

Development of a mobile Aquaculture Management Systems for performance monitoring of aquaculture players

ABSTRACT

Towards achieving National Transformation 2050 for Malaysia's smart communities 2050 with the Fourth Industrial Revolution, Malaysia aquaculture industry has become a targeted industry for the fast-growing food industry in the digital revolution that ranked in the top 15 world producers in 2014 with an estimated 521,000 tonnes of total aquaculture production. It is aligned to the 11th Malaysia Plan under the National Agrofood Policy (NAP), 2011-2020. However, in this recent years, the aquaculture sector in Malaysia is facing serious challenges in environmental issues and managing aquaculture systems during disease outbreak and disaster. This is due to lack of timely shared information among aquaculture players. For the purpose of the study, this paper used to address a mobile web application innovation as a disruptive technology to manage aquaculture systems in order to share the useful information of aquaculture issues on the right time and to the right person. Based on Design Science Research philosophy, Generic Design Cycle applied as the research methodology to develop mobile application development. Therefore, the advantages of the innovation and the significant impact to the industry also highlighted in this paper.

Keyword: Aquaculture; Aquaculture Management Systems; Aquaculture mobile systems; Mobile application