



Strategy for developing small and medium enterprises based on creative economy in facing industrial era 4.0 (study on SMEs in Kupang regency)

Maria C. B. Manteiro¹, Stella Sahetapy², Enos Kabu³, Maria B. Ringa⁴

^{1,2,3,4}Business Administration, State Polytechnic of Kupang, Kupang, Indonesia

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ABSTRACT

The problems in the research are lack of creativity and innovation, lack of skilled labor, lack of knowledge in product management and marketing that is still done in a conventional way not through automation and e-commerce systems, limited machines and facilities as well as capital for business development. In facing this problem, an appropriate creative economy development strategy is needed so that it can overcome these problems. With the right strategy in the creative industry, it is hoped that UMKM can compete in the 4.0 era and can increase business and regional income. The objectives of this study are 1) To identify and map the existence of culinary and handicraft business SMEs in Kupang Regency. 2) This research uses qualitative descriptive methods and formulates appropriate strategies in the field of culinary and knitting business in Kupang Regency. This study took samples in 4 (four) sub-districts in Kupang district, namely east Kupang, Central Kupang, West Amarasi and south Amarasi. Samples are selected based on unique business characteristics and have distinctiveness in cultural aspects (aspect culture). Data collection using in-depth interviews, observation and documentation techniques. The result of this research is the formation of a Technology-Based MSME Development Center and Bundling of Creative Industry products.

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Corresponding Author:

Maria C. B. Manteiro
Business Administration,
State Polytechnic of Kupang,
Jln. Adisucipto, Kota Kupang, 85258, Indonesia,
Email: chendymanteiro6@gmail.com

INTRODUCTION

The development of MSMEs in the era of revulusion 4.0 is not followed by swift handling by MSME owners and the government. There are several problems faced by MSME business owners, especially those who are passionate about culinary and crafts from the external and internal sides of the business (Al-Bakry, 2024). Internal problems of business owners are the readiness of human resources (HR) in managing the organization, the availability of machines and facilities to support the implementation of organizational activities, weak mastery of technology and marketing, low quality of entrepreneurship, the absence of financial statements / *cash-flow* bookkeeping,

investment, more innovative product processing, lack of information, lack of initial capital, and shortage of skilled labor. On the other hand, problems arise from external or from outside MSMEs, such as lack of support from outside parties, both the government and related institutions, the emergence of new competitors (Astuti et al., 2019), the same substitution products from *foreign franchises*, and the biggest is free trade in *the ASEAN Economic Community*.

Kupang Regency as an area that has adequate natural resources such as seaweed products, fresh fish, beef / pork, vegetables, raw materials for making handicrafts and so on has not been utilized optimally by the community (Tloim & Benu, 2023). Therefore, one of the things that can be done in maintaining regional economic growth is the need to optimize the creative industry as a sector that can improve its economy. In addition, Kupang Regency as one of the regencies that has diverse cultural wealth, this is what attracts tourists and investors / business people to come to Kupang Regency (Tumimomor et al., 2013). This potential can encourage the growth of the creative economy which has an impact on the high contribution of the creative economy sector to the economic growth of Kupang Regency (Sukartha & Fanggidae, 2020). The research is urgent since it identifies a range of internal and external challenges faced by MSMEs, including limitations in technology adoption, lack of support from external parties, emergence of new competitors, and impact of free trade agreements. Understanding and addressing these challenges are urgent to ensure the survival and growth of MSMEs in Kupang Regency.

The creative economy sector that the author studied in this study is the creative economy sector engaged in the culinary (food) and handicraft sectors (ikat weaving and musical instruments). These three sectors have grown rapidly in the regency in the last 5 years (Manteiro & Kabu, 2019). Currently, Kabaupaten Kupang is moving towards a trade and services district with the entry of new investors from within and outside the country (Fanggidae et al., 2020; Habaora et al., 2019). This requires the readiness of all parties, especially MSME entrepreneurs to be able to see opportunities and be able to compete. With the industrial revolution 4.0 where entrepreneurs or business people can be expected to be able to utilize digital technology as a means to increase the productivity and efficiency of the MSMEs concerned (Gavriel & Ardianti, 2023). Previous research on similar topics has likely addressed aspects of MSME development, challenges faced by MSME owners, the impact of the 4.0 era on business practices, and strategies for enhancing the competitiveness of MSMEs (Astuti et al., 2019; Manteiro & Kabu, 2019). While previous research may have examined MSMEs in general or specific industries, the current research focuses specifically on the culinary and handicraft sectors in Kupang Regency. This narrow focus allows for a deeper understanding of the challenges and opportunities unique to these sectors.

There are several MSMEs spread across Kupang regency sub-districts that provide NTT local culinary and handicrafts that are visited by many tourists both local and foreign, such as Oesao culinary which provides a variety of local specialties of East Nusa Tenggara, the famous sei meat business in southern Amarasi, one of which is the Sei Om Ba'i culinary business located in Tunbanun Village, Baumata crackers located in Taubenu sub-district, Oebelo sasando craft center and Oesao culinary center located in Central Kupang district, ikat weaving craft located in Amarasi sub-district (Kiak & Ratu, 2023). From the initial data, the author sees that there are several problems in the development of MSMEs in Kupang Regency, especially MSMEs in the selected clusters are limitations in mastering technology and still lack of application of mechanization (otomaniation) in organizations and still focuses on human labor so that there is no efficiency, lack of skilled labor, and various technical problems, such as lack of knowledge in management Application-based administrative & financial management, administration and product marketing that are still carried out in conventional ways not through automation systems and *e-commerce*, management management in storing and accessing data also still uses conventional methods, limited machinery and facilities as well as capital for business development (Manteiro, 2017; Manteiro & Kabu, 2019). External constraints also show that creative efforts are still not optimal in improving the development of MSMEs in Kupang Regency with related parties such as the

government, business actors, government, academics and other related institutions (Nugraha et al., 2022).

Looking at the problems mentioned above, the author wants to formulate a creative economy development strategy for Micro, Small and Medium Enterprises UMKM in the era of revolution 4.0 in Kupang district. According to Tjiptono (2022) strategy is an overall approach related to ideas, planning, and execution, an activity within a certain period of time. The concept of strategy are as follows. First, planning to further clarify the direction taken by the organization, in a rational way in realizing long-term goals. Second, references that are concerned with the assessment of consistency, or inconsistencies in behavior and actions, carried out by an organization.

According to Law of the Republic of Indonesia Number 18 of 2002 Development is a science and technology activity that aims to utilize proven scientific rules and theories to improve the functions, benefits, and applications of existing science and technology, or produce new technology. Development in general means patterns of growth, slow change (evolution) and gradual change.

Small businesses according to Law no. 20 of 2008 concerning micro, small and medium enterprises are productive economic enterprises that stand alone, carried out by individuals or business entities that are not subsidiaries or branches of companies that are owned, controlled, or are part, either directly or indirectly, of medium business or large business (Naradda Gamage et al., 2020).

The Industrial Revolution 4.0 is a phenomenon that interacts with cyber technology and automation technology. The concept of its use is based on the idea of automation created by technology without the need for human intervention in the process of its application. This certainly adds value to efficiency in the workplace where time management is considered important and needed by industry players (Ellitan, 2020; Lévesque & Stephan, 2020; Sunday et al., 2019).

RESEARCH METHOD

Methods used in qualitative descriptive research. This research was conducted to examine how the development of creative economy-based MSMEs in facing the 4.0 era in Kupang district. The research time starts in May 2023 until the time is adjusted to field conditions and research objects. Spread across 4 (four) clusters of Kupang Regency,

The sample in the study is MSMEs in Kupang district, in 4 (four) regional clusters with culinary and knitting fields that are well known by the community in the East Nusa Tenggara region. Samples are selected based on unique business characteristics and have distinctiveness in cultural aspects (*aspect culture*). The informants in this study came from 8 culinary and business actors and related parties.

The primary source of data is by conducting FGDs and in-depth interviews with respondents related to this study. Secondary data in this study is in the form of journal articles, books, government websites related to the research conducted.

In analyzing data, researchers use qualitative descriptive methods, which are methods that try to describe and interpret the object of research as it is (Gerring, 2017; Sari et al., 2023). The results of the report describe the state of the object or subject under study or describe systematically the facts and characteristics of the object and subject studied precisely.

Several variables are used as a benchmark for the development of creative economy-based MSMEs in facing the 4.0 era in Kupang district. First, innovation: This variable assesses the level of innovation within MSMEs, including technological innovation, product/service innovation, and process innovation, to adapt to the challenges and opportunities presented by the 4.0 era. Second, business resilience, is used to assess the resilience of MSMEs in facing challenges such as economic disruptions, technological disruptions, and market fluctuations characteristic of the 4.0

era. Third, adaptability to technological changes. That is, MSMEs need to adapt to technological changes characteristic of the 4.0 era, such as automation, digitalization, and the use of artificial intelligence, to remain competitive and relevant.

RESULTS AND DISCUSSIONS

The Potential of UMKM Creative Industry in Kupang Regency

Kupang Regency is one of the districts in East Nusa Tenggara Province which is a potential area for the growth of the creative industry. There are 5 things that underlie this city to be worthy of growing and developing the creative industry.

a. Market Potential

The market potential of the creative industry, especially the culinary and handicraft industry, has a huge opportunity and has a tendency to continue to grow following trends and consumer demand (Bire, 2023). In general, demand for the creative industry is influenced by the main factors, namely an increase in purchasing power and public desire which encourages an increase in demand for products that have high income elasticity, including creative products. With existing developments changing the tastes and desires of consumers in choosing creative products, especially culinary and handicraft products.

b. The potential of creative people.

Kupang Regency is an area with a population of 390,877 people. The younger generation is a great resource for the development of the creative economy in the future and should not only be directed at sectors with low productivity and added value, but should be directed more at sectors with high productivity and added value so that this young generation becomes more productive and competitive (Ufi et al., 2023).

c. Industrial and cultural potential as a Source of Creative Inspiration

The potential of the creative industry is still so great to be worked on by Indonesian business people, especially those in Kupang Regency (Manteiro & Kefi, 2021). One of the potential handicraft products is ikat weaving and sasando musical instruments. Ikat weaving craft is well known and included in export products to foreign countries. In the past, ikat weaving was only sold to be used as sarong fabric, now ikat weaving can be used as a variety of creative industries such as apparel, bandana accessories, key chains, bags / wallets and various other interesting products.

d. Potential Development of Information and Communication Technology.

In general, information and communication technology continues to develop so that it will have an impact on the development of the creative industry. The people of Kabupaen Kupang are now familiar with various communication media such as WhatsApp, *face book*, *twiter* and other social media. These media can be used to introduce creative businesses in the Kupang regency area to the outside world or electronic media (tv advertisements) and radio.

Aspects of Creative Economy Development of UMKM in Kupang Regency

a. Industry Aspects

In the industrial aspect, this culinary and handicraft business has a high intensity of competition. This can be seen from the 5-force analysis derived from *supplier bargaining power*, *customer bargaining power*, threats from substitute products, threats from new players, and the intensity of competition in this cluster. From pricing policy and market segmentation, this cluster already has a large ranking.

b. Technology Aspect

In the development of the creative economy, a touch of technology in production, distribution, processing to marketing is needed. In the production process, on average not many use machines as a tool to streamline their production, but in marketing products using *social media* as a promotional medium has begun to be widely used.

c. Resource Aspect (Raw Materials)

The raw materials obtained by MSME owners come from traditional markets, surrounding communities or their own gardens / peternakan (culinary businesses), while for complementary ingredients for handicrafts they buy them in stores. For human resources, most of these MSME owners create business ideas and ideas starting from the reason to maintain life and develop the business. Few have values and vision and mission for the future that are in direct contact with their development strategy. However, for its development, the creative economy development model is very appropriate to be applied in this cluster when viewed from the aspect of resources, especially human resources in creating value from a product.

d. Management

Limited knowledge and skills and lack of creativity make entrepreneurs less innovative on the products sold. This can be seen from how they manage their business on the management side, such as the absence of future business planning, the organizational system that is still familial, there is no proper direction and supervision in running the business.

There are several alternatives to the development of the creative industry of Kupang Regency from the external side, this can be explained through the various roles of supporting institutions below:

a. The Role of Media (Print, Electronic and Promotional Agencies)

Creative industry players expect a special rubric about the creative industry in print media and special coverage in electronic media that is aired regularly and periodically. This is considered very supportive in promoting the creative economy. In addition to print media (newspapers) and electronic media (TV), now with technological advances are expected to help in promoting small businesses from the community through *website media*, social media (Blog, Facebook and tweeter) (Fanggidae, 2019). Furthermore, outdoor advertising (billboards) is also important to make information attractive to the public.

b. The Role of an Agent (Travel Agency)

Travel agencies have a role in the development of the creative industry, namely in making tour packages or visiting locations to business places whose businesses are based on local wisdom, such as culinary that provides typical East Nusa Tenggara food, ikat weaving craftsmen and local musical instruments (Fanggidae, 2022). In addition, wisata travel agents also help in promoting MSMEs through *webside* or digital-based electronic media so that they can be known by people outside the East Nusa Tenggara region.

c. The Role of Financial Institutions

Financial institutions have a big role in the development of creative industry businesses in Kupang Regency. Until now, creative economy actors view financial institutions as playing a role in providing funding even though in many ways it has not been in line with their expectations (Sanga & Hajanirina, 2023). Apart from being a provider of funds for the business improvement needs of MSMEs, financial institutions can also collaborate with MSMEs by making it easier to access finance through the right technology system to make it easier for business owners.

d. The Role of Kupang Regency Government

The role of the government is very important in the development of creative industry MSMEs in Kupang Regency. Various activities have been carried out by the government to improve the performance of the creative industry, especially the culinary industry. One way that can be done is by establishing an IT-Based MSME Development Center at the district or sub-district level in the district.

e. The role of educational and training institutions

The role of educational institutions, in this case universities, can also help business actors in providing training in technology-based management (Wabang & Batilmurik, 2023).

MSME Development Strategy based on creative economy in the 4.0 era

There is a need for an IT-Based MSME Development Center at the district or sub-district level in Kupang regency because it is seen from the existing reality that most MSMEs have not been able to have their own internet network, let alone use *e-commers* technology to support their business. In fact, for business development with global market access, you must utilize virtual media. With the existence of the IT-Based MSME Development Center, it will make it easier for MSMEs to expand markets both domestically and abroad with efficient time and cost. This has an impact on the level of welfare of the MSME community and the workforce involved in it will increase, and synergistically will have a positive impact on the success of national development. Basically, MSME products in Kupang district are products that have their own peculiarities and uniqueness by having quality that is not inferior to products from outside. But these external products are often superior in technology, both in production, packaging and marketing technology. In order to win the competition in the glabal market, it is expected that small businesses in Kupang district must also develop in accordance with the times. Basically, with the help of Information and Communication Technology, it can improve performance so that it is more effective and efficient. So even though there is a slight difference in cost with traditional systems, MSMEs can enjoy facilities from IT that will provide commensurate returns, with information on technology MSMEs will be better prepared to compete not only domestically but also with foreign products (Manteiro & Kefi, 2021). We can compete in terms of quality, packaging, and speed of company operations and more importantly in marketing MSME products.

Another strategy to develop creative industry businesses in the small business sector in Kupang Regency seen from the external side (government, trevel agents and event organizers) is the *Bundling product* method (product merger) which combines several MSMEs based on local wisdom in marketing products through one technology-based sales package (e-commers). The purpose of *product bundling* is to improve scouting between subsectors of the creative industry, this is related to the strategy to get a *multiplier effect* from *bundling* itself. With the bundling of the creative economy, it will encourage the introduction of other subsectors.

CONCLUSION

From the results of the study, it can be concluded that the state of creative entrepreneurs in 4 clusters in Kupang Regency can be said to be prospective enough to be developed with technology- based creative economy development model, because when viewed from the aspect of industry, technological aspects, resource aspects, institutional aspects and institutional aspects. The finances of this cluster can be said to be quite high and have great opportunities to flower. Problems faced by 8 culinary and craft creative business owners The 4 clusters selected are quite diverse, including limitations in terms of use information technology in the management and marketing system and the lack of maximum cooperation between the government and other

related institutions, the establishment of a creative economy development strategy for culinary MSMEs in Kupang Regency with the IT-Based MSME Development Center and Bundling of Creative Industry products (combining creative industry products) by involving the government, travel agents, event organizers (EO), mass / electronic media (promotion) and educational institutions in the district Kupang.

This research contributes to the field in several ways. First, Identification of Prospective Areas for Development: By conducting a comprehensive study across four clusters in Kupang Regency, the research identifies areas with potential for development in the creative economy sector. This helps policymakers and stakeholders target resources and interventions effectively. Second, Development of Practical Solutions: The research provides practical recommendations for addressing identified challenges, such as establishing IT-based MSME development centers and fostering collaboration between government agencies, travel agents, event organizers, media, and educational institutions. These solutions offer actionable steps for enhancing the competitiveness and sustainability of creative MSMEs. Third, Promotion of Collaboration and Synergy: The research underscores the significance of cooperation and synergy between various stakeholders, including government entities, investors, MSMEs, and educational institutions. This collaborative approach is essential for driving collective progress and prosperity in the creative industry.

Based on the results of the research above, there are several suggestions that researchers can provide that might be useful, with some of these suggestions as follows. First, for MSME entrepreneurs in Kupang district, to be able to apply information technology so that it can compete in the 4.0 era. Second, for government and related institutions, in order can establish cooperation so that there is synergy for the progress and prosperity of the people of Kupang Regency, especially the creative industry of small and medium enterprises Culinary and local crafts by developing information centers and cooperation between entrepreneurs / investors and MSME actors. Third, for future research, to develop a model in this study by looking at and examining other factors and fields in the creative industry, especially for the development of small and medium enterprises by expanding the reach of respondents.

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