

ABSTRACT

BUILDING FLUTTER BASED MOBILE APPLICATION IN MANAWA STARTUP USING WATERFALL METHOD

By

DENDY ARMANDIAZ AZIZ

NIM: 1202162343

Indonesian Community is very consumptive. The slow increase in the value of savings is the cause of feeling lazy to save. Indonesian people are more interested in borrowing money to meet their needs ranging from education, venture capital, electronic equipment, vehicles, to residences. There are many industries that have proven profitable, one of which is the goat and sheep breeding industry. But starting a livestock business is not easy. A *platform* that can make it easier for Indonesians to invest in livestock is needed.

Based on the description above, the researcher wants to develop an investment application for livestock in this study. This research will create artifacts in the form of Livestock Investment applications for the Manawa Startup. The developed application is expected to be able to facilitate the community to invest. Flutter will be used as the Manawa application Framework because it has an excess of time speed in application development. The software development model that will be used to develop Manawa applications is Waterfall. Waterfall was chosen because of its compatibility with the conditions of the small number of development teams. The *black-box* testing method will test the suitability of the input given to the system and the expected output of several test cases.

Survey conducted by researchers provides information that the average community is only able to allocate 25% of monthly income. Manawa business design to defeat competitors is by implementing a one-time payment system up front, more affordable livestock prices, and ease of investment. Architectural design is made using use case diagrams, activity diagrams, class diagrams, sequence diagrams, deployment diagram, and entity relationship diagrams. Testing the application by the User obtained a 90% success rate in carrying out basic activities in livestock investment.

Keywords: investment, livestock, software, Flutter, Waterfall.