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Observing the utilization of local e-commerce: a case study of a small and medium enterprise in Surabaya, Indonesia

Jessica Barbara Eugenie Patty 1[0009-0003-5261-0636],
Indrawati Yuhertiana 1[0000-0002-1613-1692]

1 Universitas Pembangunan Nasional “Veteran” Jawa Timur, Surabaya, Indonesia

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Abstract. The objective of this study is to conduct an analysis of the local e-commerce platform developed by the Surabaya Government, known as E-Peken. This research observes the operations of small and medium companies operating within the textile industry sector over a period of nine years, specifically focusing on the Jarak Arum MSMEs. This qualitative study spanned a duration of six months and was done in a field setting. The research methodology employed involved the observation of both internal and external documents, such as the e-peken website, as well as conducting interviews with a total of eight informants. This study reveals that the success of implementation and adoption is contingent upon the personality traits exhibited by the owner.

Keywords: MSMEs, local e-commerce platform, E-Peken, Sales.

1. INTRODUCTION

The global outbreak of the coronavirus disease (COVID-19) in early 2020 had a profound impact on multiple sectors across different regions, including Indonesia [1]. The economic sector in Indonesia has seen significant shocks that have resulted in a substantial reduction in income generated by business entities, particularly in the Micro, Small, and Medium Enterprises (MSMEs) sector. These MSMEs have played a crucial role in supporting the Indonesian economy thus far [2]. According to the news release issued by the Coordinating Ministry for Economic Affairs of the Republic of Indonesia and published on the official website ekon.go.id, it was elucidated that Micro, Small, and Medium Enterprises (MSMEs) constitute a fundamental cornerstone of the Indonesian economy. According to data provided by the Ministry of Cooperatives and Small and Medium Enterprises (SMEs), the total number of actors involved in Micro, Small, and Medium Enterprises (MSMEs) in 2018 was recorded at 64.2 million. These MSMEs made a significant contribution to the Gross Domestic Product (GDP) of Indonesia, accounting for 61.1 percent [3]. This data underscores the crucial role played by MSMEs in bolstering the country’s economy.

Small and Medium Enterprises (SMEs) play an important role in strengthening the national device by establishing a vital position, developing overseas trade, and working on the local economy [4]. SME became Indonesia’s savior during the COVID-19 pandemic [5]. In the technological era, digitalization has become a necessity to be implemented in all types of industry, including MSME [6]. Many MSME entrepreneurs have difficulty adopting technology to develop their business [7]. Thus, it is important to examine how MSME entrepreneurs adopt technology. The research question of this study is: How a MSME (Jarak Arum) uses a digital platform created by the local
government to make it easier for MSMEs to sell their products. This research question arose to answer and understand the impact of the use of local e-commerce (e-peken) on increasing sales of Jarak Arum MSME. This research was conducted in the city of Surabaya, Indonesia where this application was created (e-peken).

The rapid spread of the virus has forced the Indonesian government to form a series of rules or regulations as a form of breaking the chain of transmission of COVID-19, one of which is regarding Large-Scale Social Restrictions (PSBB) [8]. The implementation of policies not to carry out activities outside the home, to maintain distance, and to stay at home according to government recommendations ultimately changed the total habit of the community, which previously interactions could be carried out directly, freely, and openly, now interactions indirectly or through telecommunications devices, closed and limited. Not only that, implementing these policies will, of course, also affect an economic downturn so that people's purchasing power decreases, affecting the circulation of money in the market and resulting in a further slowdown of trading activities [9].

A shift has also occurred with the Covid-19 pandemic, where previously, consumers could directly visit shops or supermarkets. However, due to restrictions and government regulations, sales are also made online via e-commerce, including for MSME players who need to adjust developments so that their businesses can continue [10]. One strategy that MSMEs can implement to survive is to sell online or through e-commerce, starting with digital promotions to reduce promotion costs and build and optimize marketing relationships with customers [11]. Entering the new average period, the government is increasingly showing its role in helping MSME players create a strategy so that the businesses they are undertaking can survive and run even though economic conditions are still recovering [12].

The form of support provided by the Surabaya city government to MSME actors to restore the economy is by creating innovation by issuing an online shopping application assisted by the Communication and Information Service (Diskominfo) called Pemberdayaan dan Ketahanan Ekonomi Nang Suroboyo (PEKEN) which brings together grocery stores and MSMEs, one of which is Jarak Arum MSMEs. Jarak Arum is an MSME engaged in the batik textile industry, which produces stamped batik, hand-written batik, and eco print batik. The MSME owner said that the difficulty or challenge in increasing sales through e-peken was the need for more digital and digital sales knowledge. So, without sufficient digital knowledge, maximizing the use of e-peken to increase sales will be a challenge.

This study aims to analyze how the application of the e-peken application to MSMEs in increasing sales. E-peken was created as a form of sustainability carried out by the government by trying to overcome digital literacy problems in MSMEs through existing applications. This research has novelty because it is research to see how the effectiveness of the government’s role in helping MSMEs continues. Therefore, this analysis is used to find out how MSMEs struggle to absorb technological developments so that qualitative research is carried out with interviews so that they can in depth understand the phenomena that occur in the field. This research was conducted by selecting one of the MSMEs in Surabaya because Surabaya is the second largest city with great concern about how MSMEs can continue. This topic is very relevant to research on the grounds that it can accelerate digital transformation [13] so that MSMEs decide to switch to e-commerce because market reach and target market become wider [14], makes transactions easier for consumers by saving time and money [15].
Research conducted by Fachrina & Nawawi with the title "Utilization of Digital Marketing (Shopee) in Increasing Sales at MSMEs in Marelan" shows that the shopee sales approach is perfect, which makes purchases for customers and sellers more comfortable. In addition, all manufacturers have access to the shopee market segmentation because of the convenience it offers, there are promotional elements that can increase sellers' sales profits, so the shopee application is ideal for use as a sales channel [16]. Aisyah, Imamsyah, et al.'s research with the title "Implementation of Digital Transformation Through Tokopedia Seller Apps to Expand Marketing to MSME Actors in Medan City (Case Study on Pelita Petshop Medan)" shows the results of the study that MSMEs experienced significant changes as a result of implementing digital transformation through Tokopedia Seller Apps, including improving customer service without the need for in-person visits, the ability to easily share promotional content with a broad audience to increase awareness of MSME pet shops, easier cost management due to no advertising costs, and increased operational efficiency [17]. The novelty of this research is the e-peken application developed by Surabaya government to support local MSMEs, different from other e-commerce such as shopee, tokopedia, and the like, owned and operated by private companies or individuals. Furthermore, e-peken uses a business model that focuses on the interests and sustainability of MSMEs, while private e-commerce generally uses a business model that prioritizes profitability.

This study addresses the research question by employing comprehensive observations and interviews with the proprietors of Jarak Arum Micro, Small, and Medium Enterprises (MSMEs), as well as various stakeholders including employees, MSME assistants, the village head of Putat Jaya Subdistrict, and consumers. The aim is to gain a comprehensive understanding of the phenomena occurring in the field. This study will thereafter examine literature reviews pertaining to the topics of digitalization and financial management. It will also address the research methodology employed, specifically interpretive qualitative methods. The subsequent sections will present the results and discussion, aiming to identify key findings derived from the research. Finally, the study will conclude by summarizing the outcomes of the conducted research.

2. THEORETICAL REVIEW

2.1. Digital Literacy

Digital transformation has become a significant phenomenon recently [18]. Digital transformation relies on digital technologies, such as artificial intelligence, machine 4.0, blockchain technology, big data analytics, and IoT [19] to increase the openness, inclusiveness, and generativity of MSMEs [20]. Digital content creation refers to the capacity to create digital content while complying with copyrights and licenses; information literacy concerns knowledge about browsing, searching, and filtering data and digital content; interaction and collaboration about communicating through digital tools and working with other organizational members and external networks; safety capabilities aim to protect devices, personal data, privacy, health, and well-being [21].

The American Library Association (ALA) defines digital literacy as the ability to use information and communication technology, find the information needed, evaluate the suitability of the information obtained, and use the information needed effectively and appropriately [22]. Digital literacy is a skill set that is broader and more complex than the simple use of digital technology, the most important of which is the need to
contextualize the internet and other ways of presenting information in unrelated formats [23]. It can be concluded from the description above that digital literacy is a skill that includes the ability to use technology, information and communication tools, social skills, learning abilities, and critical, creative, and inspirational thinking as digital competencies.

Digital literacy in a global context can be said to be the ability to assess the reliability and usefulness of information from various sources, carry out tasks by collecting information, and refer to various competencies related to skills in using computers and information technology [24]. Digital literacy in society aims to train people to use technology and communication, use digital technology and communication tools or networks to find, evaluate, use, manage, and create information intelligently and creatively [25]. As the digital age develops, good digital literacy is becoming increasingly important in today’s society, from managing digital in a home context to operating a business [26]. The goals of the digital literacy movement include: increasing the active involvement of the community, institutions, or agencies in providing digital literacy reading materials, increasing the use of digital media and internet networks in providing information and public services, increasing the ease of access and internet users (literacy) in an area.

2.1.2. Technology Acceptance Model (TAM)

Technology Acceptance Model (TAM) is a theory expressed by Venkatesh and Davis (2000), which is an appropriate concept for explaining user behavior toward new information technology systems. TAM is a type of theory that uses a behavioral theory approach widely used to study the process of adopting information technology [27]. The TAM model has developed into an essential tool for understanding human behavior indicators for possibly adopting or rejecting technology [28].

The Technology Acceptance Model (TAM) utilizes five factors influencing and predicting how technology users will accept and behave when utilizing information technology. The five constructs are 1) perceived benefits, a person's perception of the benefits of technology determines whether they think the technology will help the company perform better; 2) perceived comfort, a person's comfort at the point where they think using a particular system is easy or up to the point where using technology will free them from several efforts is known as perceived comfort; 3) social pressure, perceived social pressure is the idea that having specific skills in an organization will increase one's social status; 4) attitude of use, attitude of use refers to a person's perception of how use technology in their profession, whether they accept or reject it; and 5) the intention to use, the behavioral tendency to stick with a technology is called the intention to use [29].

The criteria of usability and user-friendliness of the end user are considered while implementing the TAM model so that the usefulness of this model and the perceived ease of use impact consumer behavior about any service [30]. Technology Acceptance Model (TAM) can help MSMEs understand the factors that influence the acceptance and use of technology. As MSMEs, technology adoption can help improve efficiency, productivity, and competitive advantage. The TAM model can help SMEs to evaluate whether the technology under consideration has sufficient usability value and ease of use to be accepted and used by employees and customers. By understanding the perceptions of usability and ease of use, MSMEs can take action to improve and enhance the features and functions of the technology offered.

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2.1.3. Empowerment Theory

Community empowerment is obtaining the necessary resources and understanding one's social environment [31]. People gain skills through this process, which help them become independent problem solvers and decision makers that require participation in organizations or communities at the individual level, shared leadership and decision-making at the organizational level, and government, media, and other accessible public resources [32].

Community empowerment is a new concept and theory in the economic development approach that encapsulates social values that reflect a community-centered development paradigm, participation, empowerment, and sustainability [33]. Community empowerment is an effort to develop community potential and power by encouraging, motivating, and increasing awareness [34]. Community-based development is associated with creativity and initiative, the most critical development resources. The cooperation of empowering and empowered as describe at Table 1.

Table 1. Analysis of the Comparison of Empowering Outcomes and Empowering Processes at Different Levels

<table>
<thead>
<tr>
<th>Level of Analysis</th>
<th>Process (Empowering)</th>
<th>Outcome (Empowered)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual</td>
<td>Learning decision-making skill</td>
<td>Sense of control</td>
</tr>
<tr>
<td></td>
<td>Managing resources</td>
<td>Critical awareness</td>
</tr>
<tr>
<td></td>
<td>Working with other</td>
<td>Participatory behaviors</td>
</tr>
<tr>
<td>Organizational</td>
<td>Opportunities to participate in decision-making</td>
<td>Effectively compete for resources</td>
</tr>
<tr>
<td></td>
<td>Shared responsibilities</td>
<td>Networking with other</td>
</tr>
<tr>
<td></td>
<td>Shared leadership</td>
<td>organizations</td>
</tr>
<tr>
<td>Community</td>
<td>Access to resource</td>
<td>Organizational coalitions</td>
</tr>
<tr>
<td></td>
<td>Open government structure</td>
<td>Pluralistic leadership</td>
</tr>
<tr>
<td></td>
<td>Tolerance for diversity</td>
<td>Residents’ participatory skills</td>
</tr>
</tbody>
</table>

Source: [31].

2.1.4. Financial management

Financial management is a science that studies the financial management of a company in terms of finding sources of financing, allocating funds, and distributing company profits [35]. According to Armereo, financial management is an activity related to financial management, starting from obtaining sources of funds, using funds most efficiently, to allocating funds to investment sources to achieve company goals [36]. The phrase strategic financial management refers to financial practices with long-term objectives consistent with the strategic objectives of an enterprise to maximize the financial wealth of business owners by managing not only the flow of funds throughout the organization but also by aligning them with corporate goals and objectives [37]. The purpose of financial management is so that companies can manage resources, especially those related to finance, to generate maximum profits and ultimately maximize the welfare of business owners. Four basic frameworks in financial management are planning, record keeping, reporting, and controlling [38].

2.1.5. Micro, Small and Medium Enterprises

Micro, Small, and Medium Enterprises are independent, productive business units controlled by individuals or entrepreneurs in any economic sector (Raharja & Natari, 2021). MSEs are one of the private businesses recognized as having a
significant impact on job creation and a more equitable income distribution, as well as the promotion of competition, increased productivity, and innovation [39]. MSMEs also have several advantages over large companies, namely innovation in product development, the ability to employ many employees, flexibility, and the ability to adapt to rapid market changes compared to large companies (Suyadi et al., 2018). According to Indonesian Law No. 20 of 2008 concerning Micro, Small, and Medium Enterprises are:

a. Micro business is a form of business that operates independently and is run by people or organizations that are not included in the category of large or medium-sized business subsidiaries or branches but are owned, controlled, or integrated directly or indirectly into it [40]. Micro businesses have assets of IDR 50,000,000 to IDR 300,000,000 (not including land and buildings) in annual sales.

b. Small business is an independent, productive economic business, which is carried out by individuals or business entities that are not subsidiaries or affiliated companies that are owned, controlled, or become part either directly or indirectly of medium or large businesses that meet the criteria for small businesses [41]. Small businesses have assets of IDR 300,000,000 to IDR 2,500,000,000 (excluding land and buildings) in annual sales.

c. Medium Enterprises are businesses that operate independently and are run by people or organizations that are not subsidiaries or branches of large or small businesses owned, controlled, or integrated directly or indirectly into it [42]. Medium-sized businesses have assets of IDR 2,500,000,000 to IDR 50,000,000,000 (excluding land and buildings) in annual sales.

3. METHOD

The method used in this research is interpretive qualitative. Research using interpretive qualitative tries to explain different points of view regarding certain social or cultural events and the experiences of the objects studied [43]. According to Klein and Myers, interpretive research also assumes that social constructs such as language, consciousness, shared meaning, records, instruments, and other artifacts produce knowledge about reality and various meanings for different people. Nurdin and Pettalongi argue that social construction in online social media tools can also generate interpretations of digital material created and consumed by social media users and help understand social media usage better [44]. This suggests that interpretive techniques are appropriate for online or social media-based research to gain a deeper understanding of the subject under investigation.

The purpose of qualitative research is to understand the problems that occur in the community because researchers want to provide an overview of the activities carried out and how they impact their lives [45]. The purpose of this study is to understand how MSMEs adopt digital literacy, in this case, the e-peken application. The object of this study is an MSME engaged in the textile and fashion industry, especially batik, in Surabaya. Jarak Arum MSMEs was chosen because it has been established for nine years by owners with a solid determination to develop their business.

This study used the snowball sampling technique of eight informants, including MSME owners, MSME assistants, MSME employees, and tailor partners from Jarak Arum MSMEs, to obtain data and information related to the relevance and role of informants related to research topics and problems.
Table 2. Survey Respondent Information

<table>
<thead>
<tr>
<th>N</th>
<th>Name</th>
<th>Age</th>
<th>Education</th>
<th>Marital Status</th>
<th>Position or Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mrs. FA</td>
<td>44 years old</td>
<td>Senior High School</td>
<td>Married</td>
<td>Owners, business actors, and financial managers at Jarak Arum MSMEs.</td>
</tr>
<tr>
<td>2</td>
<td>Ms. FP</td>
<td>23 years old</td>
<td>Senior High School</td>
<td>Not married yet</td>
<td>Jarak Arum MSME’s assistant, especially in the IT section.</td>
</tr>
<tr>
<td>3</td>
<td>Mrs. UN</td>
<td>52 years old</td>
<td>Senior High School</td>
<td>Married</td>
<td>Employees of the department draw batik patterns.</td>
</tr>
<tr>
<td>4</td>
<td>Mrs. F</td>
<td>41 years old</td>
<td>Senior High School</td>
<td>Married</td>
<td>Employees draw and color batik.</td>
</tr>
<tr>
<td>5</td>
<td>Mrs. IT</td>
<td>54 years old</td>
<td>Senior High School</td>
<td>Married</td>
<td>Tailor partners for processed batik fabrics.</td>
</tr>
<tr>
<td>6</td>
<td>Mrs. N</td>
<td>60 years old</td>
<td>Junior high school</td>
<td>Married</td>
<td>Tailor partners for processed batik fabrics.</td>
</tr>
<tr>
<td>7</td>
<td>Mr. BIM</td>
<td>31 years old</td>
<td>Bachelor's Degree</td>
<td>Married</td>
<td>Head of Putat Jaya Subdistrict, MSME Assistant</td>
</tr>
<tr>
<td>8</td>
<td>Mrs. MJK</td>
<td>54 years old</td>
<td>Senior High School</td>
<td>Married</td>
<td>Customers from Jarak Arum MSMEs</td>
</tr>
</tbody>
</table>

Source: Author's Field Survey

The data collection technique in this study was carried out using field studies through direct observation three times, interviews for two consecutive days with a total time of 2.5 hours, as well as documentation in the form of the batik process carried out at the Jarak Arum MSMEs, the products of Jarak Arum, the financial records of UMKM, photos of the activeness of Jarak Arum owners in several training activities.

Testing the data's validity is a credibility test, transferability test, dependability test, and confirmability test. The credibility test in qualitative research assesses researchers' trust in the data studied. If what the researcher says and what happened to the thing being studied are similar, the data can be considered credible [46]. Testing the credibility of the data in this study uses triangulation to compare data from various sources, methods, and time. Source triangulation is done by checking the data obtained through various sources, namely MSME assistants, MSME employees, and tailor partners with Jarak Arum. Technical triangulation is carried out by checking the same. However, with a different technique, namely, data related to increased sales in 2020 obtained through in-depth interviews with MSME owners, information is rechecked through evidence of increased sales. Time triangulation is the process of re-verifying data from the same source at different times, especially using previous informants who have conducted in-depth or repeated interviews in various settings. The researcher may repeat the test until data certainty is achieved if the results still provide conflicting information.

The transferability test in qualitative research depends on the number of readers and the extent to which the results can be used in different contexts. The research results can be very transferable if the reader understands the context and focus of the research, such as an explanation of how MSMEs adopt e-peken applications to increase sales. The dependability test is carried out by reviewing the research process series mechanism. The researcher must show that several research procedures have been followed to ensure reliable research findings. A confirmability test is a technique used by researchers to communicate their conclusions about the methodology and the main focus of the research, providing an opportunity for other parties to assess/review the research to obtain agreement.
4. RESULTS AND DISCUSSION

4.1. Personality Factors of MSMEs Owners

Personality is an essential factor for micro and small business owners, mainly because they see and respond to environmental changes and determine behavior patterns that can significantly impact internal business strategy and processes [47]. The personality factors of MSME owners can influence the management and development of the business they are undertaking. MSME owners who are persistent and dare to take risks tend to be more innovative and willing to try new things in their business. Business actors may better handle uncertainty and take advantage of opportunities leading to business growth.

Before closing the dolly localization, the MSME owner (FA) worked as a clothes tailor for ladies night workers.

"Previously, the income earned came from selling clothes for night workers, but since the closing of Dolly in 2014, I had to rack my brains on how to continue my life. In the end, I took part in training starting from training in mat embroidery and food, but I was more inclined to sew, leading me to make batik" (FA).

The opportunity for batik training provided by the government was put to good use by Mrs. FA so that it lasted for nine years and became one of the proofs that the owner of Jarak Arum MSMEs was able to get back up even though it was a challenge how to make a living, take lessons from the events that happened, and keep trying to achieve the goals they want. Maintaining the long-term viability of MSME companies requires resilience and tenacity.

Continuing an MSME business does not only require tenacity and persistence but also requires creativity and innovation. MSME owners with creative personalities can generate new ideas, develop products, and develop attractive marketing strategies. Creativity and innovation can help MSMEs differentiate themselves from the competition and attract customers’ attention. Creativity and innovation are owned by the owner of the Jarak Arum SMEs in the area, which is proven by the fact that during the pandemic, there were leftovers of batik cloth which were processed into cloth masks and sold via Whatsapp. Many interested people bought them, so during the pandemic, when many businesses eventually went out of business, the Jarak Arum SMEs continued to produce and generate turnover.

4.2. The Financial Management of Jarak Arum MSMEs

For MSMEs, sound financial management is critical because poor management affects bookkeeping and makes income and expenses unclear. Effective financial management will help check the source of income and expenses of the business. Initial capital in starting a business is also a sustainable factor for the sustainability of a business.

Jarak Arum SMEs obtained initial capital from selling batik products while participating in the training because when participating in the training, all the tools and materials were provided by the government. When it became batik cloth, it was sold and generated money used to buy tools and materials independently. Jarak Arum SMEs has just borrowed from a bank or any party when choosing to open a batik business.

"In the past, during the training, ten people were given cloth one at a time, then when the batik was sold, the proceeds from the sale were made to repurchase materials, and then they played it. However, after that, there was also financial assistance from the social services,
which made me buy materials, mannequins, and materials for the exhibition so that at the time of the exhibition, I had everything, no need to borrow anymore" (FA).

The financial records owned by the Jarak Arum SMEs are in a book that contains description, debit, and credit columns. The description column contains information on items selling well, purchasing materials and fees, and turnover expenses.

As the owner of an MSME as well as the financial manager of the MSME, Mrs. FA manages business results by prioritizing her family and personal needs because this business is her livelihood, after which it is used to purchase stocks of batik materials such as cloth, wax, dyes, and so on. One of the weaknesses of MSEM is the need for more financial planning in the production process. Even Mrs. FA admits that she tends to forget to record expenses if the number of orders is small, but turnover can still be remembered. Responding to this is very unfortunate because financial records are vital in running a business so that one can transparently see the financial flows of MSMEs, determine what steps to take, and carry out financial evaluations. Regarding the financial records of the UMKM, Jarak Arum still uses traditional methods. However, the strategy for running its business still exists and even generates a sizeable turnover, as evidenced by the turnover recap in 2020 (Picture 1).

![Picture 1. Sales Turnover in 2020](source: Author's data processing based on the financial records of the Jarak Arum SMEs)

### 4.3. Factors for the Success of Using E-Peken in the Jarak Arum MSMEs

Factors that can influence success in adopting e-peken at Jarak Arum MSME as a sales medium include: The right marketing strategy by identifying the intended target market and making effective marketing by determining the right selling price. The marketing strategy used in Jarak Arum SMEs is to make sales at prices that can still be reached without reducing the quality. When batik artisans sell written batik cloth with a price range already in the millions, Jarak Arum sticks to its strategy, but its sales are still sustainable.

"In Jarak Arum, the marketing strategy is to make sales at prices that are still affordable. For example, the written batik that sells starts at Rp. 250,000. When batik artisans sell written batik cloth with a price range already in the millions because the manufacturing process takes a long time and is meticulous in cutting, stick to the price I have set.

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The important thing is that the orders continue, even though the materials used are the same” (FA).

Furthermore, have a good experience with customers by providing complete information regarding the products being sold, such as details on sizes, colors, and materials used, even adding clear product photos. Furthermore, to have a good experience with customers by offering secure and flexible payment methods. All payments are made in collaboration with Bank Jatim so that the receipt goes directly to the seller's account. The customer, when ordering, is immediately asked to pay off even though the item has yet to be made and confirms the order via WhatsApp. However, if there are many orders, Mrs. FA confirms by coming to the buyer's place and asking for a down payment of a few percent of the total payment, and then the payment will be given after the goods are finished.

Supporting infrastructure and technology such as mobile devices and software is needed to run e-peken to help MSMEs maintain stability, speed, and reliability in operating e-peken. According to the results of research observations, the owner of Jarak Arum SMEs, in operating the e-peken uses a smartphone with adequate technology and good enough software so that it is very feasible to use in running a business online. Also having healthy competition by offering quality products to build a good reputation and establish good relationships with customers, and as a seller, must select quality raw materials, carry out strict quality control, and provide products according to customer orders.

4.4. Benefits and Challenges of Implementing E-Peken for Jarak Arum MSMEs

E-peken is an innovation that refers to the process of buying and selling products or services online through a digital platform so that it can further advance the Indonesian economy through the MSME sector, which the Surabaya city government manages. However, the novelty of this innovation produces several benefits.

Through e-peken, sellers can achieve more comprehensive market access without being limited by geographical boundaries. With the existence of an e-peken platform, products or services can be accessed by consumers in various regions,
cities, and even countries that are far from the seller's physical location. This opens up new opportunities to reach a broader market. The statement from one of the employees at Jarak Arum also strengthens the argument that e-peken is expanding market share, and in terms of payments, it is also more efficient, namely by bank transfer.

"I feel that sales have increased quite a bit because sales are also done online so anyone can see. The market share has also become wider. In terms of payment, it is also made easy by bank transfers, especially nowadays, almost everyone seems to have an ATM with m-banking, so it is easy to pay for orders. Having e-peken helps us. We are also happy that there will be orders in large and small quantities every month. The important thing is to have income" (F).

The e-peken allows Jarak Arum SMEs to promote its products more effectively. Through the e-peken platform, Jarak Arum can present product photos, descriptions, and other information to potential customers. Jarak Arum SMEs can also use social media and other digital marketing tools to reach a broader range of customers and build a strong brand image. The product marketing target of Jarak Arum is employees in the Surabaya city government and is currently developing in several hotels in Surabaya.

Furthermore, with e-peken, Jarak Arum SMEs can experience an increase in the number of orders received. With an easily accessible e-peken platform, customers can quickly find and buy batik products, as seen from the total turnover in 2021 reaching IDR 69,245,000, meaning that there will be a significant increase in 2021 with the existence of e-peken. MSMEs can also collect and analyze sales data in detail so that by analyzing the data, Jarak Arum SMEs can identify new sales opportunities, optimize marketing strategies, and develop products that suit consumer needs. Implementing e-peken can help Jarak Arum to reduce operational costs. Because there is no need to pay for renting a physical store or related operational costs, the Jarak Arum can allocate its resources more efficiently. In this case, Jarak Arum SMEs produces in his private house. Using e-peken platforms can also reduce traditional promotional costs such as print advertisements, radio advertisements, or exhibitions.

Picture 3. Sales Turnover Recapitulation

![Sales Turnover Recapitulation](image)

Source: Author's Observation - Notebook of Jarak Arum MSME

Not only do they benefit from the existence of e-peken, but Jarak Arum SMEs is also faced with specific challenges, including the need for knowledge and technological skills from the owner of Jarak Arum. Hence, they need the help of their daughter as a companion for MSMEs in operating e-peken.
"I do not understand how to run e-peken, but I am assisted in studying with my child. Sometimes I have learned, but I forget how to do it again. I understand I am a bit stuttered in technology" (FA).

4.5. E-Peken Application Findings

As an application that is still new among the public, much still needs to be improved regarding the e-peken system. In Picture 4, the review section on the Play Store, netizens leave comments regarding the e-peken application, which needs to be upgraded again due to the lack of guidance on using e-peken and its features. The findings from the e-peken application are that users or buyers can only access the website because the Playstore account is available only for sellers. However, new sellers who want to join must have a registered guide. Sometimes the e-peken application also often experiences errors in the form of no incoming notifications, so the seller does not know if there is an incoming order.

Picture 4. Complaints and Protests related to E-Peken Application

Some steps that can be taken so that the findings of weaknesses in the e-peken application can be resolved is to develop a guide for e-peken users that is concise, in-depth, and easy to understand so that users can understand the features contained therein and the uses of these features. Then, provide training for new e-peken users, fully explaining application functionality, practices, and other information. Furthermore, it can update and develop applications based on user feedback by receiving input from e-peken users so that deficiencies can be handled quickly and the e-peken application can be more optimal.

5. CONCLUSION

This study aims to analyze how the application of the e-peken application to MSMEs in increasing sales. The method used in this research is interpretive qualitative. The object of this research is Jarak Arum MSME which operates in the textile and fashion industry, specifically batik. The data collection techniques used were direct observation, interviews, and collecting documentation in the form of the batik making process and product results, financial records of Jarak Arum MSMEs, photos of the activity of MSME owners in several training activities.

The conclusion based on the results of the research and discussion, the personality factor is one of the factors for the sustainability of the business owned by the owner of Jarak Arum MSME, namely perseverance and high enthusiasm in running a business by continuing to be creative and innovating to produce new products. Regarding financial management, Jarak Arum MSME has financial management that
is quite good by continuing to purchase stocks of batik materials and tools after being allocated for family needs, but recording income and financial expenditure must be routinely carried out to make it easier to prepare financial reports.

Factors that influence the success of using e-peken in the Jarak Arum MSME are marketing strategies in terms of prices that are cheaper than other competitors but still provide good quality, have a good impression and experience for customers, have supporting technology in the form of smartphones that are adequate in operating e-peken. Apart from this, Jarak Arum MSME achieves more comprehensive market access, more effective promotions, increased sales results due to the large number of orders received, and reduced operational costs for renting business premises. The challenge of implementing e-peken for Jarak Arum MSME is the need for knowledge and technological skills from the owners of the Jarak Arum MSME. The e-peken application still has weaknesses, so it needs to be improved and updated by providing further guidance in registering an account as a new seller who wants to join e-peken.

The practical advantage lies in its ability to offer input and information pertaining to the utilization of the e-peken application, with the aim of enhancing sales performance and fostering public interest in the purchase of products affiliated with Micro, Small, and Medium Enterprises (MSMEs) in Surabaya. In the context of this discussion, the theoretical value pertains to the advancement of business theory, specifically in its application to the formulation and examination of theories related to the adoption and utilization of e-commerce technologies by micro, small, and medium enterprises (MSMEs). Moreover, the results of this research were employed as a case study in the realms of management, business, and technological education and training.

The limitation of this research is that the author could not obtain an in-depth interview with one of the informants due to time constraints. Further research warrant encompasses the augmentation of data sources, the execution of a more extensive comparative examination that juxtaposes the utilization of indigenous electronic commerce (e-commerce) in Surabaya against other urban centers to attain a more comprehensive outlook, and the scrutiny of the societal, economic, and environmental repercussions of micro, small, and medium enterprises (MSMEs) in Surabaya that engage in local e-commerce to enhance comprehension of the advantages and hazards involved.

REFERENCES


Aims and Objectives
Published online by Institute of Cited Scientists, Cyprus, two times a year, Journal of Digital Science (JDS) is an international peer-reviewed journal which aims at the latest ideas, innovations, trends, experiences and concerns in the field of digital science covering all areas of the scholarly literature of the sciences, social sciences and arts & humanities. The main topics currently covered include: Digital Economics, Education, Engineering, Finance, Health Care.

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Contact information

Journal URL: https://ics.events/journal-of-digital-science/  
Email: conf@ics.events

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