

# ANALYSIS OF INNOVATION STRATEGIES TO INCREASE THE COMPETITIVE ADVANTAGES OF THE BANGKALAN COASTAL STYLE HAND-DRAWN BATIK INDUSTRY DURING THE COVID-19 PANDEMIC

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## ABSTRACT

*Bangkalan coastal style hand-drawn batik is a regional leading creative industry that has experienced difficulties in industrial development during the Covid-19 pandemic. Because marketing relies more on direct interaction with buyers, social distancing policies, Large Scale Social Restrictions (or PSBB), and Enforcement of Restrictions on Community Activities (or PPKM) also impacted the decline in sales volume. To survive, innovation strategies are needed to increase competitive advantage. This study aims to analyze the innovation strategy, including product innovation, marketing, technology, and cooperation, to increase competitive advantage. Data were collected through in-depth interviews, observation, and documentation. The results indicate that innovation strategies can increase competitive advantage, and hand-drawn batik SMEs has enormous development potential. Government intervention affects Small and Medium-sized Enterprises (SMEs), in this case, Bangkalan coastal style hand-drawn batik, to be able to carry out various innovations.*

**Keywords:** Innovation, Competitiveness, Industry, Government.

## INTRODUCTION

Bangkalan coastal style hand-drawn batik is one of the creative industries in Indonesia that is growing rapidly and has received appreciation from various circles of society, from ordinary people to high-ranking officials in the government and private sector. Batik is changing very quickly. Initially, batik was only produced in the form of long cloth and now in various forms: clothes, bags, and hijabs. These products have different attractive motifs and designs while maintaining the Bangkalan coastal style hand-drawn batik characteristics. Batik is a work of art from Indonesia that has been preserved, maintained, and preserved to this day (Hughes & Morghan, 2007). This village produces hand-drawn batik “*gentongan*” with natural dyes derived from plant leaves and stems. The batik production process is quite long, which is up to 2 years, so the quality of the batik produced can be said to be premium (high). Their innovations inspire the development of fashion trends, sporting events, and world championships in creating hand-drawn batik designs and motifs. It causes hand-drawn batik from Bangkalan to become a modern batik product with high competitiveness. Owners and artisans of hand-drawn batik hope that the innovations made can create entirely new products that are different from previous products and modify existing products (Diab, 2013). Owners and artisans also consider consumers who buy hand-drawn batik by considering the value or function of batik along with the added value of batik products compared to other similar products (Udriah & Azam, 2019).

The development of Bangkalan coastal style hand-drawn batik is actually relatively slow compared to competitors from the Pamekasan or Sumenep styles, both of which are located on the island of Madura. Moreover, the price of Bangkalan coastal style hand-drawn batik is also much higher compared to competitors from Pamekasan and Sumenep due to the much higher quality of Bangkalan hand-drawn batik. On the other hand, owners and artisans also face problems in making innovation strategies to increase competitiveness in local and international markets. Successful innovation will be the right strategy to maintain or improve product positioning in the market (Kristiningrum et al., 2021). Thus, this study aims to analyze the dimensions of an innovation strategy that can increase competitive advantage through qualitative descriptive research.

## LITERATURE REVIEW

According to Makmur and Thahier, innovation is a strategy used by hand-drawn batik SMEs to explore the changes that occur in developing a different business. Innovation can be a change in product, process, method, or technology. There are two types of innovation, namely process innovation and product innovation. Process innovation is a change that affects the way output is in production, whereas product innovation is a change in the actual production of goods or services (Bateman et al., 2009; & Yusof, 2015). The innovation strategy is a series of decisions related to the development and renewal of hand-drawn batik offerings. This aspect includes what innovations to pursue, why, and how. From the perspective of competitive position, innovation strategy can be described in two main elements, namely product innovation and process innovation and technological innovation (Kurkkio, 2011). The innovation strategy should consider whether hand-drawn batik SMEs focus their efforts on product innovation (changes in product properties and quality) or process innovation (changes in input materials, production equipment, and process arrangements) (Onufrey & Bergek, 2019). The two types of the invention are used for different reasons, namely effectiveness (product innovation) and efficiency (process innovation) (Hollen et al., 2013)

Competitiveness is a series of continuous processes. Competitiveness is related to the resulting performance and the process (Masengi et al., 2015). Research by Asyhari, Pudjihastuti, and Kurdaningsih shows that a differentiation strategy is needed to increase Batik SMEs' competitive advantage (Asyhari et al., 2018). Competitive advantage is significant because it is closely related to business performance. The Covid-19 pandemic has caused the economy to decline. So, a business strategy is needed to increase its competitive advantage. The adverse effects and unintended social and environmental consequences of Covid-19 have created external pressure on the hand-drawn batik SMEs to address issues related to climate change and social degradation (Elkassar & Kumar, 2017). In addition to external pressures, the industry faces increasing competition due to globalization and new technologies (Cherrafi et al., 2018). Therefore, the industry must be able to meet these challenges by increasing its competitive advantage through an innovative approach (Chu et al., 2018).

## METHODOLOGY

This research was a qualitative descriptive phenomenological research. The population is the entire unit of characteristics or measurement results that are the object of study in an area that meets specific requirements related to research problems (Flowler, 2013). The research population was the owners of the batik industry, craftsmen, the

Department of Industry and Manpower, the Department of Cooperatives, SMEs in Bangkalan Regency, and the Bangkalan Batik Entrepreneurs and Craftsmen Association (PARABEN). Data were collected through in-depth interviews, triangulation (Farooq, 2015). expert surveys, and reputable international journals, which were analyzed descriptively-qualitatively.

## RESULTS

The findings of this research resulted in 3 essential points:

### Factors that Influence the Success of Innovation

Product innovation aims to maintain the survivability of Hand-drawn SMEs batik. Products currently on the market are vulnerable to changing consumer needs and tastes, technology, short product cycles, and increased competition. Although, covid-19 pandemic presents economic challenges, the owners and artisans of hand-drawn batik Small and Medium-sized Enterprises (SMEs) in the Bangkalan Regency continue to innovate. An informant who owns EQ Batik SMEs, Mrs. Eki, stated:

When it comes to innovation in batik products, I do not do it. I do not innovate, do not change colors or anything; I just develop artisans. I let them do whatever they want, but more often than not, they innovate on finished goods. Batik in the form of cloth is difficult to sell. The average buyer asks, "where is the tailor?" "what am I going to do with this cloth?" "what..what..what.." I see these questions as opportunities to innovate by making batik cloth into clothes. I made these fabrics into robes, work clothes, uniforms, and party clothes. During the Covid-19 pandemic, the sales volume of hand-drawn batik in the form of ready-made clothes increased slightly. This increase may be because we also have a trade mission that extends to Ternate, parts of Kalimantan, and Jakarta. But the sales are not what they used to be. But that is how we survive, looking for ways to keep employees from being laid off. (E/EQ Batik/29/5/21/12.00-14.00).

A similar opinion was also expressed by an informant who owns Tresna Batik SMEs, Ibu Supik. Therefore, informants provide answers as it is, which essentially is as follows:

Regarding innovation, sir, I myself have made various innovations. Innovation is indeed important, especially in business and at work. Innovation is vital to achieving the goals we aspire to. Like that, sir. Batik is also an innovation; for example, usually, the color of batik is yellow, now I make other colors. Innovation is made for better production. But, then, there are also innovations in terms of service, quantity, quality, and others. I have been doing that for a long time, sir. But, during the pandemic, whatever innovation is like, the impact is not what it used to be. (S/SMEs Tresna Batik/29/5/21/12.00-14.00).

Another opinion that supports that innovation can support competitiveness was also stated by the owner of Ataya Batik SMEs, Mrs. Gina, who said that:

Maybe the motive, sir. We are always trying to find new motives. You see, consumers are often looking for new motifs. However, if we add new motifs, we are also still trying to maintain the Madura characteristic of batik. We are also trying contemporary motifs, sir. Sometimes the Madura motif is bright in color, so to make innovations, we try softer colors. Currently, the trend is softer motifs for young people. However, if the Madura motif is changed, it cannot be changed to another motif, which allows the new color change. From bright red, green, blue to softer colors. (G/ Ataya Batik/29-05/2021/14.00-16.00).

Another opinion that supports that innovation can support competitiveness was also expressed by the owner of Sumber Arafat SMEs, Mrs. Damayanti, who stated that:

I innovate in color patterns and motifs but still maintain the standard. The grips are the colors and motifs of Tanjung Bumi. However, other innovations, such as changing colors and motifs, have other innovations. The ideas are different. Every month, I always make new motifs because my customers are not interested in buying if I do not change motifs. So we make variations in motifs and colors only, but the standard is still maintained. (D/Sumber Arafat/29-05/2021/14.00-16.00).

Another opinion that supports that innovation supports competitiveness was also expressed by an informant who owns Al-Warits Batik SMEs, Mrs. Waris, who stated that:

At first, I created a floral scent. Then, after the scent of flowers, there is a new demand: the scent of fruits. After that, there was a request to mix the flower and fruit scents. I think it can be done. So I tried to do it. It turns out that consumers like it, although mostly women, because men do not like scents. Well, finally, male consumers actually like the scent of sandalwood and Cempaka. I then mixed the scents of sandalwood and Cempaka flowers. The results turned out to be attractive to both men and women. Because of this, even though the batik motif is good, the scent is not good... consumers do not buy it.

On the other hand, if the motif is not good but smells good, people still do not buy it. Finally, I researched what fragrance everyone liked, both men, women, old, young, respected people, and ordinary people. It turns out that the preferred scent is exotic or spice. So, I created a typical Indonesian spice fragrance, namely sandalwood, agarwood, Cempaka, rose, jasmine, and cloves. Sometimes we also mix cinnamon. I also made a fresh ginger scent. It has a gingery scent. So it turns out that consumers from various countries like the smell of ginger. They also like the smell of oranges. However, if it smells like frangipani flowers, consumers from America do not like it, sir. The frangipani flower smells like the scent of the dead. They also do not like the smell of frankincense. So, I made what they wanted, which is the smell of Indonesian spices. (W/Waris Batik/29 Mei 2021/19.00-21.00).

Furthermore, researchers want to know the extent to which innovation in marketing can increase competitive advantage. In this regard, the owner of Sumber Arafat SMEs, Mrs. Damayanti, stated that:

I have a group that shares marketing-related information. So, if I get many orders, they are happy. We both get orders. I have an idea, a gallery, like in Surabaya. In the cooperative, there is no particular gallery. If there is a gallery, there will be an increase in the quality of motifs and colors.

Another opinion that supports that innovation can support competitiveness was also conveyed by the owner of Ataya Batik SMEs, Mrs. Gina, who stated that:

Marketing is done only through WA and Facebook. If there is an exhibition, I ask a friend who comes to bring my batik, sir. I want a permanent shop that showcases Madura batik products, specifically those with attractive quality and motifs.

The innovation of hand-drawn batik is carried out through product innovation, namely motif innovation, design, coloring, aroma, ready-to-wear clothes, uniforms, and marketing innovations to meet consumer desires and market demands. In fact, there is a possibility that consumers will switch to other products, which will result in lower sales. Thus, it can be concluded that the first innovation success factor is a market orientation which is the most influential in product innovation (Sanistasya et al., 2019). Market orientation can be seen from its orientation to its competitors and the level of customer orientation (Huhtala, 2014). Market orientation has a positive relationship with innovation (Ho et al., 2018). Therefore, innovation and market orientation partially positively affect competitive advantage (Udriyah et al., 2019).

Furthermore, the researcher wants to know the extent to which innovation can provide added value to hand-drawn batik SMEs that increases their growth and development.

Therefore, the informant made this statement of the Head of Industry and Manpower Office of Bangkalan Regency, Dr. Ir. Tamar Djaja, MM who stated:

Owners and artisans of hand-drawn batik SMEs in Bangkalan must have the knowledge and skills to create continuous innovation by taking advantage of events that are currently a hot issue in the community. For example, this event became the inspiration for making hand-drawn batik motifs and designs so that the customers liked the motifs and designs. Thus, innovation can provide added value for hand-drawn batik SMEs in Bangkalan.

Another supportive opinion was also expressed by the informant owner of Martha Batik SMEs, Mrs. Marhatun, who briefly stated as follows:

My innovation can increase competitiveness, sir. Moreover, when innovation is accompanied by philosophy. Creating a motif accompanied by philosophy will make customers more interested and increase our competitiveness in the market. Like 'Seek (Sek) Malayah,' there is a philosophy. Sometimes I make new motifs such as Karapan Sapi, which is combined with Genthong because Tanjung Bumi is famous for Genthongan batik and Bangkalan is famous for Karapan Sapi. Sometimes, I combine these two things into one innovative variation to increase competitiveness in the market (D/Sumber Arafat/29-05/2021/14.00-16.00).

SMEs artisans have a reasonably high knowledge competence in carrying out continuous and sustainable innovations that can provide added value. Thus, it can be concluded that the second success factor for innovation is that innovation can provide added value and improve the performance of SMEs Hand-drawn batik (Ozkaya et al., 2015).

Regarding this, the informant who owns the hand-drawn batik SMEs, Al-Waris Batik, Mrs. Waris stated:

My lecturer submitted the Dikti Science and Technology program for entrepreneurship (IBK). My IBK was selected, and I got funding of 10 million rupiahs. I used the money to open a shop and prepare all the equipment. Until finally, I have my own boutique. I am also learning more so that my products smell good, but the motifs and colors are also good, and other batiks in Madura do not have it. So, an excellent motive was chosen. However, I do not remove the characteristic of Madura from the batik. After that, Mrs. Risma gave me a gift of 5 million rupiahs. Wow, in 2009, Mrs. Risma bought my batik for a price of 5 million. It was considered very expensive. So, for them, there is no other batik that costs that much. So, at that time, I had stirred up the media. After I entered the news, Mr. Karwo heard my efforts. Same with Pak Karwo, my business was sent to BPJS 2013 to be sent to Malaysia. I passed the selection and went to Malaysia. In Malaysia, it turns out that I got the best mark in terms of excellent service and product. After that, I was interviewed by television in Malaysia. The news reached Singapore and beyond. I finally managed to open three boutiques in Malaysia and two boutiques in Singapore.

A similar opinion was also expressed by an informant who owns the hand-drawn batik SMEs Jokotole, Mrs. Uswatun Hasanah, who stated:

My innovations are always based on efficiency and effectiveness. I take advantage of partnerships with the government and the private sector. Currently, I am working with BNI 46 to train SMEs owners and artisans in Indonesia. When preparing training materials, innovative ideas emerge. So, I do not need much money to innovate hand-drawn batik products because I take advantage of the collaboration with BNI 46. The results of my innovation are also effective. Almost every week, I produce one premium product innovation, sir. Premium designs and motifs are only created once so that high-level hand-drawn batik fans are satisfied because the batik is not owned by anyone else.

The results of the analysis of information from informants indicate that five factors influence the success of innovation: 1) market-oriented innovation, 2) innovation to increase the added value of hand-drawn batik SMEs, 3) efficient and effective innovation, 4)

innovation in line with the vision and mission hand-drawn batik SMEs, and 5) innovation is carried out continuously and sustainably.

### **The Effect of Product Innovation on the Market Driving**

Market Driving is the hand-drawn ability of SMEs batik to create, mobilize, and educate the market through a product. However, that does not mean that you have to produce a new category in terms of product. Even though it is temporary, generating new passion in the market can also be considered driving (Van Vuuren & Worgotter, 2013). The market driving approach implies that innovation affects market behavior, improving competitive position (Ghauri et al., 2013). Human resources in hand-drawn batik SMEs are also responsible for the continuity of production because they also feel that they also own the business (Storbacka & Nenonen, 2015)

Researchers want to know the role of the owners and artisans of Hand-drawn batik SMEs in making innovations that create market driving. This information was obtained from an informant who owns Al-Waritz SMEs, Mrs. Waris, who stated that:

I managed to create an innovation that can create market driving through hand-drawn batik Gentongan products with aromatherapy. This innovative idea came about when I participated in a batik exhibition abroad. Apparently, consumers abroad do not like hand-drawn batik that uses colors from synthetic chemicals because it is feared that it will damage the body's skin. In addition, consumers from abroad also like aromatherapy. So after arriving in Indonesia, I tried to make hand-drawn batik with a therapeutic aroma. Finally, I managed to sell aromatherapy-scented batik products abroad: Singapore, Thailand, Europe, America, and Australia. It is the achievement of market driving abroad. With an innovation strategy, I was also able to create market driving in Bangkalan, the islands of Java, Kalimantan, Sumatra, and Bali. It is because there are so many requests for this therapeutic-scented hand-drawn batik Gentongan. In fact, during the COVID-19 pandemic, the demand for hand-drawn batik Gentongan has not decreased significantly, sir. (W/Waris Batik/29 Mei 2021/19.00-21.00).

A similar opinion was also expressed by an informant who owns EQ Batik SMEs, Mrs. Eki, who stated:

As the owner of EQ Batik, I try to motivate artisans to create various innovations with their skills, knowledge, and experience. This innovation can be in the form of product innovation, design, motif, color, or technology. The number of innovations produced is also expected to educate customers to like the product innovations produced. Thus, innovation can affect market driving. The concept of innovation comes from the craftsmen because I provide the broadest opportunity for artisans to create various innovations without considering external influences. Thus, innovation has a strong effect on creating market driving that can lead to high competitiveness. (E/EQ Batik/29/5/21/12.00-14.00)

The same opinion was also expressed by an informant who owns Pesona Batik SMEs, Mrs. Mei, who stated as follows:

If we innovate, we must be able to create market driving, sir. We must have high confidence that we can also move the market through our product innovation. We can influence customers to like our products in the market. We are not always only market-oriented but also must be able to drive the market. Almost every week, the craftsmen and I produce new products with new innovations with high philosophical values. We hope to educate customers to know more about batik, appreciate, and participate in preserving batik as the culture of the Indonesian nation, which has high cultural values and creativity. To facilitate market driving, Pesona Batik SMEs also has a batik training center for customers who want to learn to make batik. (M/P Batik/15/4/21/12.00-14.00)

Two factors encourage the creation of sustainable competitive advantage, namely product innovation and market driving. Good cooperation between the owners and artisans of hand-drawn batik SMEs, combined with knowledge and skills, can create product innovation and market driving (Schreiber et al., 2016).

## The Effect of Innovation Strategy in Increasing Competitive Advantage

In order for SMEs's Hand-drawn batik to compete and survive, continuous innovation is needed. Thus, SMEs owners must have the ability to innovate (Huang et al., 2021). Without creativity and innovation, hand-drawn batik SMEs in Bangkalan will not be able to survive, let alone compete during such high competition during the Covid-19 pandemic (Koszevska, 2018). Thus, hand-drawn batik SMEs in Bangkalan need to use and optimize innovation strategies because it dramatically affects the competitive advantage of hand-drawn batik SMEs to win the market competition (Hashi & Stojčić, 2013). The competitive strategy is good quality, good service, low cost, high technology, many alternative choices, modern marketing, and lower prices (Dennis, 2003). Five dimensions of competitive advantage can be used as indicators of success in creating high competitiveness: 1) the uniqueness of the product or service (type and packaging of products offered and services provided), 2) variety of products or services (variety of products, packaging sizes, and variety of services), 3) product price or value (selling price, discounted price, quality, and service satisfaction), 4) reputation (trusted hand-drawn batik SMEs brand reputation, relations with the community, government and customers), 5) customer experience (feel of pride, the convenience of purchase, and convenience of business location). To improve skills and innovation capabilities, artisans should be involved in various training. The results indicate that product innovation affects market driving, market driving affects competitive advantage, and innovation affects competitive advantage (Kuncoro & Suriani, 2018). Previous research argues that patented innovation analysis affects competitiveness. Indeed, innovation results must be patented not to be imitated by competitors, and innovation is protected by law (Pantano et al., 2018). In Indonesia, there is already a patent for hand-drawn batik, namely Batik Mark. Wahyono and Benny Hutahayan analyzed how SMEs adapt and further develop business competencies, innovation, and performance by utilizing market orientation, behavioral orientation, learning, and financial literacy to increase competitive advantage (Hutahayan, 2021). Previous research analyzed the relationship between sustainable innovation and competitive advantage and identified contextual factors that moderated this relationship, and there is a significant effect between continuous innovation and increasing competitive advantage (Hermundsdottir & Aspelund, 2021).

### CONCLUSION

Knowledge, skills, talents, and experience, and events that are trending in society, affect the emergence of creative ideas in making product and process innovations that can increase competitive advantage. The factors that influence the success of innovation are: 1) market-oriented innovation, 2) innovation to increase the added value of hand-drawn batik SMEs, 3) efficient and effective innovation, 4) innovation that is in line with the vision and mission of hand-drawn batik SMEs, and 5) innovation must be carried out continuously and continuously. The right and strategic innovation can increase market driving so that hand-drawn batik SMEs can also move the market and educate customers to accept product innovations and become loyal customers. Therefore, government intervention is needed to develop the creative hand-drawn batik industry in Bangkalan to become a driving force for the regional economy. Innovation must also be carried out on an ongoing basis to increase the competitive advantage and performance of hand-drawn batik SMEs.

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