Model of MSME Digital Marketing through for Biopharmaceutical Products

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Abstract

Sleman Regency has more than 50 traditional markets and also a variety of MSME business and there are more than 18,293 accommodation, food and beverage business sectors that are developing. Mobile-based information technology is urgently needed as a medium that supports efforts to promote and market MSME products, especially traditional culinary products, in this case processed products of Biopharmaca plants. The existence of a social restriction policy due to the COVID-19 pandemic requires the public to recognize technology as a medium of socialization towards digitalization. Thus, a mobile-based application is needed as a meeting place for sellers and buyers specifically for local Sleman products. Digital innovation has an impact on increasing the income and economy of MSME actors in Sleman Regency, Special Region of Yogyakarta.

Keywords— UMKM, Biopharmaceuticals, Innovation, Digital

I. INTRODUCTION

A. Background

The percentage of poor people in Sleman Regency in 2020 is 8.12%, an increase from 2019 of 7.41, while the target achievement for 2021 is the percentage of poor people of 7.71% (BAPPEDA Sleman, 2021). During the crisis that occurred in 1998, Micro, Small and Medium Enterprises (MSMEs) were not significantly affected and even became a pillar in maintaining national economic stability. However, during the Covid-19 pandemic, all sectors felt the turmoil, including MSME players, who felt the most impact [1]. Of course, this became a challenge during the COVID-19 pandemic which had an impact on the economic sector. One of the causes is a decrease in people's purchasing power and changes in people's spending priorities, thus forcing some Micro, Small and Medium Enterprises (MSMEs) to choose to adapt in order to survive.

Sleman Regency has more than 50 traditional markets and a variety of MSME business sectors. Based on Sleman Regency MSME data for 2020, there are 18,293 accommodation, food and beverage business sectors that are developing. This number is the second largest after MSME wholesale and retail trade, repair of cars and motorcycles. Therefore, as a form of effort to optimize the promotion of MSME products in Sleman Regency during the pandemic and later after the pandemic, new innovations are needed to improve the promotion and marketing of MSME products in Sleman.

Optimizing MSMEs, including through increasing transactions in traditional markets, is the focus of Sleman Regency, according to the Sleman Regency Medium Term Development Plan (RPJMD) for 2016 – 2021, namely the Realization of a More Prosperous, Independent, Cultured Sleman Society and Integrated E-Government System Towards a Smart Regency in the year 2021. Therefore, mobile-based information technology is urgently needed as a medium that supports efforts to promote and market MSME products, especially traditional culinary, as well as an opportunity to overcome poverty. The existence of a social restriction policy due to the COVID-19 pandemic requires people to recognize technology as a medium. socialization towards digitalization.

Based on survey data and interviews with several MSMEs in Sleman, during the pandemic the introduction of culinary products had been carried out by utilizing social media, such as Instagram, Facebook, WhatsApp, but this was considered to be less integrated. Thus, a mobile-based application is needed as a meeting place for sellers and buyers specifically for local Sleman products. It is hoped that this innovation will have an impact on increasing income and the economy of MSME actors.

Therefore, this innovation is very much needed as a medium that supports innovative marketing efforts for MSME products, as well as being an effort to empower the community in creating a productive economy based on technological innovation. Moreover, social restrictions due to the COVID-19 pandemic require MSME actors and the public to switch to using technology as a medium for promoting local industrial products quickly and easily. Digital innovation has an impact on increasing the income and economy of MSME actors in Sleman Regency, Special Region of Yogyakarta.

B. Problem Formulation

Based on the description of the problem analysis, we carry out a priority analysis of the problem formulation depicted through a fishbone diagram, as shown in Figure 1.
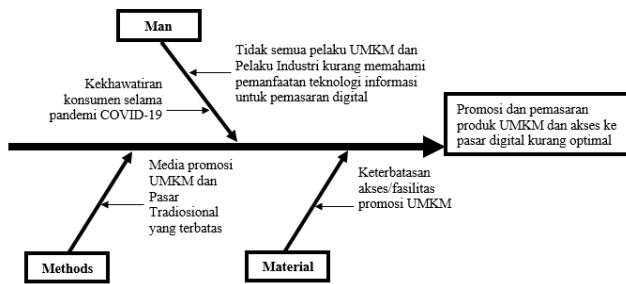
Fig. 1 Fishbone Diagram Analysis of Problem Formulation

In principle, the solution to the problem, the concept of the Research Program entitled Integrated Digital Marketing Applications for Improving MSME Product Marketing Services in the Sleman Region, Yogyakarta is implemented as an Empowerment Strategy and Digital Product Marketing based on a local based system. The flow of applied research program concepts as shown in Figure 2.
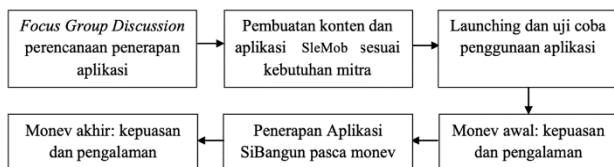

Fig. 2 Concept Flow of Applied Research Program

Applications can be an innovative solution in solving partner problems in terms of technology as well as functioning as digital marketing media specifically for local MSMEs and expanding access to consumers in the Sleman area, Yogyakarta.

C. Research Objectives

1) for Local Government

Application innovation is expected to be a solution to problems in the promotion and marketing of MSME products in Sleman Regency for long-term use to increase sustainable local economic growth.

2) For MSME Business Actors

The use of this innovation is expected to increase MSME income and product sales through the mobile platform with the convenience of digital product promotion

3) For the Community/Consumers

The application of this innovation is expected to increase consumer references and access to MSME products.

The development of appropriate technology for applications has short-, medium- and long-term impacts, including:

1) Short term impacts

Short term impacts can help introduce and promote MSME products among local communities.

2) Medium-term impact

Medium-term impact can increase the income of MSMEs and business actors, especially in Sleman, Yogyakarta.

3) Long-term impact

Long-term impact can increase the pace of the Sleman Regency economy, especially during and after the COVID-19 pandemic through digital innovation.

D. Research Limitations

This Applied Research Program will involve the Regional Government and MSME actors, especially in Sleman Regency starting from planning, implementing or implementing, to program evaluation and follow-up.

At the planning stage, researchers and partners conduct a preliminary study through a Focus Group Discussion on the need for application information technology for empowering the community's economy. This activity simultaneously maps MSME data and plans content and application features in accordance with an analysis of partner needs.

At the implementation or implementation stage of program innovation, the Team and partners jointly carry out the control function by monitoring and evaluating in the middle and at the end of implementation. Finally, at the follow-up stage of the program, researchers and partners again held an FGD meeting in order to present the results and evaluate the use of this application. In this follow-up plan, handover of appropriate technology for application products will also be carried out through minutes and cooperation agreements (MoU).

E. Research Benefits (results to be obtained after the research is carried out)

Development of appropriate technology applications, has short-, medium- and long-term impacts, including:

1) Short term impacts

Short term impacts, can help introduce and promote MSME products among local communities.

2) Medium-term impact

Medium-term impact, can increase the income of MSMEs and business actors, especially in Sleman, Yogyakarta.

3) Long-term impact

Long-term impact, can increase the economic rate of Sleman Regency, especially during and after the COVID-19 pandemic through digital innovation.

II. LITERATURE

A. review Theory review

In Indonesia, the MSME industry employs nearly 96% of the total workforce [5]. If we take a closer look at one of the areas in Yogyakarta, according to 2016 economic census data, there are at least 141 thousand MSMEs in Bantul, with a total of 128 thousand micro businesses. The MSMEs are engaged in the craft to culinary industries. By having a variety of MSMEs, especially in the creative industry sector which is superior [2][3].

It turns out that Micro, Small and Medium Enterprises (UMKM) have contributed significantly to domestic income in Yogyakarta. The Head of the Bantul MSME Office, Agus Sulistiyana said, based on BPS data for 2019, MSMEs are the

largest contributor to the Gross Regional Domestic Product (GDP) [4]. The contribution value of the MSME sector to GDPR is 15.18 percent. Followed by the agriculture, forestry and fisheries sectors, as well as accommodation and food and drink providers with respective values of 13.07 percent and 11.92 percent [5][6].

Conventionally, the marketing of MSME products mostly still relies on conventional methods such as banners or leaflets, only a handful have taken advantage of social media, such as Instagram, Facebook, WhatsApp [7]. According to several business actors in the regions, they need an integrated application that can introduce MSME products and can be accessed by local residents, so integrated solutions are mandatory. Thus, a mobile-based application is needed as a place for sellers and buyers of local MSME products to meet [8].

A paper discusses the developing UKM Handicraft Bags in Kudus district. The results of research conducted by online sales systems can help the process of marketing craft bag products by processing product orders made by members, using UML modeling designs and MySQL databases [9].

Other papers also discuss marketing strategies for MSME products through the implementation of digital marketing. The results of the study can be concluded that digital marketing has a very large influence on product marketing because it can increase sales volume and also increase profits for MSME entrepreneurs [10].

Research with the title implementation of digital marketing for MSMEs to increase product marketing and sales during the Covid-19 pandemic found that using the Google My Business application as a tool for online marketing and sales can help MSMEs so that their businesses can be found by potential customers on Google Search. and maps [11].

In another article entitled e-marketplace application for mobile-based micro, small and medium enterprises (MSMEs), it was stated that the development of e-marketplace applications as a forum for marketing MSME products using mobile can easily manage product data processed by MSME [12].

Marketing of Hoki Donut's Micro, Small and Medium Enterprises (MSMEs) products by utilizing e-commerce applications, has obtained satisfactory results. This application makes it easier for admins and buyers to carry out sales and purchase transactions for UMKM Hoki Donut's products [13].

Therefore, this innovation is very much needed as a medium that supports efforts to promote and market MSME products, as well as an effort to empower the community to create a productive economy based on technological innovation.

B. Research Road Map

This research has a road map which is divided into 3 stages, as shown in the illustration of Figure 3.
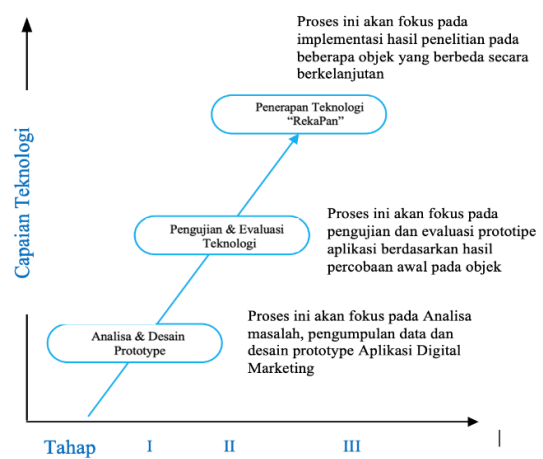

Fig. 3 Roadmap for Research on Digital Marketing Applications

III. RESEARCH METHODS

A. Types and Research Designs

The most suitable approach to assessing this research is a quantitative approach. Quantitative research is defined by Gerrish and Lacey (2010) as a broad term used to denote research designs and methods that generate numerical data. Meadows (2003) discusses two main research designs for those planning to use quantitative models. Experimental designs usually involve the introduction and manipulation of variables. The non-experimental approach uses pre-existing data collected from patients or groups of people and allows researchers to explore relationships between variables [14].

B. Location and Time of Research

The location of this research is located in Catur Tunggal Village, Depok, Sleman which will begin in June 2022.

C. Research Sample

The sample used in this study is data on processed products from MSMEs in the Catur Tunggal area, Depok, Sleman.

D. Research Instruments

The devices used for research data collection were laptops, cameras and mobile smartphones that were compatible as instruments for collecting and processing data in this study.

E. Types and Methods of Data Collection

The data collection methods used are:

1) *Observation Method*

   Observation method is a way of collecting data in which the researcher directly observes the object to be appointed as a sample in this study.

2) *Interview Method*

   The interview method is a way of collecting data by asking direct questions to MSME business actors for Biopharmaceutical products related to the problem to be studied.

3) Literary Method

The literary method is a way of collecting data by reading and studying the literature relating to the problems faced.

4) Application Model

Data that has been collected through observation and interviews will be processed according to the correct concepts in computer science. Data that has been collected through the data collection process, then the data must be processed. Data processing aims to make the data simpler, so that all data that has been collected can be arranged properly and neatly, then the data is analyzed. Editing which is also known as editing and coding (coding).

Model analysis is an analysis of system design which is presented with a use case diagram display. In general, the system business processes in the Slemob Biopharmaca marketing application will be designed using the use case diagram in Figure 4.
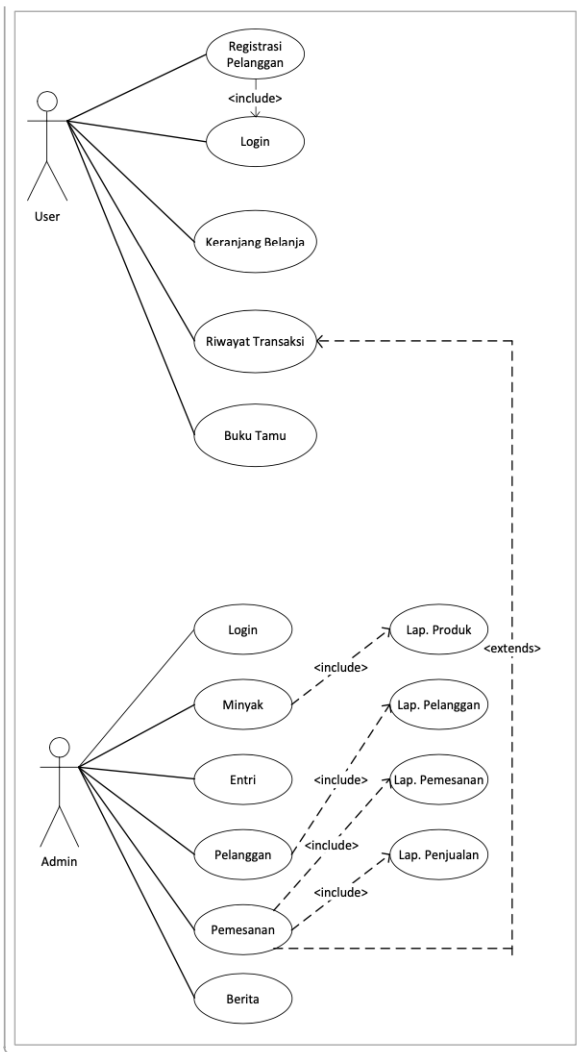
To build a marketing application, researchers build a design in developing a marketing system using Unified Modeling Language (UML)-based modeling to assist in making applications that can make it easy for customers to find information. With this website, it is hoped that it can help with marketing so that the businesses of MSME actors develop more.

IV. CONCLUSION

Mobile-based information technology is urgently needed as a medium that supports efforts to promote and market MSME products, especially traditional culinary products, in this case processed products of Biopharmaca plants, as well as an opportunity to overcome poverty. The existence of a social restriction policy due to the COVID-19 pandemic requires the public to recognize technology as a medium of socialization towards digitalization. Data from surveys and interviews to several MSMEs in Sleman, during the pandemic the introduction of culinary products had been carried out by utilizing social media, such as Instagram, Facebook, WhatsApp, but this was considered to be less integrated. This research focuses on developing mobile-based applications as a meeting place for sellers and buyers specifically for local Sleman products. This innovation has an impact on increasing the income and economy of MSME actors in Sleman Regency.

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