ABSTRACT

This research aims to complete a managing facility network data model, which is the location data in Thailand for the best location. It relies on completeness of location factors, accuracy and availability of location data. Data is exhaustively searched through publicly available sources, including private, governmental and non-governmental organizations. Location information is collected from websites of all ministries in Thailand. Completeness of location factors for a thorough site investigation is assured by supplementing the obtained web data with published information from research and business literature. The model is applied by using bottom-up and top-down approach for decision making, and developing urban planning.

The preliminary investigation identified 228 location factors that are generally applicable to any industry. Among these, 95 factors applicable to retail location analysis are identified and evaluated for relevancy through expert opinions. Factors are ranked in order of importance by means. The taxonomy of retail location factors can be used and applied into many industries. They are subsequently extracted into homogeneous groups via principal component analysis. A structural equation model of retail location factors is developed and validated by the confirmatory factor analysis. Proposed methodology can reduce an initial list of location factors to 4 significant groups of 32 retail location factors. Analysis of the 4 resultant factor groups reveals that they may be categorized into location-specific and non-location-specific retail location factors. The research findings apparently indicate that both categories of factor groups are vital to location decisions. This can explain why a retailer fails and the other succeeds even though their locations are nearby.