Android Based Livestock Sales Application Information System

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Abstract. The purpose of this study is to determine the role and function of the information system application in helping the sale of livestock products to farmers so that it can help improve community empowerment and economy. One of them is regarding the application of information systems, which are applications in animal husbandry. This study uses descriptive methods to collect data and describe the problems faced by the community in implementing Android-based application information systems in improving the quality of sales in the field of animal husbandry in the city. The results showed that the application became one of the media used by the community to improve the outcomes and quality of sales in the livestock sector, one of which was the Selling Cattle application. This application will undoubtedly facilitate the community in selling community livestock to increase people’s income.

1. Introduction

As a country that is in the process to become a developed country, Indonesia needs to build an economy based on Human Resources (HR) and technology-based innovation. The strategy is to reduce dependency on the exploitation of natural resources, improve the quality of human resources, and increase the number of entrepreneurs [1]. Sales transactions are one of the things that can be utilized in business decision making. Most of the sales transaction data are not used to the maximum extent possible, and only stored and only used to make a sales report without taking any approach [2]. On the contrary, there is a study that has applied a transaction cost approach to marketing livestock among farmers in South Africa, to test the effect of information, negotiation, and monitoring costs on selling animals on farms to buyers or consumers. The theoretical predictions of the economy of this transaction have been tested based on primary data collected from 230 livestock farmers on cattle farms in 13 communities in one of the cities located in Africa [3].

For some factors that are compatible with livestock marketing and besides, livestock farmer participation in the formal market is reduced. Therefore, after researching the cause, the majority of farmers prefer the informal market (56.4%) than the official market (43.6%) [4]. In research conducted in Indonesia, livestock on livestock has a high potential, especially in one of the animal which is cattle. Data from the 2011 Agricultural Census stated that cattle reached 14.8 million of population, and the majority for local species, namely Bali cattle, has the amount of 4.8 million (32.31%) [5]. Therefore, the contribution of livestock income, especially cattle to smallholder households, ranges from 15% to 26% [6]. However, the livestock industry has conducted research studies on collaborative practices affecting the income of small livestock is still rare [7]. Many previous studies have paid more attention to the types and characteristics of collaborative practices in livestock supply chains [8].
This research aims to find out the role of Android-based application information systems in helping the sale of livestock farmers so that they can also help the community’s economy, especially livestock farmers. Regarding the applications of information system that are android-based applications in the field of animal husbandry, this research uses descriptive methods in gathering data and describing problems that have been faced by the community. Therefore, this application information system will be able to improve the quality of sales in the field of animal husbandry, in this application contain programs that can facilitate the community to become an entrepreneur, at least the government can find out the economic development of its people, because entrepreneurs will be the cogs for the economy in each region, be it in districts, municipalities, provinces and for the country. The purpose of this research is to find out whether the socialization using applications that are android-based can help in promoting application programs that can facilitate livestock farmers in selling their livestock products.

2. Method
The research method used is using descriptive qualitative methods taken from the variables associated with sales information systems in improving the quality of livestock sales and by using previous studies related to this research. Thus, it can be analyzed how useful is the application of this application information system in improving the quality of livestock sales.

3. Results and Discussion
The experience of livestock farmers in raising their livestock ranges from 3 to 65 years. Most livestock farmers keep their livestock from childhood because it is a family’s work from generation to generation. Livestock farmers that have more than ten years of experience reached 96.36%. However, with low education, they can maintain their livestock well so that when their cattle are old enough, the animals will be sold to improve the economy of livestock farmers. In livestock, farmers mainly have the goal of raising cattle [9]. In general, traders have the same role by buying livestock directly from livestock farmers through the collection and transportation of animals to other districts and provinces as well as islands [10]. To attract the interest of livestock farmers in accessing the Selling Cattle application created to increase sales of livestock on farms, clear information must be provided that can be easily understood by the public about the use and services provided by the Selling Cattle application. By using a smartphone, this application can be accessed anywhere and anytime by the public (See Figure 1).

![START APPS](image1.png)

**Figure 1.** The main page of Selling Cattle

On the main page, the user must press the Start Apps button to enter the next page, the login page. This page only contain the start apps button that can be touched by the user to go to the following menu (Figure 2).
Figure 2. Selling Cattle login page

This menu (figure 2) will display a login page on this menu page when the user does not have an account to log in; then, a sign-in menu is provided so that the user can register himself to be able to log in officially Selling Cattle accounts. When in the sign-in the menu, the user is required to fill in several fields that the developer has prepared for registration, and when logging in, the user enters their username and password that they created when signing in (Figure 3).
Figure 3. The Selling Cattle Menu page

On this page, many menus will be provided, from the description of the application. This application might be said to be almost similar to applications such as online taxi service and other. It's just that this menu is available in the form of sales transactions of livestock, which on this menu page contains a list of chicken, beef, goat, catfish, and many other animals. When the user presses one of the menus, for example, the user presses the chicken menu then on this menu the seller user can list the price of his livestock, as well as the users, can buy the animal they want at the amount that has been registered by the seller in this application so that these livestock buyers can choose the seller with the price they want or affordable (See Figure 4).
Figure 4. Selling Cattle Transaction Page

On Figure 4, users can choose which animals they want to buy according to the financial capabilities of the user. And in it, there is a price statement that has been set by the seller so that the buyer does not need to be afraid anymore with the price and quality fraud because there is interest in it.

4. Conclusion
The development of information system technology will increase rapidly, so that makes the government look for solutions and ways to improve the economy in animal husbandry by utilizing the application of information system technology in the form of apps. This application can speed up the economic level of livestock farmers, one of which is a program that can facilitate the community and develop the community to become an entrepreneur. Where an increase in entrepreneurship in a country will also improve the country's economy. Socialization is one of the most effective ways because, in addition to being more comfortable and faster, it can be quickly understood by the community, and if there are people who forget or are unable to attend during direct socialization, they can find out the information through the application or website.

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