ABSTRACT

Mutiara Koi (MK) is a small and medium-sized enterprise (SME) engaged in trade, particularly in fisheries and freshwater fish farming, located in Cianjur Regency. MK Fish Feed Agent sells fish fry and feed to farmers in floating net cages (FNC) located in Cirata Reservoir. Currently, the recording process for farmers' fish farming activities at the FNC is still done using notebooks. There are issues in farmers' fish farming activities at the FNC, such as the MK Agent being unable to directly monitor the farming process from the initial breeding stage to the harvesting process. The MK Agent also cannot monitor farmers' debt payments, leading to frequent delays in farmers paying their debts to the MK Agent. Therefore, an integrated management information system is needed between farmers and MK Agents to monitor the farming process at the Cirata Reservoir FNC, ensuring greater transparency among all parties.

The method used in designing the management information system for monitoring is the Rapid Application Development (RAD) method. The RAD method was chosen because the design requires a short timeframe, is suitable for small-scale objects such as SMEs, and RAD is part of the Agile methodology, which allows for iterations that can adapt to frequently changing requirements. The RAD stages consist of requirement planning, which involves data collection and user needs identification; user design, which involves system design development; construction, which involves system coding development; and cutover, which involves verification testing using black-box testing and validation testing with users using User Acceptance Test (UAT).

The final project outcome is an information management system for monitoring fish farming in FNC, which assists MK Agents in monitoring farmers' fish farming activities from breeding to harvest, displays farmers' balance data, and serves as a platform for farmers' complaints. With this system, fish farming activities between farmers and MK Agents become more transparent, integrated, and easily accessible. By monitoring fish farming activities from start to harvest, MK Agents can estimate the harvest period of farmers' fish farming operations, which facilitates monitoring of debt payments.

Keywords: Fish farming, Monitoring, RAD, Management Information System