ELECTRONIC BUSINESS CONCEPT IN MARKETING OF VILLAGE LEADING PRODUCTS

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Abstract

In preparing to welcome the era of technology 4.0, especially preparing rural communities to be ready to accept the arrival of the era of technology 4.0, how can rural communities utilize the technology for their interests. Especially how rural communities can promote superior products produced by the community in general as well as rural communities in particular by using these technologies. In this research, it will be discussed how the application of E-Business can help marketing superior village products, and based on the mandate of law number 6 of 2014 "About the Village", article 86 "Information Systems for Rural Development and Rural Area Development". The problems faced, among others, are many villages that have not been touched by information technology, many villages that have superior products have not been touched by information technology, the potential, and superior products of the village are not fully promoted so that the potential and village products are not widely known. The purpose of the research is to provide the best solution so that the existing problems can be resolved, of course by utilizing information technology, which is a web-based application, by incorporating the concept of E-Business in the application to be made. The results of this study are the application of B2B and B2G E-Business to support the creation of E-Marketing Applications that can be used as solutions to problems that occur.

1.0 INTRODUCTION

In preparing to welcome the era of technology 4.0, especially preparing rural communities to be ready to accept the arrival of the era of technology 4.0, how can rural communities utilize the technology for their interests. Especially how rural communities can promote superior products produced by the community in general as well as rural communities in particular by using these technologies.

In this research, it will be discussed how the application of E-Business can help marketing superior village products, and based on the mandate of law number 6 of 2014 "About the Village", article 86 "Information Systems for Rural Development and Rural Area Development"[1]: Villages have the right to access information through the Village information system developed by the Regency or City Government. The Government and Regional Governments are required to develop Village information systems and development of Rural Areas. The Village information system as referred to, includes hardware and software facilities, networks, as well as human resources, as well as the Village information system as referred to, including Village data, Village Development data, Rural Areas, as well as other information related to Village Development and Area development. In rural areas, the Village information

system as referred to is managed by the Village Government and can be accessed by the Village community and all stakeholders and the Regency or City Government to provide information on District or City development planning for the Village.

We as researchers expect the support of related parties so that this research can produce the best solutions and can be used to solve existing problems. With the hope that the results of this research can contribute to the nation in the field of information system technology development.

2.0 THEORETICAL
2.1. Law on Villages
The village is a village and customary village or what is referred to by other names, hereinafter referred to as village, is a legal community unit that has territorial boundaries which are authorized to regulate and administer government affairs, the interests of the local community based on community initiative, rights of origin, and/or traditional rights. recognized and respected in the government system of the Unitary State of the Republic of Indonesia [1].

Village Administration is the implementation of government affairs and the interests of the local community in the government system of the Unitary State of the Republic of Indonesia. Village Government is the Village Head or as referred to by any other name assisted by Village officials as an element of Village Government administrators. The Village Consultative Body or what is referred to by any other name is an institution that carries out government functions whose members are representatives of the Village population-based on regional representation and are determined democratically.

Village Deliberations or what are referred to by other names are deliberations between the Village Consultative Body, the Village Government, and community elements organized by the Village Consultative Body to agree on matters of a strategic nature. Village-owned enterprises are business entities whose entire or most of the capital is owned by the Village through direct participation originating from separated Village assets in order to manage assets, services and other businesses for the maximum welfare of the Village community.

Village Regulations are statutory regulations stipulated by the Village Head after being discussed and agreed upon with the Village Consultative Body. Village Development is an effort to improve the quality of life and life for the maximum welfare of the Village community. A rural area is an area that has the main activities of agriculture, including the management of natural resources with the arrangement of the functions of the area as a place for rural settlements, government services, social services, and economic activities. Village Finance is all the rights and obligations of the Village which can be valued in money as well as everything in the form of money and goods related to the implementation of the rights and obligations of the Village.

Village Assets are items that belong to the Village originating from the original Village assets, purchased or obtained at the expense of the Village Income and Expenditure Budget or other legal rights acquisition. Village Community Empowerment is an effort to develop community independence and welfare by increasing knowledge, attitudes, skills, behavior, abilities, awareness, and utilizing resources through the establishment of policies, programs, activities, and assistance in accordance with the essence of problems and priority needs of the Village community.

Central Government, hereinafter referred to as the Government, is the President of the Republic of Indonesia who holds the governing power of the Republic of Indonesia as referred to in the 1945 Constitution of the Republic of Indonesia. Regional Government is the Regional Government and the Regional People's Representative Council which carries out government affairs according to the principle of autonomy and assistance tasks with the broadest autonomy principle in the system and principles of the Unitary State of the Republic of Indonesia as referred to in the 1945 Constitution of the Republic of Indonesia. Regional Government is the Governor, Regent, or Mayor and regional apparatuses as elements of the administering of the Regional Government. Minister is the minister who handles the Village.

2.2. Models E-Business
Parties involved in business activities that are in business organizations in terms of e-business are the same as business activities that occur conventionally. This means that business activities do not only involve business organizations (companies) and customers but involve other parties (stakeholders) of the company such as other companies, governments, and other institutions such as educational institutions as well. Based on the parties involved, there are several

categories of e-business models and terms in e-business, namely business to customer (B2C), business to business (B2B), business to government (B2G), business to education (B2E). E-business models have their own characteristics as described in table 1.

Table 1. Models Electronic Business

Type of E-Business	Category
B2C (Business to Consumer)	• Between organizations/companies and individuals • The value for the money involved is relatively smaller • One-time transactions or transactions do not occur frequently • Relatively simpler
B2B (Business to Business) B2G (Business to Government) B2E (Business to Education)	• Between organizations/institutions • The value for the money involved is greater • Strong and sustainable relationships • Providing credit by sellers to customers • More complex

3.0 METHODOLOGY

3.1. Types of research

The type of research we use is applied research (Applied Research), because the results of research can be directly used / applied to solve problems faced and the implementation of e-business design using the information systems development (ISD) method [5]. Traditional systems development life cycle (SDLC) methods provide structured and formal steps. But the method needs to be changed to adjust to the conditions of information technology and needs that are increasingly complex and require flexibility and great responsiveness. Various modern methods are available for the development of complex or desired systems quickly realized such as prototyping, joint application design, object oriented development, and component-based development. For the development of e-business in this cluster, a combination of SDLC advantages that are structured and formal:
1. In this research, it will be shown the application of E-Business in solving existing problems.
2. The results of research in the form of scientific journals and the concept of applying e-business.

3.2. Method of collecting data

Data collection methods used in this study are:
1. Observation method. Observation or direct observation of the research object. Observation technique is done by structured observation by preparing a list of data requirements and data sources.
2. Literature study method. Data collection methods obtained by studying, researching, and reading books, information from the internet, journals, theses, theses related to e-business and villages.

4.0 RESULANTS AND DISCUSSION

4.1. System Planning

System design determines how the system will meet these objectives, in this case: hardware, software, network infrastructure; user interface, forms and reports, and special programs, databases, and files that will be needed. System design is an advanced stage of system analysis [8] where the system design depicts the system that will be built before coding in a programming language. In the design of a system can't be separated from the results of the analysis. The system design in this study can be seen in Figure 1.
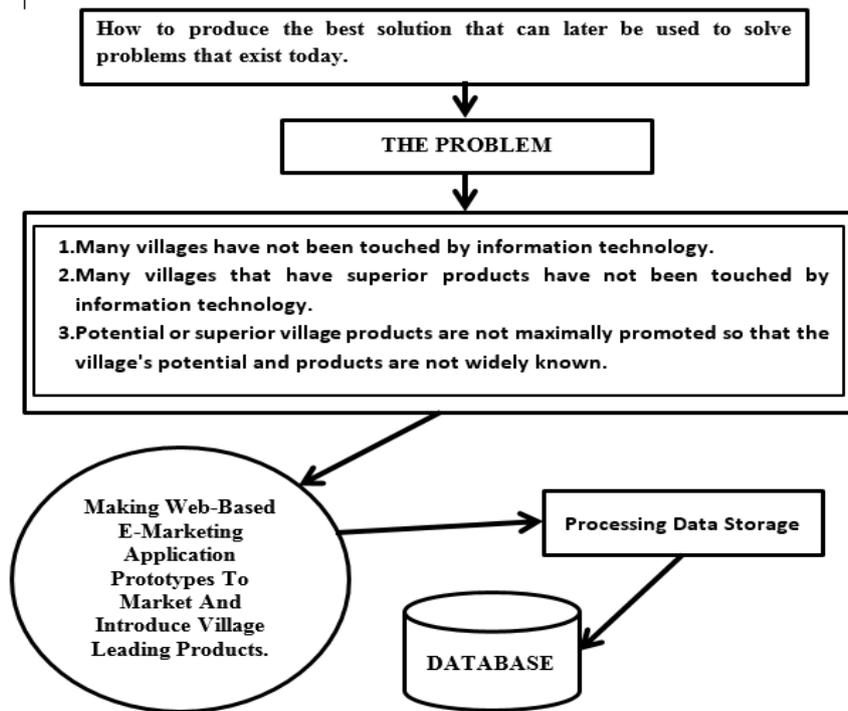
Figure 1. Research Concept

The explanation of the research concept is as follows:
1. How to find solutions to solve existing problems.
2. Collect existing problems.
3. From the existing problems, an information system is made, to process existing data to be processed into information, and stored in a database that has been prepared.

From the research concept, it can be explained as follows, with this research it is expected that the best solution for solving existing problems can be produced, in the research concept, it is clear that the purpose of solving existing problems is to make an application that can solve existing problems, by including the concept of E-Business in the application, which later the application is called E-Marketing.

4.2. Deployment Diagram

Deployment diagram [9] is a diagram that can provide an explanation of how various physical elements compile and run the system in a network that is formed. The network architecture formed is a collection of nodes in the form of hardware and software that configure runtime software components with processors and other equipment. Deployment describes the details of how components are deployed in the system infrastructure, where the components will be located (on a machine, server or PC), how the network capabilities at that location, server specifications, and other things that are physical. A node is a server, workstation, or other hardware that is used to deploy components in the actual environment. Relationships between nodes (for example TCP / IP) and requirements can also be defined in this diagram. In this information system there are components that support the running of the E-Marketing Prototype are:
1. Popojicms Web Framework, tools used to create E-Marketing Applications.
2. Xampp Web Server, used to connect databases with E-Marketing Applications.
3. Server where the database and localhost are stored, as well as the client.
4. E-Marketing can be used to help market and introduce superior village products widely.
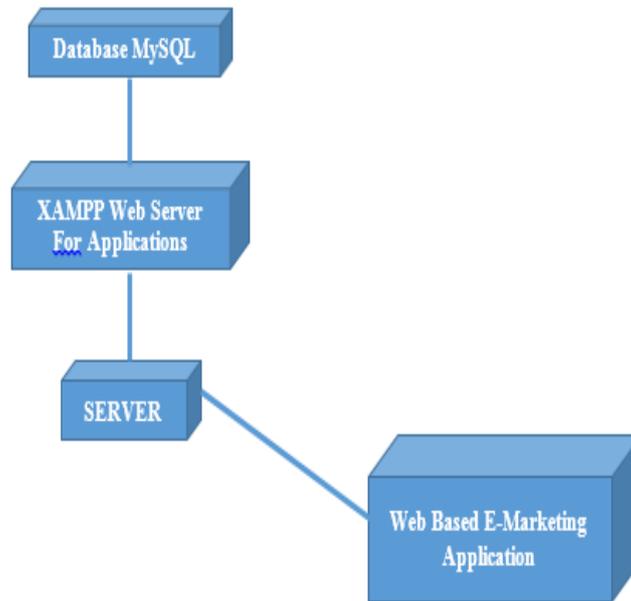
Figure 3 Deployment of E-Marketing Application Diagram

4.3. Designing Architectural Infrastructure

This stage will explain the form or design of the Web-Based E-Marketing Application, which is used to process data information on village superior products, the results of the data processing can be used to market and introduce the village's superior products widely. The research aid table used is:

Table 2. Research Aids

No	Information
1	Laptop Core I3, Windows 7
2	XAMPP As Localhost Server
3	Popojicms Web Framework

The infrastructure design of the E-Marketing Application is as follows:
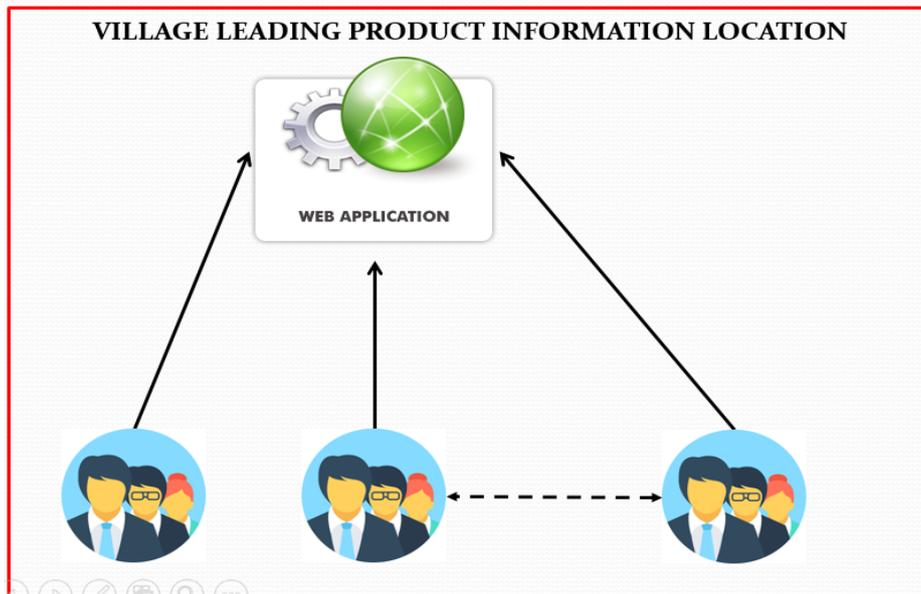
Figure 3 Application Development Concepts for the Community at Large Seeing Village Products.
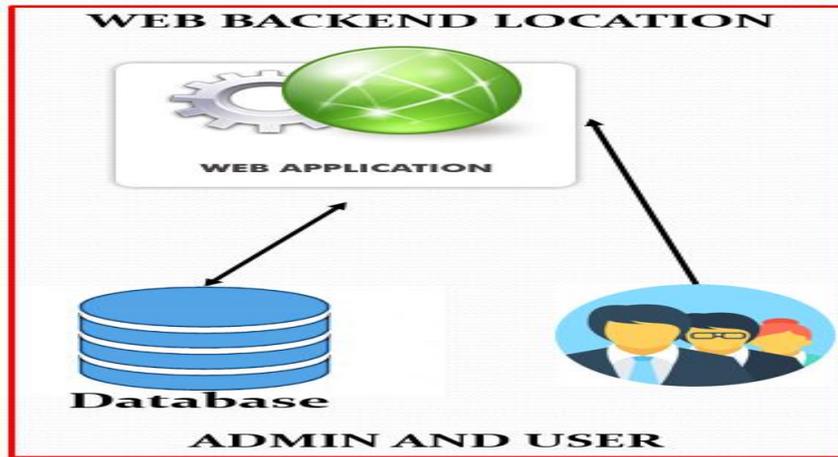
Figure 4 Application Development Concepts for Village Communities Incorporate Village Superior Products to Be Seen by the Wide Area.

Location of Information on Leading Village Products
1. In this location we can also call a frontend, this frontend contains information about the superior products of the villages, which are entered by the user through the backend.
2. In this location also information about the superior products of the village can be seen widely by people who are looking for these products.

Web Backend Location
1. At the backend location this web is managed by an administrator.
2. In this web backend location, information of superior products is entered, by the user and administrator authorities.
3. At this web backend location, the authorization of users who have the right to access the E-Marketing website is also regulated.

4.4. E-Business Implementation
   The implementation of E-Business that will be implemented is B2B (Business to Business) and B2G (Business to Government), where the private sector will collaborate with other private parties to manage marketers of the village's superior products by utilizing web-based marketing applications, and also parties private sector as an application manufacturing service provider in collaboration with the government for the application of this E-marketing application. Business to Business E-Marketing model can be seen in Figure 5, below.

Figure 5 Business to Business E-Marketing Model

   In Figure 5, it can be explained as follows, businesses or service providers providing applications, providing or making E-Marketing applications that can be used by business people who can and usually market superior village products by using web-based applications, B2B can be rent, buy out or cooperation. However, the application of B2B E-Business must be able to benefit all people, especially villages that have superior village products whose products are marketed using the web-based application. The business process of the B2B concept can be seen in the picture below:
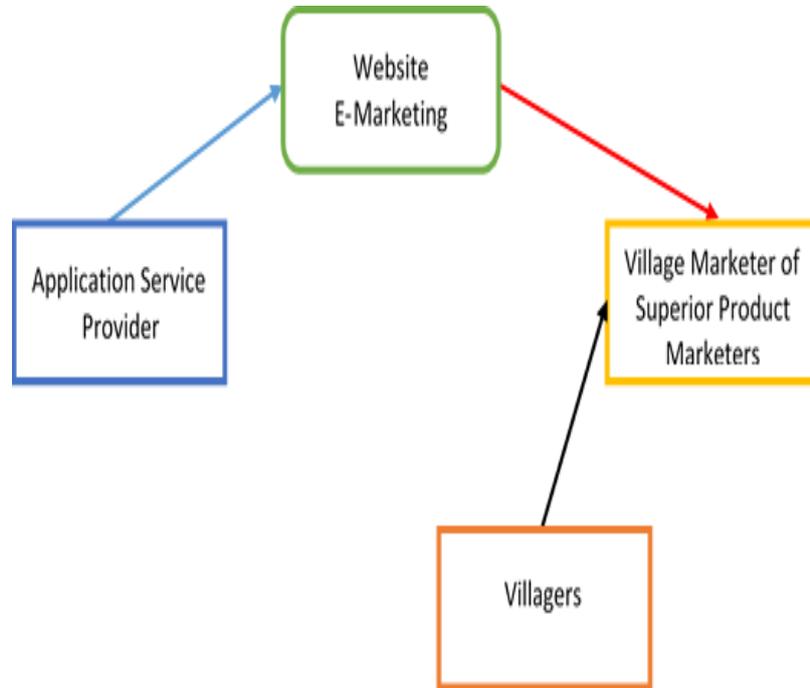
Figure 6 B2B Implementation Business Process

In the business process above, it can be explained as follows: an application manufacturing service provider makes a marketing application (E-Marketing), in collaboration with companies that work with rural communities to market their superior products, the company uses applications that have been made to market these superior products. Business to Government E-Marketing model can be seen in Figure 6, below.
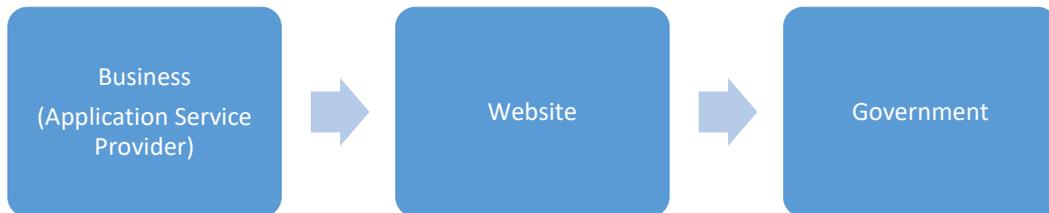
Figure 7 Business to Government E-Marketing Model

In Figure 7, it can be explained as follows, the business or service provider providing application, providing or making an E-Marketing application that can be used by the government with a leasing system or opening a tender for making the E-Marketing application. Which later the application can be used by villages who want superior products that are widely known and can also improve the village economy. The business process of the B2G concept can be seen in the picture below:
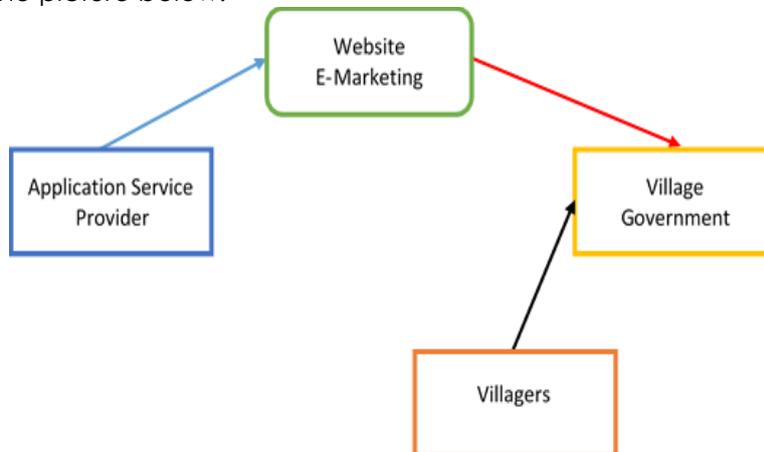
Figure 8 B2G Implementation Business Process

In the business process above, it can be explained as follows: the application making service provider makes a marketing application (E-Marketing), cooperates with the village government, and the community promotes their superior products through the local village government. Therefore, the application of E-Business (B2G) is highly recommended for making an E-Marketing application, without collaboration with the government the E-Marketing application cannot be used at national or regional scale. Both of these concepts are very good to apply as long as they can benefit the villagers who have superior products, and of course can also advance the regional economy through superior products that are widely marketed through the concept of B2B or B2G.

4.5. Interface Construction

The essence of the two concepts of B2B and B2G is online marketing, namely introducing the village's superior products online to the whole area widely, so that the village's superior products can be widely known. And in this section will explain the implementation or construction of Web-Based E-Marketing Application. To explain the results of the construction will be given information from several menu displays contained in the E-Marketing application. This interface is made based on the results of analysis and design that is made, and in making this web-based application, which is in line with the application of E-business.
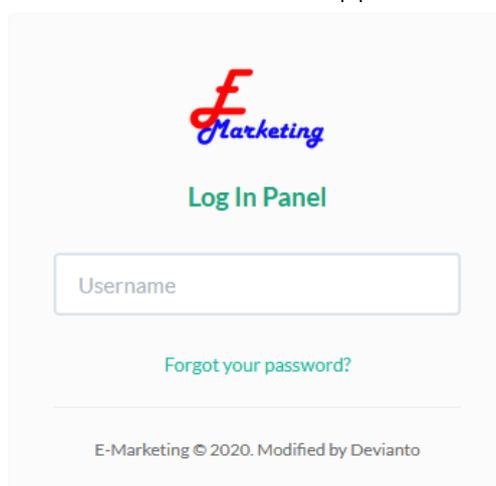
Figure 9 Login Interface Towards Backend E-Marketing.

In figure 9 shows the login menu display to go to the backend of the E-Marketing application.
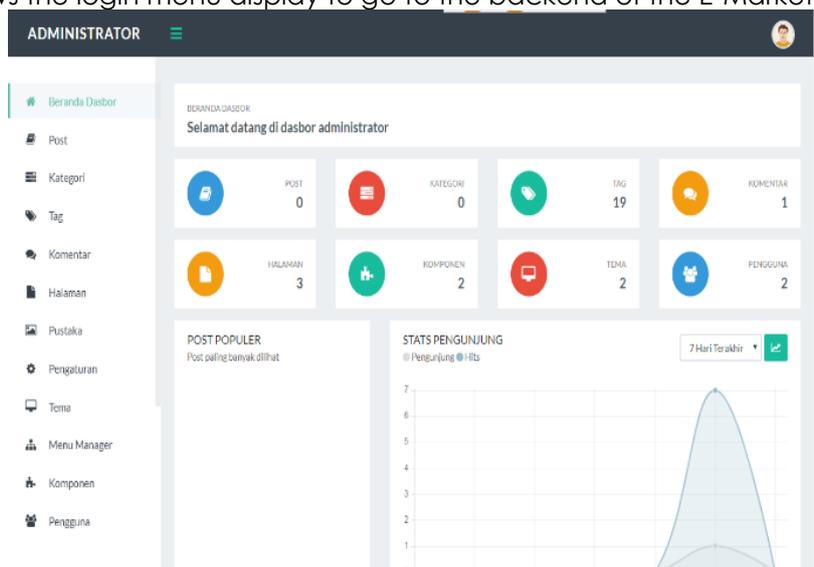
Figure 10 Home Interface Dashboard Backend E-Marketing

In Figure 10 shows the appearance of the backend dashboard of the E-Marketing application, in that dashboard information from the village's superior products is included. And also in the dashboard there are authorization settings for users who are entitled to use the E-Marketing application. The menus in the E-Marketing dashboard are as follows:

Table 3 E-Marketing Dashboard Menus

No	Information
1	Post Menu
2	Category Menu
3	Menu Tags
4	Comment Menu
5	Menu Page
6	Library Menu
7	Setting Menu
8	Theme Menu
9	Menu Manager
10	Component Menu
11	User Menu
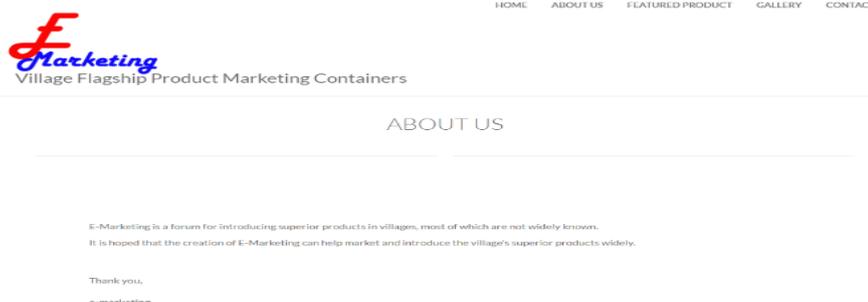
Figure 11 Front End E-Marketing Interface

In Figure 11 shows the front end of the E-Marketing application, where information about the village's superior products will be displayed. The interface that we submit is a description of the application made, and this research may be further developed with the concept we propose or with other better concepts.

5.0 CONCLUSION
5.1. Conclusion
Based on the discussion of the results of the research discussed in the previous chapter, in the study of Application Of E-Business In Village Governance (Study of the Marketing of Village Leading Products) conclusions and suggestions can be drawn as follows: Based on the discussion of the research results that have been discussed in the previous chapter, then in this research, E-BUSINESS Application in Village Government (Study of Marketing of Village Leading Products) can be drawn the following conclusions and suggestions: E-Marketing application can be made referring to the concept of implementing E- B2B and B2G businesses and this application are here to make it easier for rural communities to market and introduce their village's superior products widely. By using this E-Marketing application, the superior products of the village will be widely known by the community. The results of this study are the application of B2B and B2G E-Business to support the creation of E-Marketing applications that can be used as solutions to problems that occur and the resulting data will be information data about superior village products.

5.2. Suggestion
The advice that we can convey is that this application can be made by involving business people and the government by utilizing renewable technologies in the field of information technology.

constructive criticism and suggestions so the authors expect to be better. Hopefully this report can provide benefits to readers. thanks. SPK: 02-5/182/B-SPK/III/2020.

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