Abstract

Study on Smart City Business Ecosystem in ASEAN Cities

- Proposal for Designing Value Criteria for Smart City -

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This study proposes the method to classify and design the criteria and focus areas for the planning and implementation of smart cities in ASEAN. In addition, the business ecosystem of smart cities in ASEAN was studied and proposed.

Prior to the study of the business ecosystem, a research survey of case studies that evaluated smart city criteria in the world was conducted. A literature review was also conducted on the status of smart city planning and implementation in ASEAN. Based on the previous studies and the case studies of smart cities in ASEAN, the study which is necessary for the establishment of criteria was conducted. Specifically, the typical criteria for ASEAN smart city were developed from the literature on smart cities in ASEAN. The results of the study were compared with smart city standards in other parts of the world to identify criteria that are unique to ASEAN. In addition, interview survey was conducted with administrative officials in representative cities in ASEAN. From the results of the interview survey, the criteria that are particularly important for smart city implementation were identified.

By integrating the results of the literature review and the interview survey, representative criteria for ASEAN smart cities were developed.

The relationship and weight between these criteria and priority domains for smart city development were analyzed. Two target cities were selected and the relationship between the priority domains and the criteria were analyzed using the AHP. As a result, the value criteria and priority domains in each city were evaluated. Based on the trends in each city, a business ecosystem for smart cities was studied. A representative framework, the Business Model Canvas, was used for this study. The business model canvas and ecosystem for each city were proposed by comparing the results of this study with previous studies of the application of the Business Model Canvas to smart cities.

This study discusses the contents of these smart cities at the stage of implementation from an academic perspective, and discusses which domains should be focused on for actual operation as a smart city in the future.