

# A Portrait Of A Bussiness Management And Strategy In Developing Batik Small And Medium Enterprise (SME) In 4.0 Industrial Era

Rina Rachmawati  
Universitas Negeri Semarang,  
Indonesia

[rinarachmawati@mail.unnes.ac.id](mailto:rinarachmawati@mail.unnes.ac.id)

Widowati  
Universitas Negeri Semarang,  
Indonesia

Anindya  
Universitas Negeri Semarang,  
Indonesia

Mustofa Kamal  
UIN Walisongo Semarang, Indonesia

**Abstract**—Small and Medium Enterprise (SME) is Indonesia's economy pillar that is able to contribute 61,04% of the country's economy, to provide employment for 116,9 million people and support 293 T of Indonesia's export value (Coordinating Ministry for Economic Affairs, 2020). The challenges and obstacles faced by Batik SME are higher due to the 4.0 industrial revolution which changed the way SME survives and advances their business. The purpose of this study is to analyze the ability of Pekalongan Batik SME business management in improving business competitiveness and to analyze SME strategies to increase industrial competitiveness in facing the 4.0 industrial era. The population of this research is 24 batik artisans in Kauman batik village, Pekalongan, with saturated/census samples. The data is primary data. The research method is descriptive. The data was analyzed by using descriptive analysis technique, which was done by describing the facts of the findings. The results of the study illustrate the condition of the batik SME businesses management in Kauman Batik Village, Pekalongan. Based on the financial management, there are: 1) 74% of the artisans do not have proper business financial records, 2) 58% of the artisans do not separate business and personal finance records, and 3) 52% of the artisans have not utilized funding access provided by external parties. In terms of marketing management; 1)74% of the artisans still rely on hereditary network and 2) 74% of the artisans have not utilized the technology. Based on the HR management aspect, then: 1) the social level of batik artisans is diverse, 2) 70% of the artisans are not yet technological literate. The suggested strategies for SMEs in Kauman batik village during the 4.0 Industrial Revolution era are by 1) accessing assistance and funding offered by the Government, 2) making use of soft loans offered by banks, 3) utilizing the internet technology for business marketing, and 4) understanding and using technology.

**Keywords:** *SME; the industrial revolution 4,0; bussiness management*

## I. INTRODUCTION

The 4.0 industrial revolution was first brought up by Prof. Klaus Schwab, Founder and Executive Chairman of the World Economic Forum. The era of the 4.0 industrial revolution will change most of human life. The 4.0 industrial revolution will bring up artificial intelligence (AI), the Internet of things (IoT), and will bring other completely automated digital worlds. This 4.0 industrial revolution movement will impact all industrial sectors, including SMEs.

SME is one of the pillars of the Indonesian economy and plays an important role. It was recorded in Indonesia that in 2018, there were 63.35 million units of SMEs, most of which were informal businesses, and contributed 61.04% of the Indonesian economy, absorbed 116.9 million people and absorbed Indonesia's export value of 293 T (Coordinating Ministry for Economic Affairs, 2020). SMEs in this free trade era also face the challenges of the digital economic era (the era of the 4.0 industrial revolution).

One industrial sector that is expected to survive is the creative industry sector. Creative industries are small industries that are able to provide entrepreneurial resources, employment opportunities and are able to become the driving force of the country's economy (Hu 2010). However, the creative industries experienced several significant obstacles, including: around 92.37% of creative industry activities are self-funded, 97.36% of creative industry products marketing are still concentrated in the local market and 88.95% of them do not own intellectual property rights (Statistics Indonesia/BPS, 2017).

Batik Industry is included as one of the creative industries. The creative industry of batik grows and develops in the Kauman Pekalongan batik village, located in the Kauman village, eastern Pekalongan sub-district, and is very well known as the center of batik artisan in Pekalongan. Kauman batik

village was allegedly the oldest batik village in Pekalongan. In 2007, Pekalongan city government officially made it as the center for batik in Pekalongan City. Many SMEs started their batik businesses that is currently continuing to grow and develop. Responding to the challenges and increasingly competitive business competition in the era of the 4.0 Industrial Revolution, batik SMEs - as the driving force of the creative industry – should begin to organize their businesses and develop a strategy in developing their businesses.

Based on these conditions and problems, the objectives of this study are: 1) Analyzing the business management skill of batik SMEs in Kauman Pekalongan batik village to improve industrial competitiveness, 2) Analyzing the strategies of Batik SMEs in Kauman Pekalongan batik village to improve business performance in the 4.0 industrial revolution era. This study contributes in developing the batik SME strategy in improving Batik business performance by collaborating business management aspects.

## II. METHODS

The data used was in the form of primary data, which is the portrait of batik SME business management in Kauman Pekalongan Batik Village. The data was obtained through questionnaires and indepth interviews. Data collection was also carried out by using literature study, which was collecting data related to the research topic. The population was 24 batik artisans in Kauman Pekalongan batik village. Samples were selected using the census method or saturated samples, because all populations were taken as research data samples. This study used a descriptive exploratory method, and was developed with a theoretical or conceptual approach conducted by referring from several sources. The data was analysed using descriptive analysis technique, which was done by describing the facts of the findings and presenting them by providing comprehension and explanation.

## III. RESULTS AND DISCUSSION

The theory underlying this research is the entrepreneurship theory. The dynamic entrepreneurship theory was first coined by Schumpeter in 1934. Entrepreneurship theory states that entrepreneurship is an innovation process that results in new creation in terms of: creation of products, methods, markets, raw materials and new organizations (Schumpeter 1934). This theory emphasizes the concept of innovation, in addition to paying attention to the risks and organizing factors of production. Schumpeter also raised the profile of entrepreneurs, including: having initiative, having responsibility, and having a foresight, and entrepreneurs being able to combine the factors of production that are processed as pioneers. Robert D. Hisrich and Peter (1992) suggest that entrepreneurs

emerge from various educational backgrounds, family environments and work experience (Hisrich and Peters 1992). They are people who are familiar to change, high uncertainty, innovation and creativity to improve their and other people's welfare. Entrepreneurship theory develops into several theories, including: economic entrepreneurship theory (Schumpeter 1934), resource-based entrepreneurship theory (Drucker, 1985), psychological entrepreneurship theory (McClelland, 1961) and sociological entrepreneurship theory (Hagem 1962).

### 3.1 Analysis of Business Management of SMEs in Kauman Pekalongan Batik Village.

Batik Pekalongan is one of the most rich colors of coastal batik. As a typical of coastal batik, the decoration is usually naturalist. Pekalongan Batik is influenced by immigrants of Chinese and Dutch descent. The motifs are very free, and interesting. Although they sometimes look similar to Solo or Yogya batik, they are often modified with attractive color variations. In a piece of batik cloth, there are often up to 8 colors with a dynamic combination. The most popular and well-known motif is the *Jlamprang* batik motif.

Business management is defined as an activity to regulate everything in running a business so that the business objectives can be achieved. Business management consists of financial management, marketing management, HR management and production management. The development of SMEs in Indonesia is the responsibility of the government under the Ministry of Cooperatives and SMEs, which has several strategies. Based on the Strategic Plan of the Ministry of Cooperatives and SMEs, the policy direction in order to overcome SME problems includes: 1)improving the quality of human resources, 2)increasing access to finance and expanding financing schemes, 3)increasing the product's value-added and marketing reach, 4)strengthening business institutions, and 5)the availability of ease, certainty and business protection (Ekop, 2019). Several other institutions are responsible in developing SMEs include Bank Indonesia, which owns a policy to improve the banking intermediary function, one of which aims to help access funding for SMEs.

Based on the study result, the management of the batik business in Kauman Pekalongan batik village was very specific and distinctive. Kauman batik village is allegedly the oldest batik village in Pekalongan so that the businesses are usually hereditary businesses. Since it is the oldest batik village, the business management system is still traditional. There are still many businesses that are managed directly by the initial owners, but there are also some that are legacy continued by their children and grandchildren. Based on the financial management aspect and conditions above, it is interesting to see that most of the entrepreneurs do not

actually have an established financial management. As seen in the data, their financial managements have several obstacles, including: 1)74% of the business financial records are not well organized, 2)58% of the business finance is still mixed with personal/household finances, and 3)52% of the funding access from external parties is not well distributed. The data shows that the profit of batik entrepreneurs in Kampung Batik Kauman Pekalongan is still diverse. They earn an average monthly income of around Rp. 5,000,000.00 to above Rp. 150,000,000.00. The results of this study indicate that the batik business in the Kauman Pekalongan Batik village obtained a sufficient and advanced business turnover but there are still shortages in financial management.

**Tabel 1.** Financial profile of Kauman Pekalongan Batik entrepreneurs

Item	Description
Organized business financial records	Owning= 14 Do not own= 5
Separated business and personal bookkeeping	Separated= 11 Mot separated= 8
External Funding	There is funding= 10 No funding= 9

Source: research primary data, 2020.

Seen from the marketing management side, batik artisans in Kauman Pekalongan batik village used the name of the business owners as the brand of their batik products. It is due to the practical reason. Other results show that 87% of batik entrepreneurs produce batik with a subcontracting system, which means they produce batik and that is then bought by well-known national batik brands in Indonesia. Some of their productions are sold by labeling the names of their businesses (Rachmawati and sawitri 2015). The results of this study indicate that the production of batik in Kauman Pekalongan batik village already has a good standard and the trust from Indonesian batik entrepreneurs association. Big buyers who purchase from batik artisans in Kauman Pekalongan batik village are usually loyal buyers. Batik sales spread throughout Indonesia, such as: Solo, Yogyakarta, Kalimantan, Sulawesi and some are even marketed in Papua. The analysis shows that 74% of batik entrepreneurs already have an online promotion system, which consists of 20% by websites, and 80% by other online media. However, there are only 40% of them who actively carry out promotions and sales via online, the remaining 60% own not-properly managed websites.

**Tabel 2.** Marketing Profiles of Kauman Pekalongan Batik Entrepreneurs

Item	Description
The use of Internet as sales media	Own = 14 Do not own= 5
Branding strategy	Own = 12 Do not own= 7

Source: Research primary data, 2020.

Based on the human resource management aspect of, batik artisans in Kauman Pekalongan batik village are grouped into three elements, 1)Entrepreneurs with large capital (opening workshops, producing batik, and taking/buying batik from individual artisan(*barbaran*), 2)Batik artisans (*barbaran*) are batik craftsmen who work independently, at home, sell it to entrepreneurs with large capital, and 3)Independent entrepreneurs, are those who only sell batik (only own a batik shop). There are 37.5% entrepreneurs who open workshops, produce batik, and take/buy batik from *barbaran* artisans, 44% *barbaran* entrepreneurs (craftsmen), and 18.75% independent entrepreneurs who only sell batik (only have batik shops). There are still social gaps between batik artisans in Kauman Pekalongan. In Kauman batik village, there are several individual or group workshops. The majority of the employees are Kauman village residents themselves, and some are also residents outside Kauman village (such as the Setono area, Wiradesa area and others). Kauman Pekalongan batik village already has a batik artisans community, but it does not function well. Batik entrepreneurs in Kauman batik villages have run their businesses for an average of 5 to 60 years. On average, most of batik entrepreneurs in Kampung Batik Kauman Pekalongan are bachelors or equivalent.

**Tabel 3.** Profile of entrepreneurs in Kauman Pekalongan Batik entrepreneurs

Item	Description
Gender	Female = 4 Male= 15
Business period	Minimum = 1 Maximum = 37
Age	Minimum = 28 Maximum = 60
Educational Background	Elementary School = 0 Junio High School = 1 Senior High School = 8 Diploma/Bachelor= 10 Master/Doctoral= 0

Source: Research Primary Data, 2020

### 3.2 Analysing Batik SMEs Strategy to improve business performance.

The contribution of SMEs to the Indonesian economy is very high. However, in this 4.0 industrial revolution, there are many challenges and obstacles faced by SMEs, thus they are required to keep abreast of the times to be able to survive and develop their businesses. SMEs must have good business management aspects, related to production management aspect, marketing management aspect, financial management aspect and HR management aspect supported by technological advancements. SMEs must be able to utilize digital technology as a solution in facing the 4.0 industrial revolution, which

includes smart foundations, smart processes, and smart connectivity in all aspects of business management.

In response to this, the batik SME strategy viewed from the perspective of financial management is the availability of capital and financial reports recording using online system. One of the problems of SMEs is the capital, since it is difficult to get access to banking (Susilo 2010). Batik artisans in Kauman village do not have much access to funding from the government due to the lack of financial management in the recording of business financial statements, while one of the requirements for applying for bank credit is the documentation of business financial statements. The financial statements presented by batik artisans in the Batik Kauman village have not met the relevant accounting standards, which means they have not applied the concept of entity which require that separated business finance from personal finance. The concept of business unity (the concept of entity) shows that a business entity must be viewed as a stand-alone entity, acting on its own behalf and separate from investors, creditors and other external parties (Sari 2013). Meanwhile, external capital is a capital to develop a business (Waworuntu et al. 2017). The reason SMEs do not present standardized financial reports is because they develop the reports only for themselves (Narsa et al. 2012).

The solution for SMEs in Kauman Pekalongan batik village is for them to have knowledge about finance and to organize financial records in an organized manner. In the 4.0 industrial era, there has been a lot of help from the government or other institutions that provide access to online financial records, accounting applications in the form of software or mobile-based accounting applications. Therefore, batik artisans in Kauman batik village are facilitated in preparing and presenting the financial statements. It is expected that when the bookkeeping system is well organized, the batik artisans of Kauman Batik Village will get benefits in the form of: 1) knowing the business development to determine the steps of business funding and 2) the ease of obtaining external funding, both from the government and banks. Banking credit policies have proven to be significant towards the improvement of SMEs in Indonesia (Nisa 2016). Organized financial administration management will increase efficiency and support business competitiveness.

The strategy of batik SME in Kauman batik village based on the marketing aspect shows that batik entrepreneurs in Kauman Pekalongan batik village have not paid attention to the use of internet technology to support the business promotion system. Based on the results of this study, entrepreneurs already have the media but they have not used it consistently and well. The solution is to use internet technology as a marketing media for businesses. Internet technology will help improve business performance efficiency. The application of internet

technology will impact on the production cost savings of around 12-15%. With the marketing internet technology, the business networks will also expand. The business network is targeting investors, suppliers and consumers. The expansion of business networks will shorten the distance to the investors, consumers and suppliers thus trust and loyalty will be created. To be able to create customer's loyalty, entrepreneurs need to have an accurate strategy in marketing their products. One form of marketing strategy that is able to support food products marketing to create customer's loyalty is the use of a mix marketing strategy (Rachmawati 2011). Customer loyalty is a core goal that marketers strive for. Another benefit of customer's loyalty is that the company can maintain its business (existence). Attaining loyalty requires customer satisfaction (Rachmawati 2014). When customer loyalty and trust are formed, then there will be no effects when there are changes in patterns and methods of consumption as a result of the industrial revolution.

Based on the study results seen from human resources aspect, it shows that the majority of batik artisans in Kauman Batik Village do not understand the importance of business financial records. This is caused by factors such as education and comfort of inherited business that is considered well-established. In addition to these problems, batik artisans in Kauman batik village are not yet technologically literate. Most of them (90%) only realize the importance of information technology after being impacted by the Covid 19 pandemic in 2020. It is already too late because the 4.0 industrial revolution era has existed since 10 years ago. For these problems, the solution is to implement a training strategy and business assistance using information technology. Batik artisans should be encouraged to continue learning and increase their knowledge of technology, starting from manual financial records assistance or how to use technology-based financial records. Online business financial records can use two types of online accounting applications or cloud accounting software and desktop-based online accounting applications. There is also assistance and training on how to use the internet as a media to promote business.

The performance of batik SMEs in Kauman Pekalongan Batik Village will be enhanced if batik entrepreneurs continue to innovate to keep up with the development. This can be said that a continue innovation will find ways on how to keep being relevant and lead the competition in the 4.0 industrial revolution era.

#### IV. CONCLUSION

The conclusion of this research are: Batik entrepreneurs in Kauman Pekalongan Batik Village do not have proper business management that links them with technological advances. This affects the financial aspect, especially the access to business funding, and the still local-focused business

marketing aspect. The results of this study indicate that Batik SMEs need a strategy that can increase competitiveness in facing the 4.0 industrial revolution. The strategy carried out by Batik SMEs in Kauman batik village during the 4.0 Industrial Revolution era are by: a)utilizing technology in business management aspects including finance, marketing and human resources, b)the use of funding offered by the Government, and c)accessing credit facilities and empowerment from banks.

The limitations of this study are: 1)the population is 24 entrepreneurs, but only 19 respondents are willing to serve as a research sample, and 2) changes in the research schedule due to the Covid 19 pandemic.

#### REFERENCES

- [1] Badan Pusat Statistik, 2019, Usaha Mikro Kecil Menengah. <https://www.bps.go.id/subject/35/usaha-mikro-kecil.html>
- [2] Hisrich, R. D., and M. P. Peters. 1992. *Entrepreneurship: Starting, Developing, and Managing a New Enterprise. McGraw-Hill/Irwin.*
- [3] Hu, M.-W. 2010. SMEs and economic growth: Entrepreneurship or employment. *ICIC Express Letters* 4: 2275-2280.
- [4] Narsa, M., A. Widodo, and S. Kurnianto. 2012. Mengungkap kesiapan UMKM dalam implementasi standar akuntansi keuangan entitas tanpa akuntabilitas publik (PSAK-ETAP) untuk meningkatkan akses modal perbankan. *Majalah Ekonomi* Vol. XXII (No. 3).
- [5] Nisa, C. 2016. Analisis dampak kebijakan penyaluran kredit kepada UMKM terhadap pertumbuhan pembiayaan umkm oleh Perbankan. *DeReMa Jurnal Manajemen* Vol. 11 (No. 2).
- [6] Rachmawati, R. 2011. Peranan bauran pemasaran (marketing mix) terhadap peningkatan penjualan (sebuah kajian terhadap bisnis restoran). *Jurnal Kompetensi Teknik* vol. 2 (No. 2).
- [7] Rachmawati, R. 2014. Pengaruh kepuasan terhadap loyalitas pelanggan. *TEKNOBUGA Unnes* Vol. 1 (No. 1).
- [8] Rachmawati, R., and S. sawitri. 2015. Implementasi Strategi Branding Usaha Batik Dan Pengaruhnya Terhadap Perilaku Konsumen Dan Loyalitas Konsumen Pada UMKM Batik Pekalongan Jawa Tengah. *Teknobuga Volume 2* (No.1): 1-22.
- [9] Sari, D. P. 2013. Telisik Perlakuan Teori Entitas Usaha Mikro, Kecil dan Menengah. *Jurnal Akuntansi Multiparadigma (JAMAL)* Vol. 4 (No. 2): PP. 165-329.
- [10] Schumpeter, J. 1934. *The Theory of Economic Development. Oxford University Press* Vol. 55.
- [11] Susilo, Y. S. 2010. PERan perbankan dalam pembiayaan UMKM di provinsi DIY. *Jurnal Keuangan dan Perbankan* Vol. 14 (No. 3): PP. 467-478.
- [12] Waworuntu, M., T. O. Rotinsulu, and D. Mandej. 2017. Peran sektor perbankan dalam mengembangkan daya saing Usaha Mikro Kecil dan Menengah (UMKM) Indonesia memasuki pasar MEA tahun 2010-2015. *Jurnal Berkala Ilmiah Efisiensi* Vol. 17 (No. 1).