

## Utilization Of Artificial Intelligence In Marketing Catalog Innovation Of Jambi Souve Products

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### Abstract

In the 5.0 era, the focus is on human mindset based on technology, one of which is utilizing marketing innovation to increase economic growth in Indonesia. Development of a computer system that is capable of being run by humans in completing life tasks at the financial level of the economy, namely being able to apply an Artificial Intelligence (AI) system which is unique because it is able to work according to certain computer system programming algorithms, programming algorithms are an artificial intelligence framework for processing various types of data . AI has many benefits in various aspects of life, especially in the economic aspect in Indonesia. Economic growth in Indonesia has experienced a decline due to Covid-19, one of which is Jambi Province which has experienced a decline in economic growth. This research uses the Manual Data Analysis Procedure (MDAP) analysis technique to analyze transcription data from interviews that have been obtained directly from the field by informants who follow the purposive sampling technique. These findings use the theory of utilizing AI and business marketing innovations which make it easier for producers and consumers to obtain the right profits.

### Keywords:

Artificial Intelligence (AI), Marketing Innovation, Catalog, Jambi souvenir products

### Introduction

In the 5.0 era, the development of technological sophistication in the world is increasingly developing rapidly, making it possible for Human Resources and technology to live side by side in order to improve the welfare of life and be able to lighten the burden. In the 5.0 era, it is more effective and efficient compared to the 4.0 era because in the 4.0 era it only relies on technological capabilities. In the 5.0 era, it is a human-centered and technology-based concept that utilizes innovation from the 4.0 era. An unprecedented increase in the amount of data

heralds the era of Society 5.0. The internet, virtual entertainment, gadgets and other advancements create consistently incredible measures of information. This is a major driving factor in the development of AI.

Artificial Intelligence is the development of a computer system that is capable of carrying out and completing tasks carried out by humans as well as possible. Artificial Intelligence is unique because it is able to work according to certain computer system programming algorithms. Programming algorithms are an artificial intelligence framework for processing various types of data. With lots of data and complex algorithms, machines can work by themselves.

AI provides many benefits in various aspects of life, especially in the economic aspect. The economy is an important aspect in the survival of a country. A country can be said to be advanced if it has a high level of technology and an even economic level. However, the fact is that economic growth in Indonesia has experienced a decline due to Covid-19, one of which is that Jambi Province has experienced a decline in economic growth due to Covid-19. Based on data obtained from the Bank Indonesia Representative for Jambi Province, it shows that economic growth in Jambi City in 2019 was 4.35%. In 2020, there was a change in economic growth of -0.51%, as many as 11,000 MSMEs were affected by Covid-19. Furthermore, in 2021 economic growth in Jambi City will be 3.69%. This growth was dominated by all business categories, the highest growth was achieved by the provision of transportation and warehousing followed by the provision of food and beverage accommodation.

This is what makes the Jambi City Cooperatives and SMEs Department record data on MSMEs to obtain BPUM. In 2021 the number of MSMEs registered in Jambi City will reach 8,300. With the increase in MSMEs in Jambi City every year, marketing competitiveness is getting stronger. This requires MSME players to be able to adapt to current developments, consumer behavior currently prefers

to shop online, MSMEs themselves are one of the drivers of the economy in Indonesia. Since Indonesia experienced an economic crisis from 1997-1998, almost 80% of all types of businesses went bankrupt, only MSMEs were able to survive in any conditions. Therefore, MSME players must be creative and innovative in order to be able to compete with all their limitations and capabilities by utilizing technological advances.

The Jambi City Government provides solutions to the problems experienced by Jambi City MSMEs so far through the Digital Entrepreneur Academy training held together with the Ministry of Communication and Information. The use of digital applications has been able to maintain the existence of micro, small and medium enterprises (MSMEs) in Jambi City, Jambi Province amidst the economic downturn due to the Covid-19 virus pandemic. Through digital applications, MSMEs in the city of Jambi are able to market products, so that MSMEs are able to survive in any circumstances and conditions. Furthermore, in 2022 Jambi's economic growth will grow by 5.13%, which is still dominated by the business category, the number of MSMEs in Jambi City has now reached more than 60,000. Most of them are engaged in the culinary sector, both food and drinks.

By utilizing AI, MSME players in Jambi City can innovate products through catalogs that highlight the characteristics of Jambi which can increase quality productivity and income for MSME players in Jambi City, so that Jambi products can be known by the wider community. Therefore, in writing this paper the author took the title Using Artificial Intelligence in Innovating Catalog Design for Marketing Jambi Souvenir Products. The author conducted this research because he was curious about how Jambi MSMEs utilize technology. According to previous data, knowledge of information technology among Jambi residents is still low. In fact, if Jambi residents understand food technology, it will

be an opportunity to improve the economy, namely through the use of Artificial Intelligence, by utilizing AI, especially for MSME beginners, they can provide innovation in catalog design for product marketing which can increase product attractiveness and product selling value. This was also done to find out the differences between MSME actors who use Artificial Intelligence for catalog design innovation and MSME actors who do not utilize Artificial Intelligence in creating catalogs.

## **Methods**

The method used in writing is a qualitative descriptive approach. Data collection techniques were carried out through observation, interviews and news on the WEB. This research uses the Manual Data Analysis Procedure (MDAP) analysis technique to analyze transcription data from interviews that have been obtained directly from the field by informants who follow the purposive sampling technique (the sample will be selected based on the findings). The literature review aims to study various kinds of references and is based on the results of previous similar research in order to obtain a theoretical basis for the problems studied (Kapailu et al., 2021).

The data that has been obtained from the literature review is then analyzed using content analysis techniques. Human behavior can be studied indirectly by researcher Jayanti Armida Sari, et al. Supervision of Public Services by the Indonesian Ombudsman Representative of West Sumatra 132 by analyzing their communication through various media sourced from newspapers, textbooks, papers, pictures, advertisements, magazines, novels, as well as various other types of communication that can be analyzed. The analysis that has been carried out is used to determine the existence of certain phrases,

words, concepts, characters, topics contained in a text or series of texts (Sari, 2021).

### **Literature review**

- a) According to Drucker (2012) in Makmur and Thahier (2015), innovation is a specific tool for companies where innovation can explore or utilize changes that occur as an opportunity to run a different business. This can be presented as a discipline, learning, and practice.
- b) Innovation is a positive change in method or technology that is useful and departs from previously existing ways of doing something. Innovation itself consists of two types, namely process innovation and product innovation. The innovation process is a change that affects the way output is produced, while product innovation itself has the opposite definition, namely product innovation is a change in the actual output of either the goods or services themselves (Bateman & Snell, 2009, p. 610).
- c) According to Stuart J. Russell and Peter Norvig, Artificial Intelligence (AI) is a computer device that is able to understand its environment and can also take actions that maximize its chances of success in that environment for several purposes.
- d) Marketing is a market-driven process of strategy development that considers environmental changes and the need to offer superior customer value. The focus of marketing strategy is on organizational performance. In this case, marketing strategy connects the organization with the environment and views marketing as a function that has responsibility beyond other functions in overall business activities (Sucherly, 2004: 20).
- e) The marketing process includes four stages, namely: strategic situation analysis, marketing strategy preparation, marketing program

development, and marketing strategy implementation and control. This is in accordance with what Cravens and Piercy (2003:32) stated.

## **Results and Discussion**

The social history of Jambi states that Jambi is a trading city, this is influenced by the growth and development of the lives of the people of the Jambi area which includes the sectors of location, demographics, settlement patterns, fulfillment of life, language, kinship systems, religion and elements of development. The most popular type of trade is pepper using River transportation. Along with the development of the trading era in Jambi, it has evolved, so that the economy in Jambi has increased. Based on data from BPS Jambi Province, it is stated that the economy of Jambi province in 2019 was 4.35% dominated by Agriculture, Forestry and Fisheries which made the largest contribution to GRDP, followed by Mining and excavation. Furthermore, in 2020 there was a change in economic growth of -0.51%, as many as 11,000 MSMEs were affected by Covid-19. Furthermore, in 2021 economic growth in Jambi City will be 3.69%. This growth was dominated by all business categories, the highest growth was achieved by the provision of transportation and warehousing followed by the provision of food and beverage accommodation.

Jambi Governor Al Haris appealed to all Jambi Province MSME players to register product brands to obtain patent rights so that they have recognition from the state and intellectual property and can increase the production quality and selling value of a product. This is what makes the Jambi City Cooperatives and SMEs Department record data on MSMEs to obtain BPUM. In 2021 the number of MSMEs registered in Jambi City will reach 8,300. The Jambi Provincial Government immediately took action by distributing stimulus funds to cooperatives and MSMEs in an effort to increase the capacity of MSMEs by providing training to restore the regional economy affected by the Covid-19

pandemic. MSMEs are considered capable of supporting the economy of Jambi Province due to the Covid-19 pandemic. In general, MSMEs in the economy have a role as main actors in economic activities, providers of employment opportunities, important players in local economic development and community empowerment as well as creators of new markets and sources of innovation that contribute to the balance sheet.

MSMEs are the biggest contributors to domestic products because they are able to increase products produced domestically. Existing products will not only penetrate the national market but also domestic products can penetrate the international market. Local products are in great demand by many people. For example, typical Jambi areca palm leaf plate products, in 2021 exports of plate products will reach 67 thousand tons. It cannot be denied that the MSME sector indirectly opens up opportunities for people to get jobs. This can help the government reduce the existing unemployment rate. The capital required to open a business in the SME sector is not difficult. You could say it's easy. There are many government institutions that help provide capital funding assistance with small credit amounts. Currently, banks also provide collateral for capital loans with a small credit value. Weaknesses, which often become inhibiting factors and problems for MSMEs, are:

- 1) Human resource capabilities are still limited.
- 2) The limited product marketing area means that the majority of small industry entrepreneurs prioritize the production aspect, while marketing functions lack the ability to access them, especially in obtaining market information and market networks, as a consequence, most of them are only craftsmen.
- 3) Consumers tend not to trust the quality of small industry products.

- 4) The more MSME players increase, the stronger their marketing competitiveness becomes. This can cause MSMEs to go bankrupt every year.

This requires Jambi MSME players to be able to adapt to keep up with the times, while consumer behavior currently prefers to shop online considering the time and affordability of cheap prices compared to shopping in person. Based on the results of research conducted by Tona Aurora Lubis (2016) stated that. Most MSMEs (and their employees) have the ability to operate computers, but have little knowledge of the benefits of computers for business. This low level of knowledge/understanding regarding the importance of computers in improving business is also evident from the desire of MSMEs (who currently do not have computers) to have computers for business in the future. MSME actors' knowledge of the internet is relatively good. Only around a third, 34.88% of MSME players, do not know the internet, while the other majority, 65.12%, know and understand internet technology. However, of the total number of MSMEs who know the internet, more than half, 57.14%, have not used the internet for their business purposes and only 42.86% have used it for business. From the results of the analysis above, it can be stated that the proportion of MSMEs who know the internet is relatively large. The ability and knowledge of the types of internet use are also relatively diverse, and the use for business (for those who use the internet for business) is also relatively diverse. However, the use of the internet for business among MSMEs in Jambi City is still relatively small. This is because there is still a low understanding of the importance of the internet for business activities. Twenty-five percent of MSME players stated that they did not use the internet because they did not know the benefits of the internet and felt that the benefits of the internet did not match the costs incurred. Furthermore, although the majority of 75.00% stated that the reason for not using the internet



was because the business scope was still local, it was actually more due to a lack of understanding that local businesses could also utilize the internet to increase business activities. Related to this, there are several key factors (inhibitors and supporting potential) that determine the level of information technology utilization among MSMEs in Jambi City, namely:

- 1) Due to the low level of understanding of the benefits of information technology in business development, MSMEs in Jambi City generally do not have a section that specifically manages IT. Generally, MSMEs in Jambi City rely more on outside assistance to carry out activities related to the use of computer-based IT. Dependence on external parties will be reduced when SME owners have sufficient understanding of IT through the learning process. With a high level of technological understanding, it is hoped that MSME owners will adopt and utilize IT extensively.
- 2) The low availability of information technology investment, the results of research on MSMEs in Jambi City show that the issue of limited funds is not the main reason they do not use IT, but rather is due to doubts about the benefits of IT for business development.
- 3) Supporting Potential: The availability of human resources in terms of education is relatively good, in increasing the use of IT in MSMEs in Jambi City there is supporting potential, where the educational level of actors/owners and workers in MSMEs is relatively good. It is hoped that this relatively good level of education will make it easier for policies to introduce and apply the use of IT to MSMEs in Jambi City.
- 4) There is still low support from government institutions, the Jambi City Government already has programs and policies in developing IT for MSMEs in Jambi City. However, these programs have not been able to fully reach MSME actors in Jambi City. Apart from that, this program also

does not take place continuously within the framework of IT development for MSMEs.

There are many problems faced by MSMEs that need solutions. Marketing is one of the problems of MSMEs, namely that it is difficult to penetrate wider markets, both national and global. MSMEs need to develop strategies to expand their markets through the use of various types of technology. One potential alternative technology is artificial intelligence (AI) for marketing or artificial intelligence marketing (AIM).

Artificial Intelligence (AI) also includes modern technological tools that are programmed in such a way that they can help make work easier, especially in the business sector. AI works as a computer machine and performs tasks, such as writing, drawing, problem solving, and so on. AI tools for business are useful in simplifying human tasks when doing business, so that performance is maximized and optimal. AIM technology has been used by the financial, entertainment, health, retail and even government sectors. The use of AIM is a benchmark for MSME players to expand marketing for their products. AIM uses machine learning to reach wider customers.

The way AIM works uses computer devices and algorithms so it is different from traditional marketing methods. Giant customer data (big data) is processed repeatedly to produce niche information or market conditions. In addition, buyers' descriptions are obtained in real time as a basis for preparing sales programs. MSME players can easily and quickly respond to requests via the chatbot available in AIM. Product information is presented in its entirety, making it easier for buyers to make decisions about the products offered. Promotion costs are cheaper because data can be analyzed more effectively and creatively. Distribution of data-based promotional content reaches a wider market and

according to buyers' needs or desires. AIM is a substitute for customer service units so that operational costs are more efficient. The advantage of AI is that it supports continuous learning so that users are able to identify various current marketing issues.

MSME players continue to gain AI-based learning experiences through analyzing feedback from customers. AI technology is able to analyze customer comments or responses to MSME products. Feedback in the form of complaints, for example, can be detected via social media platforms which are currently very popular among netizens. Therefore, MSME players can immediately evaluate the quality of the products produced and then make improvements. MSME actors are needed as Human Resources who are not only good at doing business but also master technology. In order to improve digital knowledge and skills, MSME players can take part in educational forums in the form of online and offline courses. Without adequate and up to date skills, it is impossible for AIM technology to be implemented more effectively. MSME players also need to learn and be ready to follow the direction of development of digital technology including AIM. There are types of AI tools currently developing, namely:

The Jambi city government provides a solution through the use of AI by conducting Digital Entrepreneur Academy training, so that it can innovate typical Jambi City products through catalog design which can increase quality productivity and income for MSMEs in Jambi. By utilizing AI, the sales productivity of Jambi MSMEs will increase in the regional economy and be able to compete with other products in local and foreign markets. The training was designed with the training subjects most needed by Jambi MSMEs, namely creating catalogs via the Canva application in a simple, easy and cheap way. Or actors can also innovate catalogs by:

- 1) Please enter the browser application on the device you are using.
- 2) After that, search for and access the website "Pebblely.com".
- 3) Click the "Get Started" option to start editing.
- 4) Next, please log in using the email you have.
- 5) Enter a photo of the product you want to make into a catalogue.
- 6) Pebblely's AI automatically provides background recommendations like a professional advertisement.
- 7) Download the image and please share the results via your promotional media account.

MSME players can utilize and develop AI in catalog creation. Digital Communication Technology has currently created major changes in product and service marketing strategies at the global economic level. Information technology has been proven to be able to carry out marketing tasks quickly, has extraordinary reach, can carry a lot of content from writing, images and videos, is interactive and cheap. Using AI for catalog innovation can improve the marketing of Jambi MSMEs through digital tools, which will really help MSMEs because it is fast, covers a wide area, greets many people in one click and is very cheap compared to conventional marketing. Based on the data we obtained from research in 2021, it is known that as many as 72% of Jambi MSMEs have used the online conversation application (Whatsapp) to introduce their products. Meanwhile, of the 72% of partners, 38% of partners have used other social media (Instagram and Facebook) to promote products. Many MSMEs in Jambi City are now taking advantage of developments in digital technology to sell their wares. The creativity of Jambi MSME players is increasingly developing due to the development of digital technology. Now the place of business is not a major obstacle, even with the sophistication of AI they can create catalogs easily which can increase consumer appeal.

**Table 1. Difference between MSME actors who use technology and those who do not use technology**

No	MSMEs do not use technology	MSME players use technology
1	It requires costs and time to do marketing manually	Save costs and time in marketing
2	Operating hours are determined	Flexible operating hours
3	The scope of product marketing is limited	The scope of product marketing is broader and more targeted
4	Communication between sellers and consumers is not continuous	Maintain communication between sellers and consumers
5	Opportunities for collaboration between marketing are very minimal	Facilitate collaboration between marketing and sales
6	Work is still personal	Opening job opportunities
7	Fluctuation product marketing	Product marketing is maximized

From the table above you can see the differences between MSME actors who use technology and those who do not use technology. The impact of using technology in marketing is felt by Jambi city MSMEs, but not many MSMEs in Jambi have not used catalogs in marketing on social media, product photos are still simple. The following is an example of MSME actors in Jambi City who utilize AI in creating catalogs through the Figma application.

Figure 1.1 Figma application



# Figma – prototype mirror share

Figma Inc.

Figure 1.2 before



Figure 1.3 after



Based on the results of interviews that the author obtained, by utilizing AI through the Figma application, work in creating catalogs can help product marketing to be more helpful, save costs and time, of course products can easily reach the global market and are right on target, the cost of revenue will increase.

There is a need for awareness among Jambi MSME players in marketing products using catalog innovation through AI because there are many AI features that can be utilized in creating catalogs. Jambi MSME players must be able to adapt to technological advances and be able to understand and use technology, because technology will continue to develop every year. To be able to understand AI, MSMEs can learn autodidactically and take part in every

technology training organized by the local government. The government must be aware of this problem so that it can provide solutions and participate in dealing with it, because MSMEs are able to improve and support Jambi's economy.

## Conclusion

Based on the presentation of the material above, it can be concluded that Jambi MSME actors are not utilizing AI optimally. Jambi MSME players are still focused on using personal social media in marketing, product photos listed on social media are still simple, in contrast to Jambi MSME players who have utilized AI in creating catalog innovations. By utilizing AI in creating catalog innovations, it will save time and marketing costs.

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