SUMMARY

JANITA SEMBIRING MELIALA. Business Model of Aggregator Online Based on Vegetable Commodities. Supervised by MUSA HUBEIS, SITI JAHROH, and AGUS MAULANA.

Horticultural commodities continue to grow and develop as commodities that are in great demand by consumers. Vegetables are consumed more by the population in Indonesia both at low and high income levels. Development of horticultural products is still faced with various kinds of problems, including obstacles in the process of horticultural product trading. The main problem in the horticultural product trading system is the inefficiency of the distribution process of horticultural products from producers to consumers. Today, there are modern actors called aggregators who play a role in aggregating vegetable products from farmers to be distributed to consumers by utilizing information technology that is currently growing rapidly, namely the internet. Aggregators are basically collectors and intermediaries. But the concept to be developed is how an intermediary business model plays a role in creating profits for farmers, comprehensively from upstream to downstream. This can be done by packaging products and services that can be provided by aggregators based on information and communication technology using the internet.

The purpose of this study is to design an online-based aggregator business model that is implemented in vegetable commodities. Methodology This study uses a survey method by conducting in-depth structured interviews and questionnaires. Descriptive analysis is carried out using value chain analysis. Expert resource persons were selected by purposive sampling with non-probability sampling techniques, in addition farmers were selected based on quota sampling. Then this study conducted a Focus Group Discussion (FGD) to analyze the value chain in making a road map of the aggregator value chain for online vegetable commodities. In-depth interviews with experts were conducted to determine key elements and priorities using hard system methods, namely Interpretive Structural Modeling (ISM) and Analytical Network Process (ANP) analysis to create an aggregate business model based on vegetable commodities online.

The results of interviews with online farmer partner farmers to see the position of farmers in the agricultural era 4.0 using 6 elements of management namely man, material, method, machine, money, market. Processing results show that the position of the farmer partner aggregator is in the agricultural position 3.0 in the elements of money, machine, method, and man. The market and material elements of the aggregator partner farmer's position are in the agricultural position 4.0. Of the 6 management elements, only 2 management elements are already in position 4.0. This shows that online aggregator partner farmers have utilized the market using information and communication technology (ICT) as well as materials, especially materials used by farmers in the cultivation process, starting with quality seeds or organic material. The results of the Focus Group Discussion (FGD) using the value chain analysis questionnaire produce a value chain road map that shows that a series of activities carried out by online aggregators include upstream and downstream activities where farmers are not only suppliers / producers to aggregators but can be aggregate consumers in the process. The core provides input.
Strategic policy modeling techniques on the aggregator of the value chain road map using a hard system, namely Interpretive Structural Modeling (ISM) analysis by formulating the structure through the analysis of complex system elements to determine the key elements based on the processing of interviews with 6 online aggregator owners. This ISM analysis yields 5 key elements and sub-elements in the online commodity aggregator business model of vegetable commodities 1) core process; 2) Actors who play a role; 3) Services; 4) Obstacles 5) Strategic policies.

5 elements of ISM processing results from the value chain road map are used to build the Analytic Network Process (ANP) framework and are processed to obtain priority elements and formulate strategic policies using. This processing involved 7 experts consisting of academics, online aggregator experts, and the government. ANP results show that the business model of vegetable commodity-based online aggregators starts with a strategic policy which is a priority cluster in this model, namely the policy to improve internet and network infrastructure because all business activities carried out by the aggregator utilize the internet network. The priority of service clusters is e-commerce, clusters of the main actors that play a role are farmers, the core process clusters are marketing downstream products, clusters of unstructured network infrastructure. The distinctive feature of this business model for vegetable commodities is that the delivery process using a cooler will keep vegetable commodities from breaking down quickly and through online technology through applications and websites will speed up the delivery process from farmers directly to consumers. Farmers who are familiar with the internet will be able to become online aggregator partners, but for farmers who are not familiar with the internet, they can continue to be an aggregator partner but through a contact first.

Managerial implications are based on the core process and the main function of the aggregator as an intermediary for marketing agricultural products that utilize ICT, so e-commerce services are the most important service to be developed. Input providers need to be developed because the aggregator is connected to farmers so that the aggregator is able to act as an input provider for partner farmers. The aggregator acts as a collaborator of each agribusiness sub-system. There are three main actors who keep the top order, namely farmers, government, and consumers.

Theoretical implications obtained from this study are as follows: 1) Intermediaries as modern actors who use ICTs in this case online aggregators can change the agribusiness system which in theory in the agribusiness system intermediary position is on the downstream side but in this study the aggregator becomes a collaborator between upstream, cultivation (on farm), as well as downstream. 2) In the theory of value chain governance by Gereffi et al. revealed that there are several forms of value chain governance. The online aggregator value chain road map obtained in this study shows that with the help of technology the value chain governance has been integrated from the material to the end user, the level of coordination used is also high connected to each other through applications.

Keywords: Aggregator, business model, farmers, online, vegetables