technology. Power is now multidimensional, residing in networks such as global finance, political, military-security, information production, criminal, and multimedia networks. All these networks are involved in defining the rules and norms of society. Castells insists that it is digitally mediated. Information has become the key to economic productivity. Knowledge-based information technology produces more knowledge and information, contributing to a new information-based economy that is spread globally and highly interconnected, using digital and technological and other networking practices. According to Castells, digital technologies such as social media have played a huge role in creating new social structures, global economies, and cyber cultures [28].

2.2. Adoption of Digital Technology

Adoption is defined as the decision to take full advantage of an innovation as the best course of action available. The innovation decision process can lead to adoption, the decision to make full use of the innovation as the best available course of action, or rejection, the decision not to adopt the innovation. Such a decision may be reversed at a later date. For example, discontinuation is the decision to reject an innovation after it has previously been adopted. Discontinuation can occur because someone becomes dissatisfied with an innovation or because the innovation is replaced by a better idea. It is also possible for an individual to adopt an innovation after a previous decision to reject it. Adoption and subsequent termination occur during the confirmation stage of the innovation decision process [29].

The adoption process is in 5 stages, namely

1. Knowledge is obtained when individuals (or other units) learn about the existence of innovation and gain an understanding of how the innovation functions.
2. Persuasion, namely when someone forms an attitude of liking or disliking innovation.
3. Decision, namely when individuals are involved in activities leading to the choice to adopt or reject innovation.
4. Implementation, namely when using innovation.
5. Confirmation, namely seeking reinforcement of the decision made to use the innovation.

The adopter categories are: 1) Innovators (initiators of innovation), namely individuals or groups who were the first to adopt innovation. There is a tendency to take risks, be open to new ideas, seek innovation out of curiosity and interest in new ideas; 2) Early adopters, namely those who adopt innovations after innovators, choose wisely and do not immediately adopt new ideas without proof that the innovation is successful; 3) Early majority, namely individuals or groups who adopt the innovation before most of society does. They tend to wait and see how the innovation impacts others before they decide to follow suit; 4) Late majority, namely a group that is somewhat skeptical of innovation and only adopts it after the other majority has already done so. They may lack the resources or motivation to try new things; 5) Laggards (lagging adopters), namely those who are the slowest to adopt the innovation. They are conservative, do not like change, and may maintain old ways for a long time [29].

2.3. Digital Capital Indicators

Ragnedda in his article entitled *Measuring Digital Capital: An Empirical Investigation* develops *Digital Capital Index* (DCI) by adopting digital capital, a set of internalized talent capabilities (digital competencies) as well as external resources (digital technologies) that can be accumulated historically and transferred from one arena to another [30].

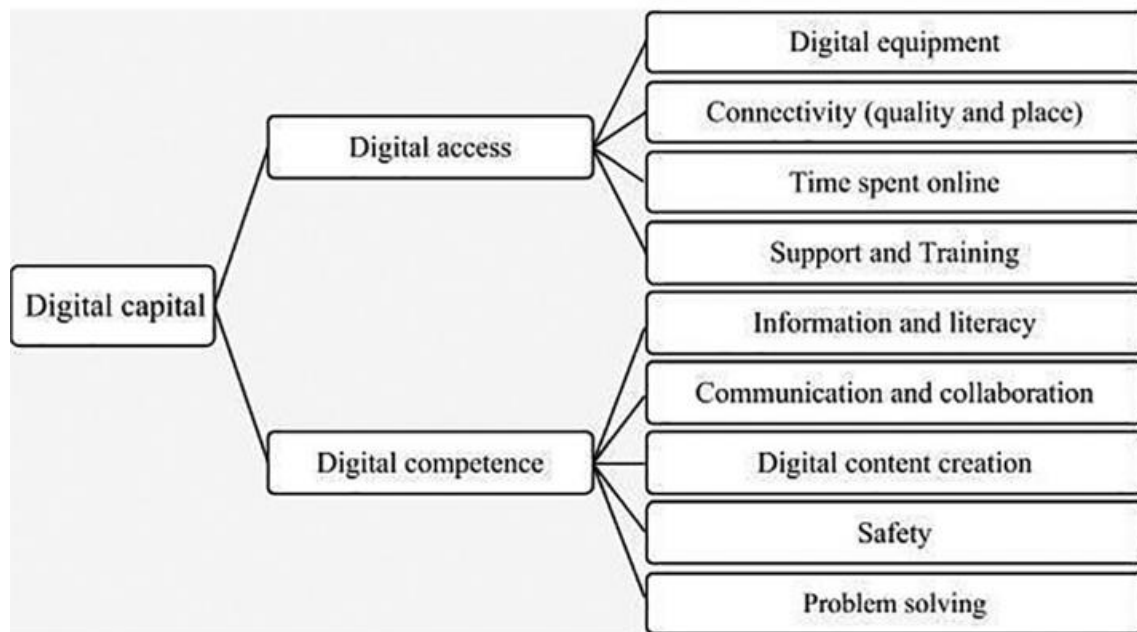


Figure 1.
Digital Capital Indicators According to Ragnedda, et al. [30].

In research conducted using the adoption concept and adoption process from Everett M. Rogers in collaboration with Ragnedda, digital capital is discussed. Thus, the discussion on digital technology adoption will be comprehensive. Digital technology adoption is a decision to take full advantage of an innovation in the form of digital technology/digital capital as the best available action. The adoption process, as seen in MSMEs, starts from knowledge, persuasion, decision, implementation, and confirmation. In this research, Ragnedda's Digital Capital Index (DCI) was used to assess the digital capital/digital technology that exists in MSMEs. Furthermore, here is the description:

First, Digital Access. It is the ability of individuals or groups to access or use digital technology. This includes access to hardware such as computers and smartphones, as well as access to internet infrastructure such as networks and broadband. In research conducted regarding digital access in MSMEs in Rendang Village and Tenun Village; a) devices used by MSMEs for internet access (digital equipment); b) where the settings frequently access the internet (connectivity); c) the length of time spent on the internet (time spent online); d) formal training that has been attended in using the internet. If you need help, who can assist in using the internet; e) the ability to help other people use the internet (support and training); f) Use of digital access in the development of MSMEs.

Second, Digital Competence. It is the ability of individuals/groups to use digital technology effectively and productively in various contexts. In the research conducted, digital competencies were seen in the context of MSME development, namely: a) information and data literacy related to how to use certain information/data, skills, and searching for information, knowing information/data, and using information for the development of MSMEs; b) communication and collaboration, communication is related to the exchange of ideas and information between individuals or groups. In the context of a digital society, information exchange is carried out through digital technology, e-mail, text messages, social media, video conferencing, and other online platforms. Then what kind of collaboration is carried out in the use of digital technology by MSME players with various parties in developing MSMEs; c) digital content creation, security, and problem-solving. Digital content is information and material presented in digital form and can be accessed via the internet or electronic devices. What kind of digital content is created or owned by MSMEs in business development, for example, in product promotions and others,

3. Research Methods

The research method used in this research was a qualitative method, namely the nature of the data collected was basically the words and actions of humans/social groups. Carried out by comparative studies, namely comparing two or more phenomena, entities, or groups that have certain characteristics or conditions, with the aim of finding differences, similarities, or relationships between the phenomena being compared.

The reason for choosing Kampung Rendang and Kampung Tenun as case studies is that they represent unique MSME villages and have an important role in preserving Minangkabau culture and the local economy. Both of them generally started their businesses offline and then tried to adapt to digital technology. Rendang Village, as a producer of traditional culinary products, was unique in combining aspects of culinary culture with technological innovation in marketing and distribution. Meanwhile, the Pandai Sikek Weaving Village, which is famous for its world-renowned weaving crafts, showed how craft-based creative industries developed with social capital and digital technology, especially in promotion. The selection of the two was not based on the representation of all MSMEs in Minangkabau, but rather on characteristics that were relevant to the research focus.

The technique for determining informants is by *purposive sampling*, namely by establishing certain criteria that must be met by the person who was used as a source of information [31]. The criteria set in this research were:

1. Rendang MSME players and Pandai Sikek Weaving MSME players
2. The location is in the designated MSME cluster, namely Rendang Payakumbuh Village and Sikek Pandai Weaving Village.
3. Have been an MSME actor for at least 5 years
4. Own a rendang/weaving business on a micro and small scale

Based on the criteria and information to be obtained, 35 informants were obtained with the following details:

1. The number of informants from Rendang Village MSMEs is 9 people, consisting of 6 Rendang Village MSMEs who are still active and 3 Rendang business actors who have stopped running businesses in Rendang Village (to complete the data).
2. The informants for the MSMEs in Kampung Weaving who have a gallery in Pandai Sikek are 15 weaving business actors and 5 more informants to complete the information, consisting of weaving children from weaving MSMEs and weaving collectors who collaborate with weaving MSMEs.
3. Agencies related to the development of Rendang Village and Weaving Village are 6 people (for data triangulation).

The data collection techniques used were in-depth interviews, uninvolved observation and document collection. Meanwhile, the research instruments are in-depth interview guidelines and observation guidelines. The data analysis stage in the qualitative research carried out is according to Miles and Huberman, namely;

- a. The codification stage is the stage of giving a name or labeling to the research results. The results are in the form of themes or classifications of research results. In the research conducted;
- b. The data presentation stage is an advanced stage of data analysis to present findings in the form of groupings or categories, which can also be in the form of diagrams and matrices;
- c. The conclusion drawing or verification stage is the interpretation stage of the findings of an interview or document. After conclusions are drawn, the coding process and data presentation are re-checked to ensure that no errors have been made (Afrizal, 2014). In the research carried out, the codification and data presentation stages carried out before drawing conclusions/verification can also be assisted by NVivo.

4. Results and Discussion

4.1. Digital Technology Capital

4.1.1. Ragnedda Digital Capital Indicator

4.1.1.1. Access Digital

Digital access is the ability of individuals or groups to access or use digital technology. This includes access to hardware such as computers and smartphones, as well as access to internet infrastructure such as networks and broadband. Digital access is needed by business actors for sales and promotions, while the production process remains traditional. Rendang Village and Tenun Village have similarities in digital access.

Devices used by MSMEs for internet access (*digital equipment*) include EDC machines (*electronic data capture*), smartphones, computers at the cashier, laptops, QRIS, and m-banking. Some are also supported by Wi-Fi. These devices are used to process payment transactions such as EDC, Q-Ris, and m-banking. For rendang or weaving MSMEs, not all of them use tools for digital access. In particular, the use of computers in Rendang Village was found in Rendang E MSMEs. However, there are also those who still maintain selling using an offline system, namely Rendang I. This is because these MSMEs have difficulty learning and adapting to the online system. HP doesn't support it, and we still use manual HP (not smartphone). Even though they have received training, they cannot put it into practice. Furthermore, in Weaving Village, no one uses computers at the cashier.

Frequent internet access settings (*connectivity*) come from smartphones and Wi-Fi. Some MSMEs use Wi-Fi at their places of business to make it easier to connect to the internet, either for work or other purposes. Others use their respective data packages for internet connections. The length of time spent on the internet (*time spent online*) each day is uncertain, averaging between 1-3 hours for sales and promotional purposes. This is because internet use is only done in the free time of workers. On average, those who also hold social media accounts are workers in rendang shops/weaving galleries. This is due to the lack of a special admin to manage various online platforms such as social media and *e-commerce*. This affects the online sales made by MSME players, as they cannot serve customers quickly.

MSMEs in Rendang Village and Woven Village have received training from the government, for example from the Cooperatives Service or the Industry and Trade Service. However, on average, this formal training does not have the form of ongoing assistance, so that in applying the knowledge gained in the training, the implementation depends on each MSME actor in Rendang Village and Tenun Village. This was expressed by J, Rendang Payakumbuh MSME Actor, on November 17 2023 as follows:

"The problem is that the training carried out by the Cooperatives Service is not sustainable, so that the understanding of the material by business actors is floating and no significant benefits have been felt. "Most training only teaches the basics without any process from start to finish and stages of success assessment."

Next, related to the ability to help other people use the internet (*support and training*) in Rendang Village and Weaving Village have not been found. Therefore, MSMEs in Rendang Village and Tenun Village already have digital access. They have sufficient equipment to access the internet and can carry out marketing and promotions and even make transactions online, and have access to digital-related training. However, even though access already exists, the problem is the digital competence possessed by MSMEs and the tendency of MSMEs to prefer selling offline.

4.2. Digital Competence

Digital competency is the ability of individuals or groups to use digital technology effectively and productively in various contexts. This digital competency is needed by MSME players to support the process of adopting digital technology. In the research conducted, digital competencies were observed in the context of MSME development, namely:

4.2.1. Information and Data Literacy

Data literacy discusses how to use certain information/data, skills, and searching for information, knowing information/data, and using information for the development of MSMEs. Some things that can be done are as follows: a) MSME players can explore and search for various information, data, and digital content from various sources, either by self-teaching through browsing the internet or by attending various trainings held by different parties; b) MSME players learn to use various online communication tools, both self-taught and through various training. However, in practice, assistance is still needed in using various online platforms to develop MSMEs. For example, asking for help from workers or family to manage the MSME online platform, especially during free time, which is not yet dedicated; c) In developing MSMEs, on average, the digital content that is produced by MSMEs in Rendang Village and Tenun Village is assisted by workers or families who are considered to have mastered IT. Only a few owners also produce content.

What MSME actors have not done is related to information and data literacy, such as using services and savings (e.g. *cloud* or *hard drive* external) to store files/content, verify the source of information found, and have not yet developed strategies related to being aware of how digital platforms can be *hacked* by irresponsible individuals. For example, in Tenun Village, when there was social media, it was affected; *hacking* is prevalent in Sikek Art, and it took a long time to recover, even creating a new Instagram account again. Meanwhile, at the IK gallery, they no longer use Instagram because it was hacked.

In research conducted on MSMEs in Rendang Village and Tenun Village, digital competence was utilized to increase product sales and serve as promotional tools. For example, information literacy is often acquired either through self-teaching or training in digital marketing and how to use specific platforms for selling. This is also employed as a product promotion event, ensuring that the product is better recognized when sold online. Additionally, information literacy facilitates communication among MSME actors and helps them obtain information related to beneficial training.

Information exchange is not carried out via email, text messages (SMS), or *video conferences*. However, it is mostly done through WhatsApp (WA) or social media platforms such as Facebook and Instagram. On WA, information can be exchanged between fellow MSME players to promote products or share information about various topics, or with potential buyers. WA can be used as a means of promoting their products. MSME players can send product photos to prospective buyers and conduct transactions via WhatsApp. Social media can also serve as a means of product promotion to attract the interest of potential buyers.

4.2.2. Generated Digital Content

Digital content has benefits in developing MSMEs. By using the right digital content, it will help MSMEs to promote products, increase sales and expand market reach. The following are the percentages of MSMEs that have social media/e-commerce accounts as follows:

Table 3.

Percentage of MSMEs that Have Social Media/e-commerce Accounts for Promotion/Sales at Rendang Village MSMEs and Tenun Village MSMEs.

No	Category	MSME Village	
		Rendang Village	Weaving Village
1	Have social media/e-commerce accounts	17 %	27 %
2	Do not have social media/e-commerce accounts	83%	73 %

Based on observations, MSMEs in Rendang Village and Tenun Village on average already have social media/e-commerce accounts as initial capital for uploading content for promotion and sales. 83% of Rendang Village MSMEs have social media/e-commerce accounts, while only 17% do not. Likewise, 73% of Kampung Tenun MSMEs already have social media/e-commerce accounts, only 27% don't. Based on the results of interviews with informants, on average more people have social media accounts than e-commerce accounts and content is also more likely to be uploaded on social media. This means digital content has the potential to be uploaded to these accounts.

The uploaded content is more varied, starting from text (which can be uploaded to Instagram stories), images/photos with captions, and videos. However, the weakness is that it requires time allocation and creativity in managing content so that more and more people are interested in viewing and even following the social media accounts for Kampung MSME products: Rendang and Weaving Village. Meanwhile, uploading content in e-commerce, on average, consists of images/photos with captions, or videos, and there are also text messages when responding to chats from potential buyers. The advantage is that if the product photo is attractive and has a clear description, it can increase sales on the e-commerce platform. Additionally, features such as product videos, reviews, and testimonials can help potential buyers decide whether or not to buy the product being offered. The weakness is that there is tight competition in e-commerce, so it requires an understanding of how to carry out online store management and necessitates the availability of time to respond to various interactions with potential buyers. The following displays social media, e-commerce, and content from the MSMEs of Rendang Village and Woven Village:

Table 4.

Social Media, E-commerce, and Content Creation in MSMEs in Rendang Village and Tenun Village

No	Discussion	Types of MSMEs	
		MSMEs in Rendang Village, Payakumbuh City	Sikek Clever Weaving Village MSMEs
1	Social media used	Facebook Instagram WA Youtube TikTok	Facebook Instagram WA tiktok
2	e-commerce used	Shoopee Tokopedia Lazada	Shoopee
3	Content creation	Image/photo content accompanied by captions Video content	Text message Photos and captions Video content

Digital technology is used in promotions and sales to potential buyers. In the current digital era, utilizing social media and e-commerce is also carried out by MSMEs in Rendang Village, Payakumbuh City, and Tenun Pandai Sikek Village. Promotions on social media certainly require digital content to attract buyers' interest. What is meant by digital content is all forms of information conveyed through digital media. Some digital content is in the form of text messages, images and captions, videos, and infographics. Text messages for digital product promotions are short messages that are written to attract potential buyers to purchase the product being offered. This message is used to send direct messages. If there is a potential buyer, this will be followed by a further process related to a more detailed discussion regarding the product variety.

Image content and captions involve the use of photos/images along with short text that describes or explains the image. The information provided can be in the form of information on various products, prices, services, and also various activities carried out by MSME players related to their products. The ideal selection of images/photos must be of good quality, relevant, and appropriate to the target market. However, in practice, this is not always the case. Some already use daily equipment to take pictures/photos. The use of images and captions is intended for promotion on social media and e-commerce. This is considered one of the effective ways to do it. For example, on social media, by posting pictures and captions on Facebook/Instagram, those who are interested can interact directly on that social media. Apart from Instagram or Facebook feeds, you can also post images and captions via stories. This is a feature that allows users to share photos, videos, text, or other images in a temporary format, or within 24 hours. So this content does not need to be immortalized on the profile.

Video content refers to the use of video as a medium to communicate messages to potential buyers. Video is the most effective content because of its ability to attract attention and convey information more clearly. MSMEs from Rendang Village and Tenun Village also use video content to promote products or activities related to the products they produce. Videos can be in the form of product reviews or testimonials showing feedback from buyers, or in the form of advertisements showcasing the product. Others can be videos that are stories (*storytelling*) about product-related experiences or product-related activities. Video content can be in the form of product reviews; for example, for Kampung Rendang products, video content can contain product reviews by content creators who try to eat rendang. We will tell you what rendang tastes like and share the experience of trying this product, inviting followers on social media to also try the product being reviewed. At Kampung Weaving, videos can contain examples of songket products being sold, videos of models demonstrating the use of the product, or photos of the product mounted on a mannequin accompanied by comments from the creator and background music to attract the audience's attention to see the product.

Furthermore, content in the form of infographics has not been used in posts on accounts either by MSME actors in Rendang Payakumbuh Village or Pandai Sikek Weaving Village. Infographics are visual content designed to convey information clearly, concisely, and interestingly. Infographics are used to present complex and complicated data in a format that is easier for readers to digest. Using elements such as graphs, diagrams, or illustrations aims to clarify information. The average content used is text content, images/photos with captions, or videos.

The use of text content, images/photos with captions, or videos as a means of promoting MSME products in Rendang Payakumbuh Village and Sikek Weaving Village certainly has its own strengths and weaknesses. As an example: 1) Text content: the advantage is that the cost is relatively cheaper than visual content, but it has weaknesses such as the content not being as interesting as visual content. Potential buyers will take longer to read and understand the meaning of the text than visual content, and not everyone likes to read text, especially long text; 2) Image content and captions: the advantage is that images convey information more quickly visually without having to write a lot of text messages. If the image is interesting, it will produce content that will attract potential buyers to buy the product. The weakness is that because the image is accompanied by a caption which is only short text, it cannot convey more detailed information in the post. If there are potential buyers who are interested, then more detailed information will be provided, requiring more effort to produce attractive images compared to text content; 3) Video content: the advantage is that it can present information in a visual and easy-to-understand way and provides space to increase creativity in conveying information. The downside is that producing quality videos requires quite a lot of money and creativity to make videos with a short duration but are interesting, because there is a tendency for viewers to get bored of seeing videos that are too long. It also requires a strong internet connection and a larger quota to open video content compared to text content or image/photo content with captions. Therefore, with the various advantages and disadvantages of this content, MSME players more often combine the three contents to get maximum results.

The social media platforms used are mostly Instagram and Facebook. TikTok is not very actively used and does not really suit the targets of potential buyers. There are business people who are active on Instagram, but there are also those who are not. For business actors who are active on Instagram, examples include Rendang E and Songket D. The content created on Instagram consists of images and captions, infographics, and also videos. However, posting updates is not done every day, only at certain moments. Posts on Instagram also take the form of Instagram Stories, Instagram Reels, as well as several Instagram Highlights, which function to promote their products to potential buyers. The Highlights also contain buyer testimonials that give an impression of the product. However, in posts on the Instagram feed, there are not many comments from Instagram users regarding the products posted. Likewise, there are not many likes on these posts.

Like the DS weaving business, even though it has Instagram, most sales are made on Facebook, because Facebook's target users are more interested in songket. As stated by DO, Kampung Weaving MSME Actor on November 23 2023:

"The social media owned include; WhatsApp, Facebook and Instagram. WhatsApp is used for transaction processing and detailed prices, while Instagram is only for posting pictures of weaving products. There are 1400 Instagram followers with a small number of likes between 1-5 likes. Then there are three Facebook accounts, where the first account has 5.7 thousand followers with an average like of more than 10 likes. The second account has 831 followers and the third has 1 follower. "More transactions are carried out via Facebook because the target market uses Facebook more."

Product marketing is also carried out in e-commerce. Compared to Kampung Tenun products, Kampung Rendang products are more widely marketed in e-commerce. This is because the price of rendang products is still affordable for buyers, while songket costs millions. Buyers are more likely to be interested in buying offline or browsing first via social media Facebook or Instagram. For Kampung Tenun MSMEs, e-commerce functions more as a promotional tool. At Rendang Village MSMEs, to attract potential buyers to choose to check out the product, it is seen based on the product description, product photos, ratings and reviews given by people who have already purchased the product via e-commerce.

Therefore, Kampung Rendang and Kampung Tenun have created various content for social media and e-commerce. To upload more diverse content on social media, such as text messages, photos, and so on *caption*, as well as videos. In contrast to e-commerce, they more often use photos and *caption*. However, the functions of social media and e-commerce are different between Rendang Village and Tenun Village. In Rendang Village, it functions as a means of promotion and sales. Meanwhile, the Weaving Village functions as a promotional facility. This difference is caused by shopping online *online* to buy goods such as songket. Even though you can see testimonials, comments, or product photos, potential buyers are more interested in seeing the original goods first at Kampung Weaving. This is because the price of songket is quite expensive, and there are also concerns that the product quality is not the same as shown in the photo/video. Meanwhile, for Rendang Village, sales also occur randomly *online*, because rendang products are relatively cheaper, and if they don't meet expectations, there won't be too much loss. The similarity that occurs is that in managing accounts in both Rendang Village and Tenun Village, management is needed more professionally and has its own admin. Currently, social media management is on average only assigned to workers in their spare time, so this also has an impact on the content produced. In Rendang Village, apart from being managed by the admin, there is also assistance from related agencies to create a kind of shop *online* which is managed by the Payakumbuh City promotional boarding house. When there is an order, the promotion center will help to educate MSMEs. So, the use of social media and e-commerce is more active than that of MSMEs in Kampung Weaving Pandai Sikek.

4.2.3. Communication and Collaboration

Communication is related to the exchange of ideas and information between individuals or groups. For MSMEs in Rendang Village and Tenun Village, text messages are in the form of WhatsApp (WA) or via social media such as Facebook and Instagram, as well as e-commerce platforms like Shopee, Tokopedia, and Lazada. Then, what kind of collaboration is carried out in the use of digital technology by MSME actors with various parties in developing MSMEs? Communication via WhatsApp (WA) is conducted with prospective buyers. For example, promotions are made to certain groups. Pictures are posted along with written product descriptions. If there are potential buyers who are interested, they can chat (ask personally on the business person's personal WhatsApp). WhatsApp is also used to exchange information among MSME players. Communication is also carried out for promotion on social media (more will be discussed in the content section in point three). Communicating online makes it easier for potential buyers who want to ask questions about the products offered.

Collaboration is also carried out by business actors in Rendang Village and Tenun Village. This collaboration refers to cooperation with parties with the hope of increasing sales and serving as a means of product promotion. In a digital context, this refers to the use of technology, information, and the internet in developing MSMEs. More specifically, this research focuses on collaboration in the form of cooperation related to the development of content uploaded on social media and e-commerce. The following is an example of collaboration carried out in the form of:

- a. MSME collaboration with influencers/public figures. This is done with an endorsement system; this is achieved by asking other people who have influence to promote the products we sell. Endorsements can be done in two ways, namely: endorsements are done by sending the product and paying the influencer to promote our product by uploading it to their social media later. If the endorsement is made on Instagram, the content will be uploaded to the Instagram feed or Instagram story. Later, there will be a product review with video content, starting from the product unboxing process, tasting the rendang product, and providing testimonials on the taste of the rendang that was tasted, as well as promotions to invite other people to try the product. Endorser collaboration involves providing products to figures or public figures who are widely known by the public. When there is a certain event, the character is given the product for free and is expected to use it at that particular event. The exchange that occurs here is that the MSME owner hopes that people who see the public figure using the product will be interested, and this will act as a means of promoting the product indirectly.

The system is that it is not the endorsed public figure who will post in the media, but later, if there is coverage of the public figure, it is hoped that other people will also be interested in the Pandai Sikek songket worn.

- b. Collaboration in utilizing government-managed e-commerce platforms. The collaboration referred to is assistance from the government to increase product sales by opening an online shop managed by the government. Therefore, MSME players just wait for orders to arrive on the platform, without needing to take part in managing the digital platform.
- c. Content collaboration created by assisted MSMEs to promote MSME products. The content that is part of the collaboration is video *storytelling*, where the video tells the story of two people who are tired from overworking and want to eat to increase their energy. Then, they tried eating various variants of rendang E products, starting from rendang, wet jerky, and egg rendang. After trying the product, they provide testimonials regarding the taste and texture of the food. Then it was introduced that this was one of PT PERTAMINA's products.

4.2.4. Digital Security and Troubleshooting

It is an activity carried out to protect data, software, and hardware from various digital threats that can cause losses, especially for MSMEs. In the research conducted, digital security was explored in connection with the informants' experiences related to managing digital technology, particularly regarding their social media and e-commerce. MSMEs do not yet have device protection, such as securing devices, whether computers, laptops, or smartphones, with passwords or other authentication methods to prevent unauthorized access. Therefore, MSME actors need to receive training and increase awareness to be able to identify *scams* (fraud). An example of a scam is phishing, which is an attempt to obtain someone's data using phishing techniques. Data that can be targeted by phishing includes personal data (name, age, address), account data (*username* and *password*), and financial data (credit card information, accounts).

The digital security case that occurred in the Pandai Sikek Weaving Village is a social media incident involving MSME actors who were *hacked* by an unknown person. This experience has happened to several MSME actors, such as Instagram Galeri LS, which was *hacked* until it couldn't be found, and the owner had to ask his nephew for help to recover the account. Another case occurred at the Pandai Sikek Art Gallery, where the Instagram account could not be found in September 2023. A month later, it could be found, but the account was empty. Another case also happened to Dewi Songket, where Facebook was *hacked*, necessitating the creation of a new account. Another case involved IK Gallery, which previously had an Instagram account that was plagiarized by irresponsible individuals who made the same posts as those posted by the official Tenun SK account and sold songket at a cheaper price. Therefore, the *owner* decided not to use Instagram anymore because the impact of the cloned account affected market prices. Of the various digital security cases that have occurred, the average solution taken by MSME actors is to create a new account or stop using social media altogether. Even if they want to recover their accounts, they have to ask other people for help first. No preventive measures have been taken regarding digital security. Meanwhile, there were no digital security problems found in Rendang Village. The only issue that occurs is related to the inactive use of the *website*, as it is considered not to support the development of MSMEs, especially since using a *website* also requires an annual fee.

4.3. Digital Technology Adoption Process

The use of digital technology by MSME players is caused by various factors such as: 1) Changes in consumer behavior in shopping. This behavior refers to the actions of individuals or groups who use the internet or e-commerce to carry out the purchasing process online *online*. Initially, shopping was only *offline*, where individuals would directly visit shops or places of sale to conduct buying and selling transactions *cash/cashless*. Now, prospective buyers have started shopping online for reasons of convenience and practicality; they can also make transactions using *cashless* methods. Seeing this opportunity, business actors are also beginning to promote and sell online to reach a wider market; 2) Covid-19 and the implementation of PSBB (Large-scale Social Restrictions). This has caused all activities to be limited and has impacted tourist visits due to regulations prohibiting activities that cause crowds. Additionally, there are restrictions on the movement of people, except for meeting basic needs, activities related to defense and security, and other permitted activities during the PSBB. At that time, tourist activities were not allowed, as they involved the movement and distribution of people from various regions (<https://ppid.sumbarprov.go.id/>, [s.d.]). Thus, with no tourists shopping in Rendang Village and Tenun Village, an alternative was taken by selling online.

Currently, digital technology is widely used for marketing media and promotional tools. On average, use cannot be done effectively. This is because there is no special admin in charge of managing the online platform. Nowadays, digital technology is used for marketing and promotional advice. Currently, it is also used for buying and selling transactions. However, not all business actors are currently active *online*; there are also those who don't use it or have stopped using it. Because currently some are still active and some are not, those who actively use it will feel the benefits of more and more people getting to know their business products. Meanwhile, those who are not active will focus on selling *offline* only.

Therefore, regarding digital technology development plans, they are divided into 3, namely; 1) Want to develop *online* further, for example by providing a special admin to manage *platform* digital. Looking at future prospects, several MSME players are optimistic about developing *platform* digital because we see future opportunities. Because in the management of various *platform* digital requires people who have the skills and the time to do it *update* and also respond to comments on social media and *e-commerce*; 2) Some see future developments, when prospective buyers are interested in buying *online*, then you will learn about it. Business actors have not seen adequate benefits from development *platform*, so still considering continuing; 3) Not interested in developments in digital technology. A business base that has been established for decades is considered sufficient as a promotional event. Moreover, sales are carried out online *offline* considered to be profitable enough so that based on this experience it is felt that there is no need for it *platform online*. Moreover, management requires *skill* and

special admin. Based on this explanation, it can be explained that the stages of the adoption process in Rendang Village and Tenun Village are the same, because on average their initial business base is business. *offline*, that is;

4.3.1. The Cognitive Process (Knowledge)

When MSMEs are faced with the existence of digital technology and confronted with its functions, they will study the innovation process in the form of using digital technology to develop MSMEs, both in marketing, promotion, and transaction processes. This learning process can be done through self-taught learning, training, or based on formal education that has been completed by MSMEs or *support systems* like family members who help in developing digital technology for MSMEs. MSME players are starting to learn how digital technology functions in developing MSMEs and also learn from the experiences of others who have previously tried using digital technology. When studying the process of using digital technology and its functions, they will gain *stock of knowledge* from digital technology. For example, how to market and promote using various social media such as Facebook, Instagram, WhatsApp, YouTube, and even TikTok. Additionally, there are e-commerce platforms such as Tokopedia, Shopee, Lazada, and so on. There are also various online transaction media such as EDC, Q-Ris, and m-banking. Knowing about digital technology and its benefits will certainly be different from using it.

4.3.2. Persuasion (Persuasion)

It is the process of forming an attitude of liking or disliking the development of digital technology. MSME players have actively sought information regarding the adoption of digital technology and development for MSMEs both in Rendang Village and Tenun Village. Here the process of interpreting the information obtained will occur. In developing an attitude of supporting or not supporting the use of digital technology in MSMEs, MSME actors will consider how it will be implemented in the present and future, as well as taking into account other people's experiences when implementing it. So various information will be sought to reduce uncertainty or risk when digital technology adoption is implemented. MSME players must also consider whether the knowledge they already have is relevant to the situation, conditions and potential they have.

When MSMEs have received various information, they will see what the situation and conditions of their business are like. For example, in Rendang Village, is it enough? *offline* Even if it is considered to have brought profits, what will the resources that manage this digital technology be? Or in Weaving Village, because making songket takes a long time, if later there is an order *online*, whether there is enough time and resources to serve orders, because most of the initial business base is *offline* and MSMEs in Rendang Village and Tenun Village are on average in need *support system* to develop digital technology. Then, with songket prices in the millions, it won't be safe to make transactions *online*, considering the number of transactions is quite large. Plus, MSME players learn from other people's experiences regarding the use of digital technology, this will form an attitude of liking or disliking digital technology in developing MSMEs. For MSME players who feel that using digital technology will be profitable after considering the conditions and potential they have, they will like the adoption of digital technology. On the other hand, if they feel that it will cause a lot of harm to business development or will not make a profit, or whether using digital technology or not will not have any influence, then they will tend not to like the adoption of digital technology.

4.3.3. Results (Decision)

After going through the knowledge and persuasion process, the process is a decision, MSME actors, MSME actors will choose to adopt or reject innovations in the use of digital technology. When, with various considerations, it is felt that digital technology will be profitable, MSME players will accept digital technology, and they will start thinking about preparing what resources they need, including digital access and digital competence. However, if it is felt that it will be detrimental, it will be decided not to like or reject the use of digital technology. For example, in Rendang Village and Tenun Village there are those who refuse to use digital technology because of considerations *skill* regarding limited digital technology management and also age factors that are not familiar with the system *online*. However, there are also those who want to try even though they have limitations regarding their ability to use technology, but MSME players use it to manage digital technology. In another case, there are also MSME actors who directly take advantage of digital technology in developing their business.

4.3.4. Implementation (Implementation)

At the implementation stage, involving the behavior of MSME actors in Rendang Village and Tenun Village regarding the application of digital technology in the development of MSMEs was actually put into practice. This stage is related to the decision stage. When using digital technology, for MSMEs who don't understand it, they won't use it and will just choose to sell *offline* just. For those who decide to try using digital technology, they will develop promotions, sales, and more. Development can be seen in the existence of websites, social media, even existing ones *e-commerce* from this business. At this implementation stage, it is hoped that it will bring profits and minimize the risk of loss.

At this level it is also expected *support system* from various parties so that the use of digital technology can run well. For example, there are those who actually have it *skill* management of digital technology that helps manage social media accounts or *e-commerce*. Then it is also hoped that there will be assistance or *upgrade skill* by competent parties such as related agencies so that the practice of using digital technology will be sustainable;

4.3.5. Confirm (Confirmation)

Look for reinforcements made to use technology. At this stage, MSMEs can choose to continue or stop the current use of digital technology. This strengthening was taken based on experiences that occurred after the application of digital

technology in the development of MSMEs was carried out. At this stage, MSMEs can decide to stop or continue using digital technology. Based on the research that has been carried out, at this conformation stage there are three types of actions taken by MSME actors, namely continuing the development of digital technology, some still looking at future situations and conditions, and some stopping the use of digital technology in developing MSMEs.

Therefore, the process of adopting digital technology in the MSMEs of Rendang Village and Tenun Village takes place from the knowledge, persuasion, decision, implementation and confirmation stages. The process of knowledge and persuasion will ultimately influence the decision, implementation and conformity of the use of digital technology in developing MSMEs. The adopter categories for Rendang Village and Woven Village MSMEs are: *early majority* namely individuals or groups who adopt an innovation before the rest of society does. They tend to wait and see how innovation impacts others before they decide to follow suit.

Based on the findings associated with analysts using digital technology (*analyses of digital technology uses*) and Ragnedda digital capital indicators as follows:

1. The development of MSMEs cannot be separated from the adoption of digital technology carried out by the MSMEs of Rendang Village and Tenun Village, namely digital technology expands the network and market of the MSMEs of Rendang Village and Tenun Village. If we look at Ragnedda's digital capital indicators, the MSMEs of Rendang Payakumbuh Village and Sikek Weaving Village are already using digital technology.
2. Digital technology can change the way people interact and communicate. In the context of MSMEs, digital technology capital is not only an operational tool, but also a link that strengthens or creates social capital. The use of social media in Rendang Village can add new customers/buyers. Trust is formed by seeing *platform* Business actors' social media can be seen from comments, ratings, posts that convince buyers to ask further questions regarding the products offered, and even buy the product directly. Then also build their product branding. Apart from that, the existence of social media groups, for example on WA, can also influence the way you communicate and interact. For example, providing information is felt to be faster in a group
3. The impact of digital technology on networks and trust. One of Lupton's focuses is on how digital technology influences beliefs and social norms. Adopting digital technology can expand social networks, create new norms, and also build trust, or vice versa. This is a pre-condition for the development of MSMEs in Rendang Village and Tenun Village. Because in the beginning, both the Rendang Payakumbuh Village and the Pandai Sikek Weaving Village were naturally centralized and they started their businesses on average. *offline*.

By adopting this digital technology, MSMEs are starting to penetrate the market *online* especially for sales and promotions. Based on research results, currently 83% of Kampung Rendang MSMEs already have social media/e-commerce accounts, and 73% of Kampung Tenun MSMEs also have social media/e-commerce accounts. *e-commerce*. This means that the majority of MSME players have started to adopt digital technology, especially for promotions and sales. For example, MSMEs in Rendang Village, when using digital technology for promotion and sales on social media and e-commerce, will make the reach of potential buyers wider. If they are initially known locally, then by using digital technology they will be able to reach buyers in the future. national scale. Apart from that, we also expand our network with *reseller*, without having to meet first, you can agree to make sales by resellers managing social media/e-commerce accounts for MSMEs.

If there is a request for a product, it will be sent by the MSME player directly to the buyer. The trust that is formed no longer needs to be established directly between prospective sellers and buyers, but can be observed from social media/e-commerce through *reviews* from buyers, comments, and ratings. Then, there will be new rules for transactions that occur, namely no longer online *cash*, but already *cashless* by using certain payment applications such as the transfer system with *m-banking*. Likewise, in the Pandai Sikek Weaving Village, the use of digital technology can reach a wider network as a means of promoting Pandai Sikek songket cloth. The difference between Kampung Rendang and Kampung Tenun is that digital technology is used more as a means of promotion rather than sales. Because the price of songket is relatively expensive, prospective buyers prefer to keep coming to the Pandai Sikek songket gallery after seeing the products that have been promoted. There are certain norms regarding the process of learning weaving skills; in terms of production, the use of digital technology is not yet acceptable, for example, weaving using machines or digitizing motifs. There are concerns that the learning process passed down from generation to generation will become extinct, as well as concerns regarding the decline in the value and authenticity of the product because if the motif has been digitized, anyone can use the motif. Therefore, the adoption of digital technology will have a particular impact on expanding the social networks of business actors.

4.4. Barriers to Digital Technology Adoption

There are cultural barriers from norms and beliefs that can hinder the process of adopting digital technology in MSMEs. It is feared that new technology could change existing cultural practices. For example, in the Kampung Tenun UMKM, there is a norm that the inheritance of weaving skills must be passed on to the residents of Pandai Sikek, so there is concern about the use of technology in weaving production because it could eliminate the weaving skills of the children of Nagari Pandai Sikek and could also threaten the tradition of spreading weaving skills. Apart from that, the network of weaving children is limited to the residents of Nagari Pandai Sikek.

Then, the experience in selling offline is felt to be more profitable than *online*. Thus, this digital access has not been utilized properly. For example, in Rendang Village, there are business actors who rely more on selling *offline* because it feels more profitable. With buyers shopping for souvenirs in Rendang Village or by collaborating with other business actors. Likewise, in Kampung Weaving, because the price of songket is expensive, they sell it on various platforms *online* deemed less effective. Average *platform online* It is mostly used for promotional purposes only, but for selling, prospective buyers

prefer to see the songket cloth they want to buy directly before the buying and selling transaction. Moreover, there is no special admin yet

5. Conclusion

MSMEs in Rendang Payakumbuh Village and Pandai Sikek Weaving Village have adopted digital technology consisting of digital access and digital competence. Digital access takes the form of the devices used (*digital equipment*), internet access settings (*connectivity*), training, and the ability to help others use the internet (*support and training*). In this case, Kampung Rendang and Kampung Tenun have similarities in the use of digital devices such as transaction support tools and internet access arrangements. Digital competency is acquired through formal education, independent study, or training. However, MSMEs still need help in managing their *platform* online. In adopting digital technology, the MSMEs of Rendang Village and Tenun Village go through stages before deciding whether to accept or refuse to utilize digital technology capital. These stages are in the form of a knowledge process (*knowledge*), persuasion (*persuasion*), results (*decision*), implementation (*implementation*), and confirmation (*confirmation*).

This research still has limitations related to the scale of application in the context of cross-cultural MSMEs. Although several structural and cultural barriers have been identified, further research is needed to explore how social capital and digital technology capital development models can be adapted and applied to MSMEs in other regions with different cultural and socio-economic contexts. Therefore, it is recommended that future research also deepens understanding of how cultural and structural conditions can influence the success of the digital transformation of MSMEs.

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