# Design and Build a Mobile Application 'Malaya.Id' as a Medium for Business Networks in the Development of Msme's

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## Abstract

Business networks are the most important thing in an effort to increase and expand market share and can help manage businesses to be more efficient. In expanding business networks, information technology plays an important role, especially in the use of websites and mobile applications. To help manage MSMEs, the role of BUMDES (Village-Owned Enterprises) is needed which will help in terms of promotion, sales, and also help MSMEs to complete the needs of production raw materials. This research is research and development research. The focus of this research is to design and develop a website-based information system and mobile application for MSME actors in Gedangan District, Malang Regency. This research involved 50 MSME actors engaged in the culinary field and several other fields of production. The methodology used is Perceptual Mapping Value Proposition & VRIO Analysis. Through the results of this research, it is hoped that the application of mobile applications can help MSMEs to develop their businesses and have implications for increasing product sales results. In addition, MSME actors also have skills in operating mobile applications and MALAYA.ID websites which will later continue to be developed more widely.

**Keywords:** *Mobile Applications; Business Networks; MSME Development*

## Introduction

The rapid development of information technology has an impact on marketing patterns applied by business actors. Based on cnbcindonesia.com "APJII's latest data, in 2022 internet users in Indonesia will reach around 210 million. [1] This means that there is an addition of around 35 million internet users in Indonesia". Based on this data, it can be an opportunity for business actors to develop various strategies based on information technology, one of which is by utilizing websites and mobile applications that are easily accessible to the surrounding community.

With the advancement of technology today, many people encourage to create new innovations to help in obtaining information quickly and easily. Likewise, with government agencies in order to make information services well, In addition to accurate, fast, and easy information, the information submitted must be packaged attractively. [ 3] The advancement of information technology is seen to be increasingly rapid in the development of the internet and cannot be separated from a website and also mobile

application. Digitization of sales through cellphone media is known as the stem information based on mobile applications.

Business networking is the most important and indispensable thing in order to be able to find and find various customers with the aim of building a good relationship between the two. [4] The existence of micro, small and medium enterprises (MSMEs), which are the largest part of the national economy, has so far proven that MSMEs can be relied on as security in times of crisis. To face the difficulties experienced by MSMEs, business actors build business networks to facilitate the economic turnover of their products and businesses. [5] In general, we know that businesses will be able to survive by strengthening the network in accordance with the management function of carrying out well-organized planning, organizing, action, and supervision. In addition to business networks, the existence of information technology also brings significant changes in the process of business transformation towards digitization, capital mobility and liberalization [6].

Gedangan Subdistrict, which is located in Malang regency, has 8 villages, each of which has superior products. In accordance with the government's appeal that one village, one product, then with the concept of website-based marketing and mobile applications, it will make it easier to introduce products to the general public. Given the increasingly complex business competition, increasingly mushrooming competitors, and the demand to always provide the best service quickly and comfortably, as well as to expand the marketing reach so that buyers can make transactions anywhere and anytime, it is time for MSMEs to make breakthrough marketing strategies through an online marketing system (website-based and mobile applications managed by BUMDES.

It is hoped that the use of technology and marketing development through websites and mobile applications can develop and increase the results of sales turnover so that it can have implications for improving services to buyers by providing convenience in shopping for products, product information, payments, and delivery of goods orders can be done faster without having to come directly to the store, so as to save costs.

Based on this description, the researcher conducted a study entitled DESIGN AND BUILD Mobile Applications MALAYA.ID as Business Network Media in MSME Development (Study in Gedangan district, Malang Regency).

## Methods

This research is a research and development research. The research method used is Perceptual Mapping Value Proposition & VRIO Analysis. [7]. This research is included in the development research. Perceptual mapping value proposition is a description of consumer perception of a product or company based on attributes or non-attribute. By creating a perceptual map, companies can be helped to determine the strategy of competing positions (Julio, 2015). According to Malhotra (2017), the visual representation provided by perceptual mapping shows the position of various competing products or brands. In this study, perceptual mapping will be used to analyze and find out the positioning of BUMdes with their respective MSE excellence in which quadrant position. By utilizing the Value-chain model and using a framework based on the definition of two assumptions (resource heterogeneity and immobility) a framework was developed under the name: VRIO (Value, Rarity, Imitability, Organization). This VRIO model is used to identify whether certain resources from the company can be strengths or weaknesses. In this study, VRIO analysis was carried out on BUMdesa MSMEs. The VRIO framework is structured with a number of questions regarding the company's business activities, related to values (value), rarity (scarcity), imitability (possible imitation), and organization. No. 7 All answers will determine whether a resource or capability owned by MSMEs in BUMdes Gedangan district is a strength or weakness.

The digital system development method used in this study is the waterfall method, namely: (1) System Engineering (2) Analysis (3). Design (4). Coding. (5). Testing (6). Maintenance. Here is an overview of the method:[8]
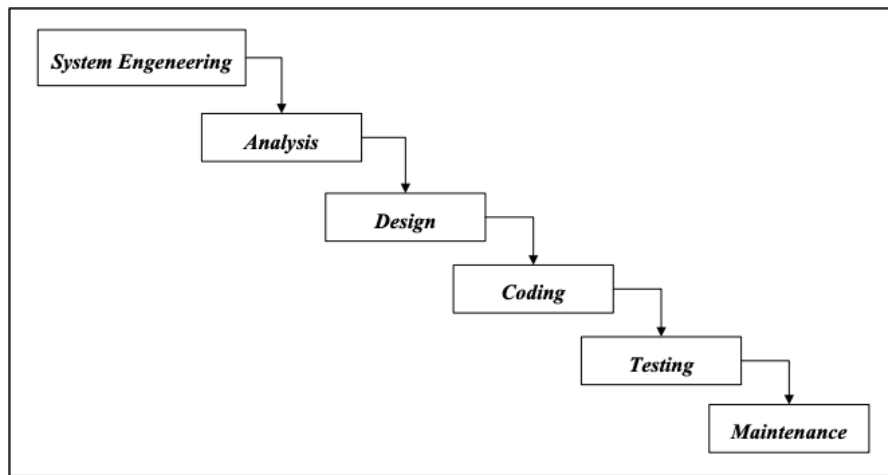


Figure 1. Waterfall method

## Results and Discussion

The research activity is carried out by conducting an FGD with the sub-district, this activity aims to find out the needs of the village and the wishes of the village in designing the website to be developed by the researcher.

From the results of the FGD conducted by the researchers, it was agreed that the BUMDes website system would be managed by admins from the community, and would manage village information such as information on the availability of MSME products and other information related to the village. Based on the existing problems, the system design can be defined using **the use case diagram** as follows:
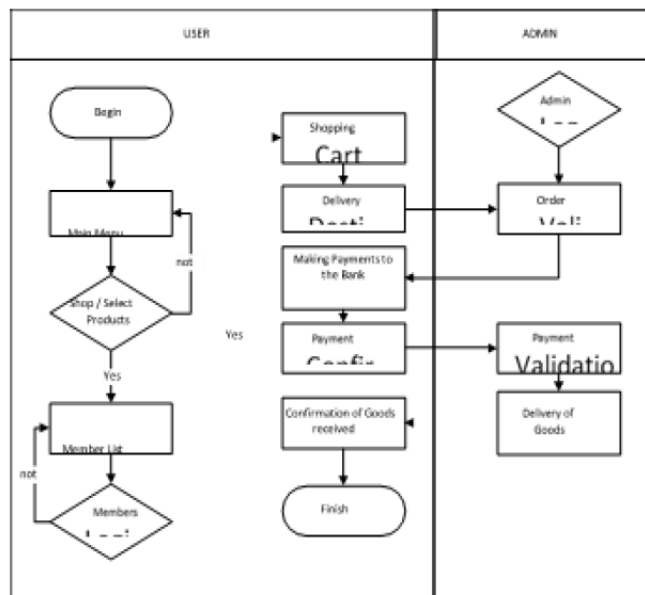


Figure 2. Use case diagrams

A use case diagram is one of many types of UML (Unified Modelling Language) diagrams that describe the relationship of interaction between a system and an actor. Use Case can describe the type of interaction between the user of the system and the system. Of course, use case diagrams are something that is easy to learn. The first step to modeling, of course, is the need for a diagram that is able to describe the actor's actions with the actions of the system itself, as found in the use case diagram.

Meanwhile, the function of the use case diagram is as follows: [8]

- Useful for showing the process of activity in order in the system.
- Able to describe business processes, even display a sequence of activities in a process.
- As a bridge between makers and consumers to describe a system.

The following is the system implementation of the website and mobile application MALAYA.ID

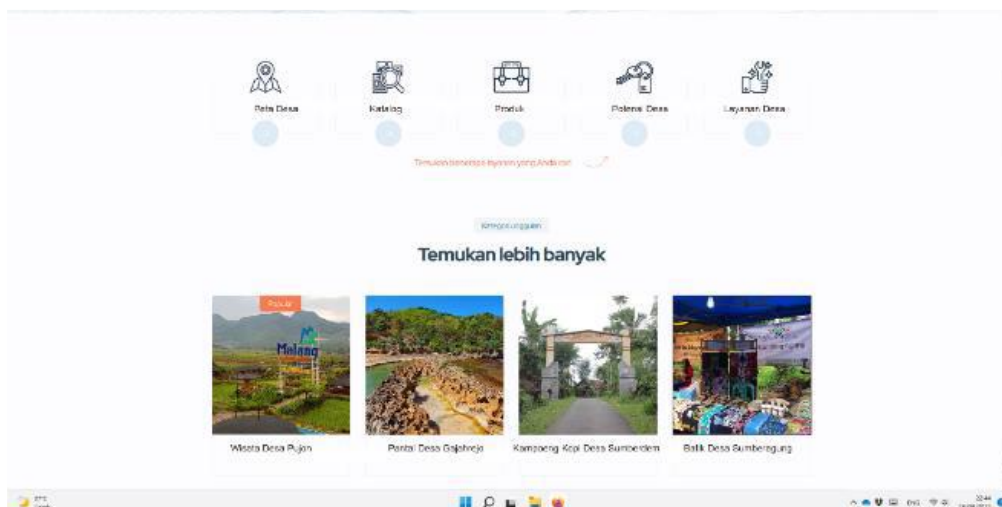

Figure 3. Home View of the website Malaya.id
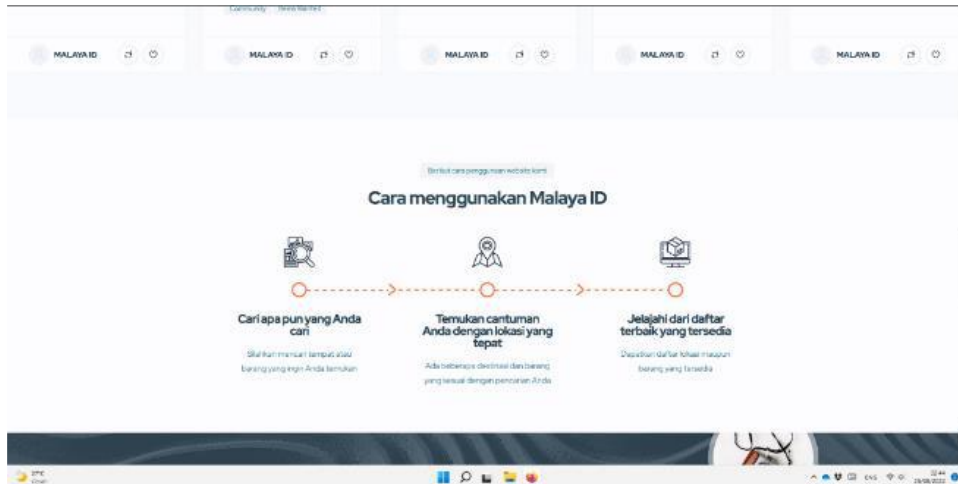


Figure 4. Menu options view

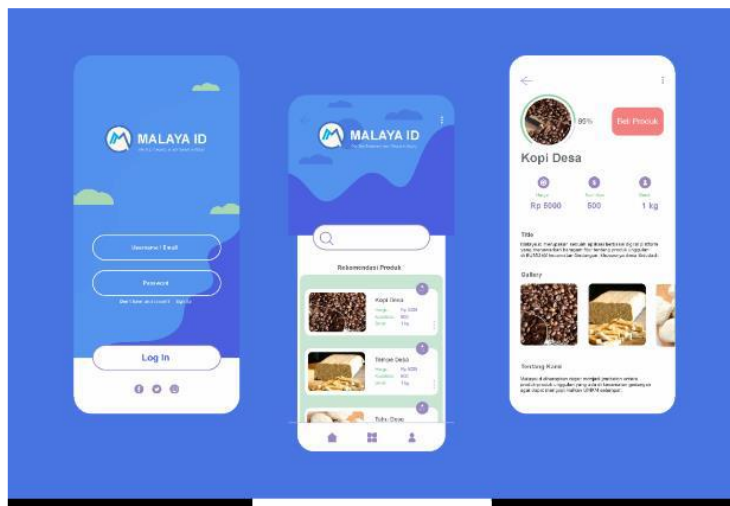Figure 5. How to view using



Figure 6. Home view



Figure 7. Display via Mobile APPS

## Conclusion

From this research, it can be concluded that by designing the website and mobile application MALAYA.ID as a strategy in increasing the market share of MSME products in Gedangan district managed by BUMDES Gedangan, it can make it easier for the general public to find out and place orders for superior products in Gedangan district, Malang Regency. It is hoped that in the future there will be more and more features that can be used in the mobile application and officially registered on the play store.

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