



# **Branding Topics Concerned for Micro, Small, and Medium Enterprises (MSMEs) Hand-Drawn Batik Entrepreneurs**

## **(Case Study in Jetis Batik Village, Sidoarjo Regency, East Java Province, Indonesia)**

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**Abstract.** Micro, Small, Medium Enterprises (MSMEs) should have special attention, because MSMEs are becoming one of the economic pillar that play prominent role in current economic expansion in Indonesia. This study aims to investigate the topics concerned by hand-drawn Batik entrepreneurs, according a case study at one Jetis Batik Village entrepreneur that categorized as Micro, Small, Medium Enterprises (MSMEs) in Indonesia. This research used interview as the data to be processed by Topic Modeling. The data went through preprocessing system, such as audio data to text data transformation, informal text to more formal text transformation, stopwords removal. The final step is using Nocodefunction application to do the Topic Modeling Processing to produce 9 (nine) topics, which were the way consumer buying, time processing, price, brand management, batik entrepreneur community, batik making process, family business, target consumers, marketing method. There were also some recommendations given to face and to handle the highlighted topics, and most of them were the Indonesian government intervention in funding, making the regulation process easier, and educating the batik entrepreneurs. The idea of future research was continuing with the Micro, Small, and Medium Enterprises (MSMEs) consumer point of view, then being combined by the MSME's point of view to enrich the data and searching from the recommended strategies to bridge the gaps.

**Keywords:** Branding Strategies; Interviews; Hidden Thematic Structure; Topic Modeling.

## 1 Introduction

The importance of Micro, Small, and Medium-sized enterprises (MSMEs) for economies and community's life is considerably recognized, especially in developing countries [1]. In Indonesia, one of the developing countries, MSMEs are becoming one of the economic pillar that play prominent role in current economic expansion, proved by the number of MSMEs that reached 64.2 million with the contribution to Gross Domestic Product of 61.07%, according the data from Ministry of Cooperative and Small and Medium Enterprises (KemenkopUKM) in March 2021 [2]. That is one the reasons why MSMEs should be maintained, improved and sustainable.

Some of the weaknesses identified in the MSMEs sectors are branding and marketing. Most of MSMEs do not have ability enough to do the branding matters on their products. Most of the MSMEs focus on the trading and forget about the branding [1]. Branding is needed to increase trading, sales and could build a strong brand to put awareness, loyalty, and consumer brand love. The performance of MSMEs will be guaranteed if they are supported by innovation [3]. Noticing the huge impact combining the weakness of MSMEs power in Indonesia, it is urgently needed to know the thoughts from the point of view of those MSMEs.

Batik is one of the most MSMEs products that is very popular in Indonesia, because in many areas people make Batik as the way of living. Batik has also been added to UNESCO's Intangible Cultural Heritage of Humanity List in 2009, as the proof that Indonesian Batik has been recognized as a history in human civilization [2].

Micro, Small, and Medium Enterprises in East Java Province are the second largest contributors to Indonesia economy growth after Special Capital District of Jakarta [4]. Based on the survey of East Java Central Bureau of Statistics in 2016, the number of MSMEs reached 9,782,262 in various businesses. From that amount, 90% was MSMEs in regencies or cities [5].

Previous research has identified that Micro, Small, and Medium Enterprises (MSMEs) should have capable owner in managing sustainable business [6]. That is one of the important things to be highlighted in running a business categorized as MSMEs. Another problem for Jetis Batik Village was the access limitation from the government [7]. In most of the previous research was conducted using the reviews from web pages such as tripadvisor and airlinequality.com [8-10], QnA forum [11], and employee review data from Glassdoor [12], but in this research, interview was used to dig in the hand-drawn batik entrepreneur point of view. From the batik entrepreneur point of view, the opinions could be clustered to some topics that should be highlighted to increase branding matters of them.

This study aims to investigate the highlighted topics concerned by the Jetis Batik Village entrepreneurs that categorized as Micro, Small, Medium Enterprises (MSMEs) in Indonesia. This study has 2 (two) Research Questions (RQ), which are:

- RQ 1: How are batik entrepreneurs' opinions clustered?
- RQ 2: What are the recommendation strategies for Batik Entrepreneurs to increase their batik matters?

Topic modeling was used in this research to reveal the hidden thematic structure in collection of texts, analyze the words of the original texts and could be used to summarize, visualize, explore and theorize about a corpus [13].

Topic modeling is also a machine learning method that could process to discover brief topics in documents [14].

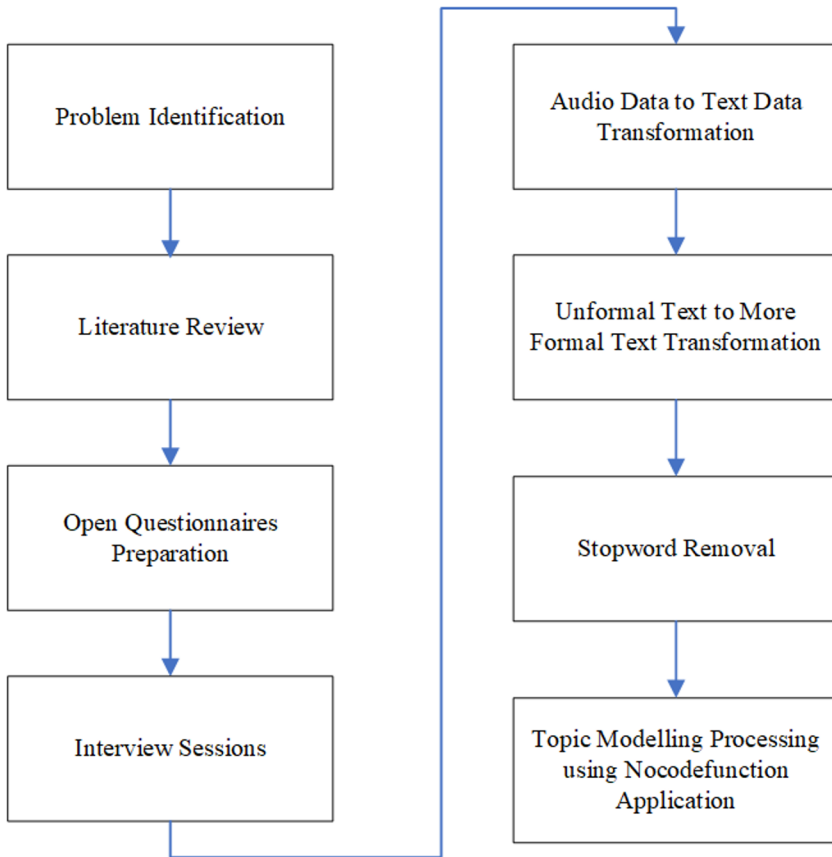
## 2 Materials and Method

The research was conducted using interview to hand-drawn Batik Entrepreneur in Jetis Batik Village, that was categorized as Micro, Small, and Medium Enterprises (MSMEs). Jetis Batik Village is located in Sidoarjo Regency, East Java Province, Indonesia. There was an open-ended question interview, whether the respondent should elaborate and giving examples. The interview was conducted to 1 (one) respondent among Jetis Batik Villages entrepreneurs, while the other entrepreneurs were not available or unwilling to participate. The interview was directed also to branding topics, how they marketed and did the branding of their products, besides understanding about their batik product characteristics. Jetis Batik Village in Sidoarjo Regency, is one of the 10 (ten) Batik Center or Batik Village recommended by Ministry of Tourism and Creative Economy [15]. In this research, one entrepreneur was chosen to be observed.

The interview was conducted in Bahasa Indonesia. The audio data that was collected from the interview session, should be transformed to text data. The next step was standardizing the unformal text that was captured from interview to more formal text. The effect of local dialect language was also removed.

Stopwords in Bahasa Indonesia were also removed using the guidance of “stopword-bahasa-indonesia” by Nugraha and Chandra [16].

The final step was done by Topic Modeling processing using Nocodefunction application. This function identified automatically the key topics in the text operation, called topic extraction or topic modeling. It analyzed the text line by line and determined groups of words and expressions which tend to cluster together, forming topics. The function follows the principles of unsupervised learning, [10], which is a type of machine learning that is running without explicit instruction.



**Fig. 1.** Research Methodology Flow Diagram.

### 3 Results

The result of data processing using Nocodefunction application [17], is an alternative creating topics by topic modeling, without coding system.

After running the process for an average parameter, which was 50, the default parameter of the program, it was found that there were 9 (nine) main topics from the result of the open interview of the batik Entrepreneur of Jetis Batik Village, that was shown in the Table 1 below. They were the way consumer buying, processing time, price, brand management, batik entrepreneur community, batik making process, family business, target consumers, and marketing method.

**Table 1.** Topics Identified in Open Interview of Hand-drawn Batik Entrepreneurs.

Topic	Topic Label	Topic Words
1	The way consumer buying	Coming, Consumer
2	Processing time	Time, Month, Spending time
3	Price	Tens, ten thousands, five hundred thousand, five, ten thousand rupiahs, thirty, price, seven, seven hundred fifty
4	Brand management	Brand management, brand
5	Batik entrepreneur community	Fabric, kamsatun batik, batik, there is, batik production, sidoarjo, batik entrepreneurs, community, east java, fabric material
6	Batik making process	For, design, process, people, colouring, doing, one, brand, first process, one design
7	Family business	Area, siblings
8	Target consumers	Friend, producing, mass production, thirty, middle-up, mass, mass products, products, producing batik, friends
9	Marketing method	Participating in exhibition, exhibition

## 4 Discussion

### 4.1 Topic Modeling in Discussion

9 (nine) topics were gathered in the data processing. The sequence number of the topics in Table 1, is the sequence number of the most important topics to the least highlighted topic. The first topic that received highlighted attention was about the way consumer buying, that explained about how consumers bought Micro, Small, and Medium Enterprises (MSMEs) batik product, by coming to the stores. Although many social media were used by batik entrepreneurs, most of the consumers preferred to come to touch and feel the batik material, even to see the motives and detail of the art of hand-drawn batik. The factors that might be the purchase intention were the beauty, creativity of the products [18]. The second topic mentioned about the processing time of batik which took months to produce 1 (one) product one piece hand-drawn batik. It will not be match between the demand and the supply needed. The third topic was about the price of hand-drawn batik that was higher than printed and stamped batik. The fourth topic was about the brand management, which most of the batik entrepreneurs not aware enough about their branding. Sometimes they still think about trading, than branding to fulfill their own need to survive. According the interview, it was known that many batik entrepreneur that did not extend their legal brand term to the government due to the lack of funding, although at first the government helped them to get their legal brand

by submitting the requirements procedures. The fifth topic was about the batik entrepreneur community that grew in each provinces as the place for batik entrepreneurs to communicate to each other and getting information about the current regulation or update information and even the events they could participate to market their products. The sixth topic was about batik making process which including the design, process and also colouring. It should have good quality to maintain the consumers keep buying the products. The seventh topic was about family business, that most of the MSMEs batik entrepreneurs ran in family businesses circle, even it was the legacy of their parents. The eighth topic was about target consumers, which most of the hand-drawn batik targetted middle-up consumers, and they did not do the mass products to keep the art of batik. The ninth topic, which was the last topic was about the marketing method they did, that was participating in exhibitions in some big cities, such as Jakarta, Surabaya and Bandung with other batik entrepreneurs all over Indonesia.

The limitation of this research is no ranking system for the important values among the topics and the limited number of the respondents.

#### **4.2 Recommendations Strategies for MSMEs**

Observing and analyzing the situation of Micro, Small, and Medium Enterprises (MSMEs) hand-drawn batik entrepreneurs in Jetis Batik Village, it is highly recommended that the Indonesian government should be in charge of the branding and marketing process to increase the awareness of those MSMEs about the the importance of their brands, besides also allocating the resources to support batik [19]. The government involvement could be regulation establishment that protected the national growth of batik products, especially in Indonesia, such as determining the using of batik in such national days, or deciding batik to be worn in certain days in government offices employees. The other regulation could be the protection regulation of imitation product, especially entering from outside Indonesia.

The free of charge brand registration that was initiated by the government was a great step in helping the MSMEs to be aware of the brand matters. The brand management that has government intervention, such as brand period extension process should be made easier. The government should also carry out socialization to the batik entrepreneurs and the community about the importance of brand registration and its extension.

The batik entrepreneurs should voluntarily participate in the batik community in their areas and coordinate with the local government to update the regulation frequently. They also have to upgrade their education by increasing their knowledge and skill [20]. Some topics that could be learned, such as branding and marketing in digital marketing, how to sell their products in the marketplace. They should also collaborate with the social media to educate them through their platforms. In previous research, it is found that social media, big data, and blockchain applications impact the advanced technology business capabilities of MSMEs [21]. The government should also support by giving the digital training for MSMEs to help them adopt e-commerce more effectively [22]. Batik Entrepreneur Community could also organize the exhibition that em-

phasize their local products, and could also promote outside Indonesia, with the government's help. Local community could also emphasize such as exhibition, talkshow, and seminars about batik and MSMEs matter, so the community aware about the product in their surroundings.

Batik entrepreneurs should also adopt the technology [23] and innovation that can increase MSMEs' competitiveness and business processes if it is carried out correctly and effectively [3]. Innovation could be a strategic focus to enable the diversification and performance improvement [24]. The companies that are able to use technology to master information, would have a bigger chance of winning the competition [25], and it encourages the leaders to actively evaluate and update their business models to align with digital advancements and allocate the resources to support these processes [26]. Another innovation that becomes trend currently is doing the green industry in some aspects [27]. The material that they use to make batik could be replaced by the environmentally friendly resource. The government could also support the MSMEs by giving incentives for adopting green technologies [28], while those MSMEs need to understand the important role of green innovation as a tool for carrying out environmentally friendly business practice [29].

The topic about the way consumer buying highlighted how the consumers coming to the store and found it was important. It is also necessary to concern about its interior and exterior to attract the customer to come [30]. To meet the consumer need in bridging the supply and demand, the forecasting of number of batik that should be prepared should be calculated well, since hand-drawn batik always takes longer time that the printed batik, even more, if the MSMEs do not have enough employee to run the business.

The important thing that should be highlighted for topic about marketing method for small companies such as MSMEs, according to Palencia et al., the marketing activities are not designed in the long term to position products, and positioning occurs from sales efforts rather than innovation [17]. The sales efforts should be really well-planned to make it efficiently and effectively.

For the topic about price, price competition among the MSMEs should also be highlighted. The advantage of creative industry is the art of the product. If the product has added value in arts, the price could be higher, depends on the complexity in the process [31].

## **5 Conclusion**

There were 9 (nine) topics that should be highlighted about the batik entrepreneurs point of view about branding. There were the way consumer buying, time processing, price, brand management, batik entrepreneur community, batik making process, family business, target consumers, and marketing method. There were also some recommendations given to face and to handle the highlighted topics. Most of the recommendations should include Indonesian government intervention in funding, making the regulation process easier, and educating the batik entrepreneurs.

The idea of future research could continue with the Micro, Small, and Medium Enterprises (MSMEs) consumer point of view. The next step is MSMEs consumer point of view being combined by the MSME's batik entrepreneur point of view to enrich the data and searching from the recommended strategies to bridge the gaps.

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