

Prioritizing Customer-Focused Performance Measures for Home Furniture Delivery and Assembly Service Using AHP: A Case Study of Multinational Company in Thailand

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Abstract. Nowadays, e-commerce is growing continuously. This makes a huge demand for last-mile delivery services in various business sections for delivering goods to the customer's homes. For a retail home furniture business, the last-mile delivery service for this business is specific and different from other parcels. Due to furniture is a large product, heavyweight and may require assembly services. Moreover, it is necessary to make an appointment with the customer to determine the exact date and time of service. Front desk staffs, drivers, and assembly workers have communication with customers directly in several stages of the service. Accordingly, customer dissatisfaction can occur in many service activities. This affects the business performance of the last mile service provider. Thus, the objective of this article is to identify and prioritize customer-focused performance measures of last-mile delivery and assembly service for home furniture products. First, customer-focused performance measures were obtained from literature reviews and derived from the Supply Chain Operations Reference (SCOR) model, including reliability (RL) and responsiveness (RS). These measures were then filtered for identifying the key performance indicators (KPIs) through in-depth interview with experts in the field. Next, the set of customer-focused KPIs was applied to the multinational company (MNC) in Thailand that provides home furniture delivery and assembly service. The weights were evaluated by their customers and the respondents who have sufficient experience in home furniture delivery and assembly service through the pair-wise comparison method in the AHP technique. Finally, the priority-ranking list of KPIs can be obtained. It can be used as a tool for improving service performance and customer satisfaction as well as leading to specify a business strategy. Furthermore, the MNC can apply this approach to re-evaluate the priority weight of customer-focused KPIs for other countries where the company provides service.

Keywords: Performance Measurement, Analytic Hierarchy Process (AHP), Last-mile Delivery Service, Multinational Company (MNC) Supply Chain Operations Reference (SCOR)