

Beyond Batik Lasem: Utilizing Instagram for MSMEs' Growth Opportunity and Challenges

Tinjung Desy Nursanti^{1*}; Evy Steelyana²; Ine WawoRuntu³

¹Management Department, BINUS Business School Undergraduate Program,
Bina Nusantara University,
Jakarta, Indonesia 11480

²Accounting Department, School of Accounting, Bina Nusantara University
Jakarta, Indonesia 11480

³Volksuniversiteit Regio Eindhoven
VA Eindhoven, Netherland 5611

¹tinjungdesy2600@binus.ac.id; ²evi.steelyana@binus.ac.id; ³ine_wieringa@hotmail.com

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ABSTRACT

The research explored the distinctive attributes and unique impact of Lasem's online batik shops on the development, cultural preservation, and women's empowerment of Micro, Small, and Medium Enterprises (MSMEs). Employing a descriptive qualitative method, the researchers integrated theories of women's empowerment, local economic development, and cultural preservation to analyze data. Data were collected through in-depth interviews, participatory observations, and document studies. Meanwhile, thematic analysis was conducted, involving data coding, categorization, and interpretation. The findings indicate that Lasem's online shops, which hold daily, weekly, or spontaneous Instagram live sales sessions, significantly influence these areas. These shops highlight the town's cultural heritage and leverage its Internet infrastructure. The research reveals substantial employment of women of all ages in Lasem's online batik sector, emphasizing platforms that teach skills and promote economic independence. Live sales attract foreign clients, enhancing Lasem's global reputation and promoting tourism and cultural preservation despite its remote location. Results show that the Instagram live sales environment is modest but growing, with most online shops offering frequencies. Social media participation by women significantly boosts financial independence and skill development. Live sales events also draw international buyers, and online marketing promotes Lasem's culture. The research supports several Sustainable Development Goals (SDGs): Decent Work and Economic Growth (SDG 8) through skill development and income generation for women; Industry, Innovation, and Infrastructure (SDG 9) through digital marketing for cultural preservation and tourism; and Sustainable Consumption and Production (SDG 12) through quality packaging and ethical consumption. These efforts enhance economic empowerment, cultural sustainability, and responsible consumerism.

Keywords: batik Lasem, Instagram, Micro, Small, and Medium Enterprises (MSMEs), growth opportunity, growth challenges

INTRODUCTION

Lasem, a cultural and historical hub of Indonesia, attracts visitors with its traditional customs and history, gorgeous coastal landscapes, and vibrant livelihoods of the inhabitants. Lasem is located on Java Island's north shore. Lasem attracts tourists with its cultural and artistic legacy. Lasem's culture is a mix

of Javanese, Chinese, Campa (introduced by Admiral Cheng Ho's forces), Arab, and Dutch traditions. Lasem's batik's Tiga Negeri and Empat Negeri motifs show influences from three or four nations. In the book "*Batik: Warisan Adiluhung Nusantara*" (Musman & Arini, 2011), it emphasizes the unique features of batik Lasem, which arises from the blending of Chinese and Javanese cultural influences. The amalgamation

of these cultures has profound historical origins. At first, the Chinese have established themselves on the northern shore of Java due to the advantageous location of important ports in the area. However, even before significant acculturation to China, the origins of batik Lasem can be traced back to the rule of Bhre Lasem I (1350–1375). According to Nurhajarini et al. (2015) in the book “*Akulturası Lintas Zaman di Lasem: Perspektif Sejarah dan Budaya (Kurun Niaga-Sekarang)*,” batik has already become the attire of the nobility in the Lasem’s region during this period.

Lasem, nicknamed “Little China” or “Little Chinatown” since it is the first Chinese settlement in Java, has several Chinese villages. A gold-coated reclining Buddha is also at Lasem. In the 14th to 15th century, Chinese immigration thrived in Lasem (啦森 Hokkien: Lao Sam, Mandarin: La Sen), Sampotoalang (Semarang), and Ujung Galuh (Surabaya) on Java Island. The landing of Admiral Cheng Ho’s large fleet in Java as political envoys for the Ming Dynasty’s Emperor to build cultural and commerce linking with Majapahit legitimized their commercial activities. Many settled near Java’s northern coast. According to Krom, Majapahit Kingdom Chinese settlements dated back to 1294-1527 AD (Munandar, 2020). Old buildings like Chinatown, which has Chinese architecture and historic temples near the trade route along the Babagan Lasem River (formerly called the Paturen River), an important sea-to-land link, demonstrated this. Eventually, they strategically dominated critical economic locations, like the city’s main arterial commercial centers (Rizali & Sudardi, 2019).

Kholifah et al. (2023) investigated the encounters of Yogyakarta’s batik artisans in medium enterprises in terms of capacity transformation amidst the COVID-19 epidemic, as well as the obstacles faced by these artisans in adapting to Industry 4.0. The findings indicated that the transformation of batik craftsmen was influenced by factors such as the owner’s motivation, changing motives, innovative motifs based on market demands, production processes and technological advancements, marketing strategies, and evaluations of traditional marketing or digital marketing. The tiny and micro levels of the batik business should focus on the transformative characteristics of batik artisans operating at the medium level. Similarly, Ali (2019) conducted a study involving 120 respondents who owned Small and Medium Enterprises (SMEs) in Batik Lasem in Rembang, Central Java. The result showed that entrepreneurial marketing improved consumers’ flexibility, competitive advantage, and marketing performance.

Sediyono et al. (2018) explained how to use a knowledge management approach, good documentation of tacit and explicit objects, and a design to retrieve local knowledge and communal identity on indigenous batik values. The fundamentals of batik craft could be obtained by observation, interview, audio, and video recording. Then, Roziqin

and Fajrina (2021) stated that local stakeholders established batik Tulis Lasem for the 4.0 Industrial Revolution. Response to the Internet’s role in shifting business models varied by capacity and management for batik industry entrepreneurs. Governmentally, the local government regulated batik Tulis Lasem as hand-written batik instead of printed or stamped batik and offered facilities to promote it. Higher education institutions helped batik Tulis Lasem to develop through management, Internet marketing training, capital and resources, and patent aid, such as its Intellectual Property Rights.

Riyandari et al. (2023) found that many women remain marginalized in society and subordinated in the public arena, which was dominated by men. Therefore, the government and other organizations had to support women’s empowerment efforts to promote gender equality and improve women’s position. It was possible through knowledge and skill acquisition. Abdurohim (2023) mentioned that women in Micro, Small, and Medium Enterprises (MSMEs) created jobs, innovated, and offered various services, increasing economic inclusion. Women in MSMEs improved operational efficiency and business decision-making, boosting productivity. MSME women entrepreneurs’ income increased family welfare and helped society to adapt to social and economic changes. Marthalina (2018) and Raspati and Kadiyono (2023) also found that women’s MSMEs engagement was an individual contribution and a key component of a sustainable and inclusive economy.

Meanwhile, Dirgantoro (2019) highlighted that the conservation of batik Lasem could be effectively sustained by implementing a gamification strategy to captivate the attention of the younger demographic. Moreover, Gondoputranto and Dibia (2022) asserted that the advancement of technology and the digitalization process were frequently attributed to the eradication of traditional culture. There was a clear opposition between technology and digitization. Thus, these advancements did not eradicate preexisting customs but instead had the potential to safeguard nearly extinct communities. Nevertheless, it was confined to just two instances of batik fractal, namely the ones conducted by Pikel Indonesia, in which the community employed an algorithm, and the Turkish Digital Textile Archive.

Hastuti et al. (2023) analyzed the readiness of SMEs in Batik Lasem to use metaverse technology as a marketing platform to increase sales. They included 40 SMEs that sold products online, had a medium-sized business, and used provincial-level marketing methods. Most participants said the metaverse was a virtual three-dimensional environment supplemented with conversations about VR and AR integration, popularly known as the metaverse in modern discourse.

Basiroen and Lapien (2016) highlighted the significance of incorporating innovation into traditional batik motifs to cultivate the younger generation’s interest in appreciating batik Lasem. They underlined using a design thinking creative process approach to

maintain the existing “standards” known as “pakem” while introducing new elements. Then, Basiroen and Oetojo (2018) reiterated that the appropriate digital format and popular design elements were crucial components to appeal to millennials. Meanwhile, Hafiar et al. (2020) stated that Instagram was used as an alternative media platform for advertising batik. Nevertheless, their research specifically targeted batik entrepreneurs in the West Java region.

Digital marketing is defined as using digital technologies to accomplish marketing goals (Chaffey & Ellis-Chadwick, 2019). This concise description serves as a reminder that the decision to invest in Internet marketing should be based more on the outcomes produced by technology rather than simply adopting the technology itself. Digital marketing encompasses a wide range of activities that utilize technology to fulfill marketing goals from an external and internal standpoint. This term is synonymous with Internet marketing and e-marketing. It aligns more closely with the notion of digital business, which encompasses the management of both internal and external digital communications (Chaffey, 2015).

Batik Lasem businesses must establish a robust online presence, optimize their websites for e-commerce, and leverage social media platforms like Instagram to survive in the digital era. Using Instagram optimally involves showcasing visually appealing content, engaging with followers, and implementing e-commerce features such as product tagging and direct shopping options. Successful utilization of Instagram can help Batik Lasem MSMEs reach a broader audience, including potential customers who may not be physically present in Lasem, by embracing digital marketing strategies, collaborating with influencers, and online marketing and sales.

According to the explanation, it is interesting to answer several questions. They are how batik Lasem businesses utilize online shopping through Instagram as a platform for marketing and sales, what challenges and opportunities are associated with this digital approach, and how the cultural significance and distinctive characteristics of batik Lasem can be effectively showcased to attract digital consumers through building a strong brand identity, telling the story behind each batik piece, and highlighting the unique cultural elements.

METHODS

The research applies a descriptive-qualitative method. According to Luthfiyah (2020) and Moleong (2021), the method is distinguished by its use of a natural environment, reliance on sources for data collection (both verbal and visual), detailed data description, and good interpretation through narration. Once the data are collected, they are analyzed through data reduction, presentation, and drawing conclusion or verification. The research specifically examines MSMEs in the batik Lasem industry that employ

Instagram as a platform to advertise their products through regular live broadcasts.

The research utilizes primary and secondary data sources to get complete information about the MSMEs of batik Lasem and how they market their products. The acquisition of secondary data is accomplished by written sources such as inscriptions, previous research, and news articles, as well as the analysis of the online shopping Instagram account of batik Lasem. Meanwhile, primary data are collected using online interviews carried out via WhatsApp conversation, where participants provide their responses by text or voice notes. The inquiries encompass the attributes of the batik patterns created, market rivalry, workforce size, and the origins of the essential components used in batik production, such as fabric, wax, and dyeing substances.

For the research, there are two hosts of batik Instagram accounts that are willing to answer the questions posed. They can be referred to as Informant 1 and Informant 2. Convenience sampling is employed to facilitate the research process due to time constraints and the unavailability of precise data on the number of batik MSMEs in Lasem. In this case, two informants are selected as sources of information to provide answers to the research questions. An observational study is also conducted in Lasem over a single day to observe the actions of artisans working in four MSMEs of batik Lasem. These enterprises predominantly employ women with different age groups as batik manufacturers. Also, the researchers keep notice of the hosts that are doing a live batik sale.

In addition, another kind of primary data is the screenshot of the batik Lasem account’s Instagram live sale. To access this information, one must first follow the account to receive updates about upcoming live sales. The frequency of live sales conducted by Instagram profiles for batik Lasem varies, with certain accounts hosting them daily, others twice a week, triweekly, and some even irregularly. This observation documents the number of viewers, the duration of the live sale, and the following day’s statistics on the quantity of fabrics sold during the live sale. As the observations conducted on Instagram accounts for live sales also consider the number of batiks sold per session upon the completion of the live sale, the details on this matter is disseminated the next day through an Instagram story or an Instagram feed. The next stage is to narrow the focus by analyzing specific factors, including the discussed subjects, sales performance, and the number of sales for each online store with Instagram accounts (a table will be developed to present the data). Figure 1 illustrates the stages of the inquiry as an overall research framework.

RESULTS AND DISCUSSIONS

The data collection produces various datasets that can be used as the findings and subsequently subjects to further analysis. Based on the observational

findings, it is determined that there is a minimum of 26 batik Lasem stores that maintain Instagram profiles with a primary concentration on selling batik Lasem. Various information can be identified from the Instagram accounts of batik Lasem, as outlined in Table 1.

The information presented in Table 1 can be elucidated as follows. First, based on the frequency of live sales, three stores in Lasem consistently perform live sales daily, demonstrating a dedicated commitment to engage with clients and market their batik items actively. This consistency implies a firm dedication to online marketing and the continuous maintenance of an active presence on various social

media platforms. Then, two stores choose to conduct live sales weekly, suggesting that they may prioritize other areas of their business during the remaining days of the week or employ a strategy to generate anticipation and exclusivity for their live events. Meanwhile, one store elects to conduct live sales biweekly, achieving a harmonious blend of regular interaction and efficient resource allocation, which is Batik Lasem Sekar Mulyo. One store also prefers to conduct live sales three times a week to show its closeness to its spectators, which is Batik Lasem Tiga Negeri. Meanwhile, the other four shops (Batik Kresno Aji, Batik Lasem Seruni, Kidang Mas Batik Lasem, and Batik Pusaka Beruang) exhibit a higher

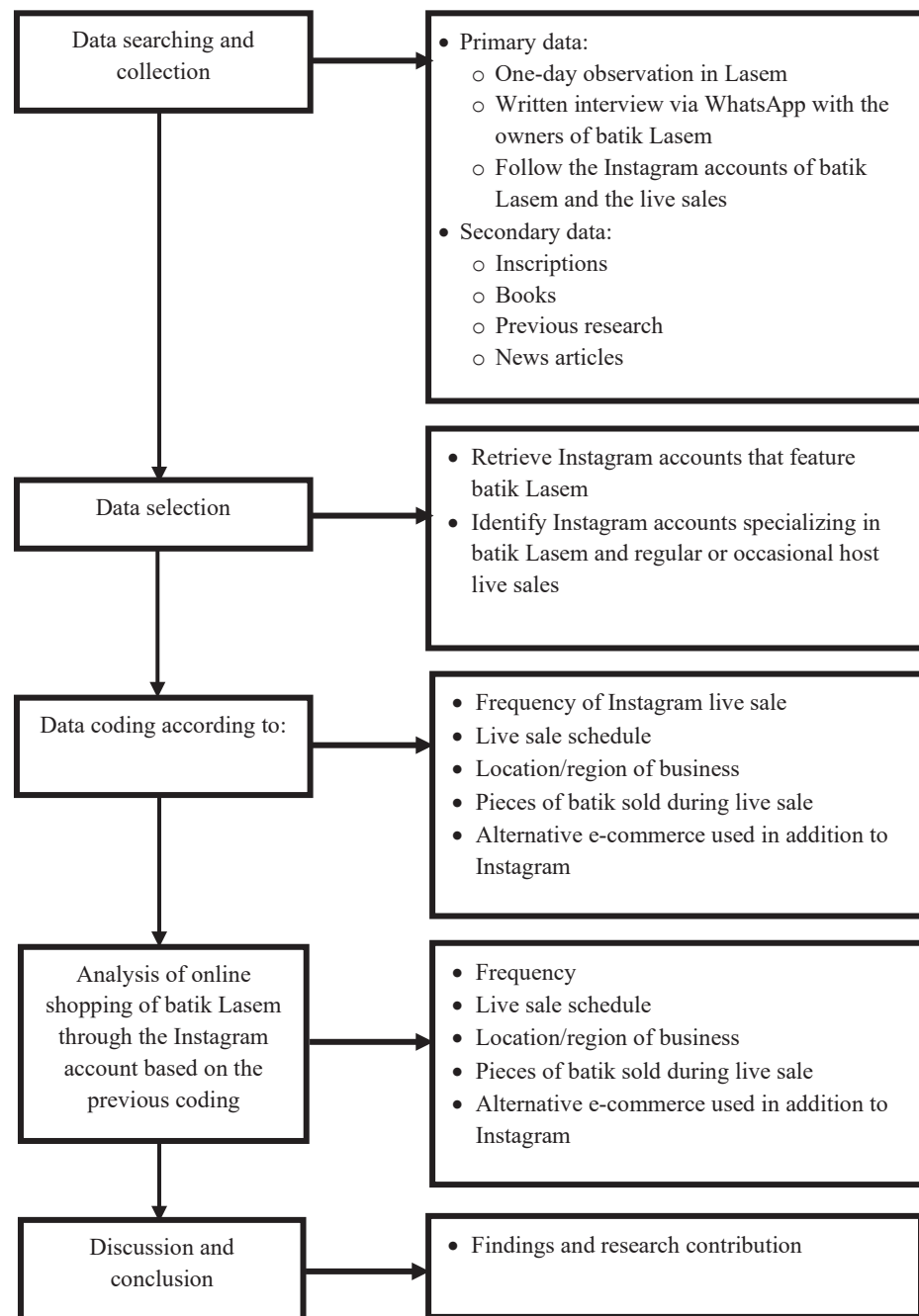


Figure 1 The Overall Research Framework

degree of adaptability in their actual sales operations, perhaps modifying their timetables in response to factors such as demand, inventory levels, or other business imperatives.

Next, the analysis conducted according to the predetermined schedule results in various findings. First, the live sale that takes place at night is selected by three online shops with Instagram accounts, namely Batik Lasem Sekar Mulyo, Griya Batik Lasem Canting Kencana, and Batik Kondang. It is deemed the most effective time to attract customers and produce sales

transactions. Live sales, which are held at night, are the most liked and chosen time since they potentially leverage clients' leisure time after work or other daily commitments. Second, the live sale, which is held all day (from the morning until night with determined shifts), is applied by three online shops with Instagram accounts: Batik Lasem Tiga Negeri, Oemah Batik Lasem, and Batik Rumah Merah Lasem. They specifically target individuals who wake up early and perhaps captivate clients before they commence their day. Continuous live sales until night allows customers

Table 1 Marketing Strategy of Micro, Small, and Medium Enterprises (MSMEs) of Batik Lasem Using Instagram Live as Online Sales

Information Retrieved on Batik Lasem Instagram Live Sales				
1	Frequency			
	Daily	Weekly	Biweekly - Triweekly	Random
	3 shops: Oemah Batik Lasem, Batik Rumah Merah Lasem, Oemah Batik Nusantara	2 shops: Griya Batik Tulis Lasem Canting Kencana, Batik Kondang	Biweekly-1 shop: Batik Lasem Sekar Mulyo Triweekly-1 shop: Batik Lasem Tiga Negeri	4 shops: Batik Kresno Aji, Batik Lasem Seruni, Kidang Mas Batik Lasem, Pusaka Beruang
2	Time schedule			
	Morning	Morning to Night	Night only	Random
	-	3 shops: Batik Lasem Tiga Negeri, Oemah Batik Lasem, Batik Rumah Merah Lasem	3 shops: Batik Kondang, Batik Lasem Sekar Mulyo, Griya Batik Tulis Lasem Canting Kencana	4 shops: Batik Kresno Aji, Batik Lasem Seruni, Kidang Mas Batik Lasem, Pusaka Beruang Batik Lasem
3	Location of business			
	Lasem	Semarang	Pekalongan Cirebon	Other Locations
	8 shops: Batik Lasem Tiga Negeri, Oemah Batik Lasem, Batik Rumah Merah Lasem Batik Kresno Aji, Batik Lasem Seruni, Kidang Mas Batik Lasem, Batik Kondang, Batik Lasem Sekar Mulyo, Pusaka Beruang Batik Lasem	-	1 shop: Griya Batik Tulis Lasem Canting Kencana	-
4	Sales: The amount of batik pieces being sold per live sales			
	< 100	100 –200	200 – 300	> 300
	3 shops: Batik Lasem Tiga Negeri, Oemah Batik Lasem, Batik Rumah Merah Lasem	3 shops: Batik Kondang, Batik Lasem Sekar Mulyo, Griya Batik Tulis Lasem Canting Kencana	-	-
5	Online shop using another additional platform such as Shoppe or Tokopedia			
	Using Shoppee	Using Tokopedia	Using Shoppee and or Tokopedia	Mainly using Instagram
	Four online shops utilize both Instagram and Shoppee as alternate marketing platforms for their items.	One online shop has been identified utilizing Tokopedia in addition to Instagram.	Only one online shop utilizes Shoppee and Tokopedia rather than solely relying on Instagram.	20 online shops identified using Instagram as their marketing platform to showcase the products

to tune in at any time conveniently. Meanwhile, one Instagram online shop (Oemah Batik Nusantara) also starts a live sale from the afternoon until night with predetermined shifts. The other four online shops with Instagram accounts have erratic timetables, which may cater to certain audience preferences or suit company activities.

Based on the firm's location, most of the batik Lasem online shops, which have Instagram accounts, operate in Lasem, the central hub of the batik industry in Indonesia. This location emphasizes the clustering of batik businesses in the area and the importance of preserving local tradition. Then, one online shop that holds live sales through Instagram operates from Pekalongan. This expansion can potentially allow them to access new markets or attract other groups of customers. It highlights the widespread presence of batik craftsmanship in several locations throughout Indonesia. The absence of a defined location indicates a wide distribution across several geographical areas or the possibility of online-based firms without a physical presence.

Moreover, based on sales represented by the average number of pieces of batik sold during live sales, some information can be recited as follows. First, three Instagram accounts of batik Lasem (Batik Lasem Tiga Negeri, Oemah Batik Lasem, and Batik Rumah Merah Lasem) regularly conduct live sales, in average achieving sales of less than 100 pieces after each live sale. Nevertheless, these three accounts conduct daily live sales with a minimum of three shifts, resulting in an estimated average sale of 300 pieces of batik every day. The other three shops (Batik Kondang, Batik Lasem Sekar Mulyo, and Griya Batik Tulis Lasem Canting Kencana) demonstrate satisfactory sales figures, indicating a robust demand for their items and an effective approach to customer involvement. There are no shops that generate sales within this range of 200–300 after each live sale, suggesting room for improvement or optimization in their marketing and sales strategies. Moreover, none of the stores routinely sell more than 300 batik pieces per live sale, indicating a potential for growth or enhanced exposure to reach a broader customer base. However, there is a possibility that the actual sales of each shop will reach more than 300 pieces since there are also offline sales to the store or through phone calls.

The use of another existing online shop platform as an alternative to transactions can be derived from the following information. First, by utilizing Shopee, four shops employ this platform together with Instagram to implement a multi-channel strategy for e-commerce, potentially expanding their reach beyond social media. Second, a listed shop utilizing Tokopedia facilitates Tokopedia (Batik Lasem Tiga Negeri), suggesting a preference for alternative platforms or a concentration on Instagram as the primary sales channel. Batik online shop utilizes Tokopedia and Shopee as alternate marketing transaction platforms, in addition to their Instagram presence. It demonstrates a flexible strategy for online

sales and diversification of distribution channels. Third, 20 shops primarily utilize Instagram as their major medium for showcasing their products, emphasizing the network's widespread appeal and efficacy in reaching clients for batik products. Nevertheless, these accounts do not engage in real-time transactions of Instagram live sales.

Next, the operational mechanism for selling batik products using Instagram live sales can be explained as follows. Online batik shops that frequently schedule live sales on predetermined days usually provide updates on their Instagram profiles, Instagram stories, or Instagram feeds. At the commencement of the live sale, the host initiates the sale and provides the relevant instructions for making purchases. A designated WhatsApp number is displayed on the screen for the purpose of facilitating conversations related to purchases. The host promptly commences the live sale, occasionally delaying until the viewership count exceeds a specific threshold. The batik cloth is systematically unfolded, revealing its motif, color, and series category. Enthusiastic viewers can promptly capture the image presented on the screen and expeditiously transmit it to the administrator via the previously given WhatsApp number or exhibit it on their mobile phone screen upon the commencement of the event. The WhatsApp administrator will promptly respond and notify the availability of the batik design they desire. However, there is no guarantee that people will receive the chosen fabric every time they capture the screen and transmit it to the administrator. Viewers who are potential customers encounter several specific challenges. The phrase "BATIK WAR" originated from instances like this, where acquiring a piece of batik Lasem fabric through a live auction is not a prerequisite. The agility and nimbleness of the fingers are also affected, bolstered by a reliable Internet connection. Another essential promotional strategy that is executed by batik Lasem business is offering reduced shipping fees or completely free shipment before the live sale starts.

The information offers valuable insights into batik businesses' tactics, preferences, and market dynamics, focusing on their frequency of live sales, timing, location, sales performance, and online store platforms. It highlights the significance of adjusting to customer behavior, utilizing Internet platforms efficiently, and researching prospects for growth and expansion in the batik business. The findings of this observational and exploratory study align with the research conducted by Suranto and Pratiwi (2023) and Pratiwi (2021) that they aimed to develop a set of technopreneurship marketing strategy models for small and medium enterprises in the industry center of batik Masaran Sragen and leveraged digital e-commerce to augment the capability of product sales. The investigation yields a marketing technopreneurship implementation model that relies on the synchronization of digital capabilities. The digital marketing marketplace (Shopee) has a significant impact on boosting sales capacity. In

general, incorporating digitalization elements has a beneficial effect on boosting sales volume. The readiness of infrastructure and human resources and the benefits of various e-commerce platforms are believed to make technopreneurship an essential and valuable entrepreneurial approach for MSMEs in Indonesia. Digitalization technology is seen as a necessity in today's business landscape, particularly for expanding marketing reach.

According to Maulana et al. (2021), digitalization can potentially enhance the effectiveness of IT implementation in small businesses in Indonesia, thereby contributing to their success. Meanwhile, based on Prasetyo and Disarifanti (2021), digitalization is not limited to the product marketing process, but can also be utilized for the advancement of designs for batik Lasem patterns. A batik Lasem motif has been innovated. The digitalization process is expected to enhance adaptability and appeal to market preferences, particularly among the millennial and younger generations, thereby ensuring the preservation of Indonesian culture, specifically traditional batik cloth.

It has also been found that incorporating stories about batik can serve as an effective marketing technique for boosting digital sales and promoting the sustainability of batik Lasem (Darmayanti et al., 2022). The local community of batik makers aims to use the cultural basis of their batik products as a sales technique. Cultural narratives not only enhance the regional economy but also contribute to the preservation and growth of local culture sustainability. Aryani's study in Aryani (2022) examined the decorative motifs on Lasem batik, noting a fusion of Arabic calligraphy and Chinese sinography, which impacted the intangible value of the created batik motifs.

The MSME entrepreneurs of batik Lasem have several opportunities to boost sales, which include the presence of various accessible logistics networks in the small city. Additionally, they offer pick-up services for goods that will be delivered to both domestic and international buyers. The growing connectivity in transportation facilitates the accessibility of logistics for the procurement of primary raw materials, including those that are typically challenging to acquire. By focusing on the local economy, specifically in Lasem where the majority of the population depends on agriculture, particularly fishing and salt pond farming, MSMEs of batik offer employment prospects for various roles such as batik makers, designers, and *pecanting* (women who apply wax during the batik process). Women can be empowered to a great extent to conserve batik, along with its unique patterns, for future generations. Conversely, alternative job prospects for males typically involve physically demanding tasks, such as the process of fabric melting (which entails removing wax from cloth to advance to subsequent stages).

In addition to the current opportunities, the challenges faced by MSMEs of batik Lasem can be attributed to the requirement of a reliable Internet

network connection and a strong signal for stable digital infrastructure. It can facilitate the utilization of marketing platforms by the batik MSMEs' marketing department with greater ease. An additional obstacle encountered pertains to fluctuations in climatic conditions, particularly during periods of harsh weather. Typically, the drying method for batik fabrics involves utilizing natural sunlight in addition to a washing machine to ensure optimal color appearance and durability. The initial sun-drying of the batik fabric yields visually pleasing hues. In the event of unpredictable weather conditions and the possibility of rapid rainfall, the resulting colors will differ from those observed under clear and sunny skies. Artisans of batik Lasem MSMEs must adapt to weather fluctuations that occur over specific seasons. A sufficiently spacious area is required to serve as a sheltered location for drying batik materials, ensuring protection against unexpected rainfall. In this scenario, the implementation of drying equipment that is not economically feasible becomes necessary. It is crucial for batik makers, especially batik businesses or owners, to prioritize maintaining high product quality as it significantly influences consumers' purchasing decisions. These findings align with the research result that indicates a notable correlation between product quality, brand image, and consumer willingness to buy (Haryanti et al., 2020).

Furthermore, the community development program for MSMEs of batik Lasem identifies a lack of knowledge and technical literacy, particularly at MSME of Anugrah Art Lasem. By providing support to assist the business in growing, maintaining a competitive advantage, and ensuring legal compliance, the help includes designing banners, signage, batik catalog books, and overseeing digital marketing on Facebook and Instagram. This approach aims to bridge technology barriers to boost sales of Lasem batik products (Damayanti et al., 2022). Hence, it is imperative to seek local government assistance in terms of financial backing and provision of training to tackle emerging issues effectively. Enhancing the local economy can effectively foster residents' livelihoods, obviating the necessity for them to seek employment in major urban centers. Ensuring equitable allocation of employment opportunities in rural areas will mitigate the influx of urbanization and foster economic development. However, the utilization of IT support and effective financial management in SMEs is not directly linked to the company's financial performance (Hastuti et al., 2021). Instead, these factors are more likely to be influenced by the company's age and investment opportunities.

In addition, data are collected through interviews conducted via WhatsApp conversation and voice notes with two hosts of batik Lasem accounts, identified as Informant 1 and Informant 2. Table 2 displays many details that can be acquired, such as the distinguishing features of batik Lasem, common patterns, workforce size, competition among industry players, sources of fabric raw materials, wax

production methods, and ingredients used for fabric dyeing and coloring.

Table 2 pertains to the gender and number of workers, the competition that takes place or the collaboration that can be carried out, as well as the many problems and possibilities that are encountered. It is known that both enterprises are run by women, who also serve as the primary administrators of the batik business and the primary hosts for live sales via Instagram. Aside from that, the batik Lasem business owned by informant 1 has a bigger production scale than informant 2. It is due to the different number of workers they employ. Informant 1 has approximately 120 employees, while informant 2 can only employ less than 50 people. This difference demonstrates the contrasts between the magnitude of manufacturing and the business strategies that are run. Both companies are dominated by female employees between 20 and 60 years old. It implies that the existence of the batik Lasem business has its role, and it also shows the contribution of women as the primary source of income for their families.

In terms of competition and collaboration, informant 2 acknowledges that rivalry is a typical occurrence that takes place in all businesses, including in batik Lasem business. Another informant indicates that the practice of collaboration, which involves providing mutual assistance to one another, is also commonly done, particularly in firms that have a

large scale as opposed to smaller scale businesses. However, challenges and opportunities also arise in fabric procurement. Both informants have difficulties in finding dependable fabric suppliers. Informant 2 notably highlights the obstacle of rural locations and limited access to main roads. The statement indicates a requirement for enhanced infrastructure or logistics strategies to aid MSMEs in remote regions. Then, both businesses recognize the advantages of using natural dyes, as well as the difficulties involved in obtaining raw materials and managing the intricate production process. It implies a requirement for research or support initiatives to tackle these difficulties and encourage sustainable practices.

Thus, based on what previously has been elucidated, Lasem's online batik sales contribute to the achievement of multiple Sustainable Development Goals (SDGs). The promotion of online sales and skill development initiatives contribute to the advancement of women, resulting in increased local revenues and supporting the goal of Decent Work and Economic Growth (SDG 8). Improving Internet infrastructure is necessary for enhancing digital marketing in cultural preservation and tourism, which aligns with the goals of Industry, Innovation, and Infrastructure (SDG 9). Sustainable Consumption and Production, also known as SDG 12, refers to the goal of promoting responsible and efficient use of resources to minimize waste and environmental impact.

Table 2 Data Gathered from Informant 1 and Informant 2 About Their Businesses

	INFORMANT 1	INFORMANT 2
Characteristics of Lasem batik	Written batik (not stamped, not printed)	Written batik (not stamped, not printed)
Typical motif	Butterfly with mostly pastel colored	Two-tone
The number of employees includes artisans, designers, and individuals who have their specialization in tasks and responsibilities	120 people (aged 20-60 years), mostly women	Less than 50 people (aged 20-60 years), mostly women
Competition between business actors	While this is a frequent occurrence, some other MSMEs offer mutual assistance to support one another.	It is typical. Assigning an identity to a business will inevitably result in facing significant competition.
Fabric cloth source	Certain suppliers of fabric materials have scheduled delivery times for sending materials.	MSMEs, being situated in remote and isolated areas, have a lack of reliable suppliers for the required fabric supplies. The proximity of these places to the nearest roadway is around 1.5 kilometers, which adds complexity to the procurement process.
Wax Source	Typically, engaging in self-production is advised as a method to reduce manufacturing costs.	In general, self-production is recommended as a means to lower production expenses.
Raw materials for fabric dyeing	Natural colors are created by employing organic raw materials, such as roots and leaves, which are chopped down and processed into a paste that is ready for coloring purposes. In addition to that, the composition is crafted with a recipe that has been handed down from one generation to the next.	The production of natural colors is challenging due to the complexities involved in sourcing raw materials and the intricacies of the manufacturing process. Most of them use the chemical color.

CONCLUSIONS

The data analysis highlights the distinctive characteristics of the online enterprises of batik Lasem, particularly concerning the fact that they offer hand-written batik exclusively. The small number of online shops that participate in Instagram live sales makes these platforms distinctive. Published testimonials about batik cloth's quality and open reporting of fabric sales after the live sales events can boost consumer trust.

This industry, which is predominantly driven by female artisans, not only helps to maintain the cultural history of Lasem but also supports the economic independence of women, which is in line with Sustainable Development Goal 8 (Decent Work and Economic Growth). The integration of digital marketing strategies has improved Lasem's international reputation, showcasing the successful attainment of Sustainable Development Goal 9 (Industry, Innovation, and Infrastructure) and Sustainable Development Goal 12 (Sustainable Consumption and Production).

The research focuses solely on batik Lasem, disregarding several batik industry hubs situated in other rural areas that offer potential for exploration. The research findings provide significant insights into several academic disciplines, such as e-commerce, cultural preservation, women's empowerment, globalization, and marketing strategy. Thus, the implication is that traditional businesses may potentially gain advantages by implementing modern technologies like virtual try-ons. These technologies have the capability to enhance customer trust and engagement.

One of the research limitations is that only two informants can provide information about batik Lasem. A larger sample, in this case, more informants, is needed to obtain deeper information on the company size and location distribution to provide a more comprehensive picture of the batik Lasem business. Furthermore, the research applies a qualitative method and based on observations of the Instagram accounts of batik Lasem to collect data and indirect interviews with only two informants of the business. Another technique in collecting data can be done through distributing questionnaires to get quantitative data in determining consumers' preferences. Further research can be conducted, such as analyzing the logistics network to provide the raw materials and necessary dyes and colors to produce batik fabric. Additionally, sustainable practices in the batik Lasem business can also be explored.

REFERENCES

- Abdurohim, D. (2023). Women's empowerment in MSMEs: Analysis of social and economic impacts. *International Journal of Management and Business Economics*, 2(1), 49–53. <https://doi.org/10.58540/ijmebe.v2i1.467>
- Aryani, D. I. (2022). Lasem's batik revival through the revitalization of Arabic calligraphy and Chinese sinography. In *Proceedings of the 1st International Conference on Social, Science, and Technology, ICSSST 2021*. <http://dx.doi.org/10.4108/eai.25-11-2021.2318807>
- Ali, A. (2019). Entrepreneurial marketing and consumer need adaptability for batik industry marketing performance in Lasem, Rembang. *Arthatama: Journal of Business Management and Accounting*, 3(1), 55–66.
- Basiroen, V. J., & Lopian, M. E. (2016). Implementation of design thinking process in creating new batik Lasem design. *Pertanika Journal of Social Sciences and Humanities*, 24, 119–136.
- Basiroen, V. J., & Oetoyo, J. O. (2018). Digital campaign as a solution to engage the millennial's awareness about Javanese batik Pesisir. In *ARTESH International Conference on Art for Technology, Science and Humanities* (pp. 1–16).
- Chaffey, D. (2015). *Digital business and e-commerce management: Strategy, implementation and practice*. Pearson Education.
- Chaffey, D., & Ellis-Chadwick, F. (2019). *Digital marketing: Strategy, implementation and practice* (7th ed.). Pearson Education limited.
- Damayanti, Kartini, S. D. A., & Artanti, A. R. (2022). Empowerment in business development through marketing expansion and business legality in Anugrah Art Batik Rembang. *Jurnal Pengabdian dan Pemberdayaan Masyarakat Indonesia*, 2(1), 23–30.
- Darmayanti, T. E., Pandawangi, A., Aryani, D. I., Dewi, B. S., & Effendi, I. Z. (2022). The cultural narrative as a digital promotion strategy in selling batik tulis Lasem and its effect on the economy in Lasem. In *Proceeding of International Conference on Business, Economics, Social Sciences, and Humanities* (Vol. 5, pp. 134–142).
- Dirgantoro, B. P. (2019). Gamification the learning of manual craftsmanship batik Lasem process through board games. *Journal of Game, Game Art and Gamification*, 4(1), 28–32.
- Gondoputranto, O., & Dibia, I. W. (2022). The use of technology in capturing various traditional motifs and ornaments: A case study of batik fractal, Indonesia and TUDITA-Turkish digital textile archive. *Humaniora*, 13(1), 39–48. <https://doi.org/10.21512/humaniora.v13i1.7408>
- Hafiar, H., Subekti, P., Komariah, K., Komala, L., & Perbawasari, S. (2020). Instagram: The alternative media in batik promoting. In *ICASI 2020: Proceedings of the 3rd International Conference on Advance & Scientific Innovation* (p. 296). European Alliance for Innovation.
- Haryanti, K., Hastuti, T. D., Lako, A., & Krisprantono. (2020). The relationship between product quality and brand image with willingness to buy: A study on batik Lasem consumer. *International Journal of*

- Applied Research in Management and Economics*, 2(1), 1–11. <https://doi.org/10.33422/ijarme.v2i1.206>
- Hastuti, T. D., Sanjaya, R., & Koeswoyo, F. (2021). The investment opportunity, information technology and financial performance of SMEs. In *2021 International Conference on Computer & Information Sciences (ICCOINS)* (pp. 247–251). <https://doi.org/10.1109/ICCOINS49721.2021.9497182>
- Hastuti, T. D., Sanjaya, R., & Koeswoyo, F. (2023). The readiness of Lasem batik small and medium enterprises to join the Metaverse. *Computers*, 12(1), 1–15. <https://doi.org/10.3390/computers12010005>
- Kholifah, N., Sudira, P., Pardjono, Sofyan, H., & Utami, B. (2023). The transformation of batik in the 4.0 Industry Revolution: A case study in the clothing sector. *TEM Journal*, 12(1), 140–146. <https://doi.org/10.18421/TEM121-19>
- Luthfiyah, F. (2020). *Metode penelitian kualitatif (Sistematika penelitian kualitatif)*. Rosda Karya.
- Marthalina. (2018). Pemberdayaan perempuan dalam mendukung Usaha Mikro, Kecil, dan Menengah (UMKM) di Indonesia. *J-3P (Jurnal Pembangunan Pemberdayaan Pemerintahan)*, 3(1), 43–57.
- Maulana, H., Soegoto, E. S., & Syahputra, R. (2021). Technopreneurship in small businesses. *International Journal of Entrepreneurship & Technopreneur (INJETECH)*, 1, 25–32. <https://doi.org/10.34010/injetech.v1i1.5468>
- Moleong, L. J. (2021). *Metodologi penelitian kualitatif*. Remaja Rosdakarya.
- Munandar, A. A. (2020). Majapahit and the contemporary kingdoms: Interactions and views. *Berkala Arkeologi*, 40(1), 1–22. <https://doi.org/10.30883/jba.v40i1.522>
- Musman, A., & Arini, A. B. (2011). *Batik: Warisan Adiluhung Nusantara*. G-Media.
- Nurhajarini, D. R., Purwaningsih, E., & Fibiona, I. (2015). *Akulturasinya lintas zaman di Lasem: Perspektif sejarah dan budaya (kurun niaga-sekarang)*. Kementerian Pendidikan dan Kebudayaan, Direktorat Jenderal Kebudayaan, Balai Pelestarian Nilai Budaya (BPNB) Yogyakarta.
- Prasetyo, D., & Disarifanti, N. (2021). Studi pengembangan desain motif batik tulis Lasem Rembang. In *Prosiding Seminar Nasional Desain Komunikasi Visual* (pp. 14–25). <https://doi.org/10.33479/sndkv.v1i.120>
- Pratiwi, A. R. (2021). Model pemasaran batik berbasis digital marketing era new normal COVID 19 (Rafida Batik Sentra Industri Pilang Masaran Sragen). In *Seminar Nasional Teknologi Informasi Komunikasi dan Industri* (pp. 192–198).
- Raspati, F. A., & Kadiyono, A. L. (2023). Micro, Small and Medium Enterprises (MSMEs): Women's empowerment for women entrepreneurs. *Sawwa: Jurnal Studi Gender*, 18(1), 25–48. <https://doi.org/10.21580/sa.v18i1.14430>
- Riyandari, A. (2023). Women and their roles in society: Writing about women in Lasem, Semarang, and Karimunjawa. In *The reflective essays of FLA journey on teaching, research, and community service*. Universitas Katolik Soegijapranata.
- Rizali, N., & Sudardi, B. (2019). *Aktualisasi nilai China dalam batik Lasem*. PT Sarana Tutorial Nurani Sejahtera.
- Roziqin, A., & Fajrina, A. N. (2021). Will creative industries survive in Industrial Revolution 4.0? An experience from batik tulis Lasem, Indonesia. In *Proceedings of the 1st International Conference on Law and Human Rights 2020 (ICLHR 2020)* (pp. 252–258). <https://doi.org/10.2991/assehr.k.210506.035>
- Sedyono, E., Mahatma, T., & Hunga, I. A. (2018). Knowledge management of traditional batik in Central Java. *International Journal of Engineering & Technology*, 7(4.44), 143–146. <https://doi.org/10.14419/ijet.v7i4.44.26970>
- Suranto, & Pratiwi, A. (2023). E-commerce based technopreneurship for developing sales of small and medium industrial products. *Jurnal Info Sains: Informatika dan Sains*, 13(02), 610–618.