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Modified-Kansei engineering for the quality of logistics services during the Covid-19 pandemic: Evidence from Indonesia

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Abstract: This study modifies Kansei engineering by measuring the effect of customer emotional satisfaction from the services provided by logistics service providers on customer loyalty during the Covid-19 pandemic. Kansei engineering modification in this study uses EFA (exploratory factor analysis) analysis in the ServQual dimensions, then CFA (Confirmatory Factor Analysis) is taken to examine the relationship between variables. The object of distributing the questionnaire is 298 respondents who have experience using the services of Indonesian logistics providers. The EFA results on the ServQual dimensions show three new variables besides Kansei's words: customer satisfaction, commitment, and loyalty. The CFA findings also show that during the Covid-19 pandemic, customer commitment affects customer loyalty. In addition, customer commitment mediates customer satisfaction and customer loyalty. Lastly, customer satisfaction significantly affects customer loyalty.

Subjects: Operations Research; Logistics; Supply Chain Management

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PUBLIC INTEREST STATEMENT

The discrepancy and distortion of logistics service variables often arise from the voice of consumers in actual conditions. This shows that the freedom of consumers to express their perceptions of the variables needed in Kansei mapping is one of the causes of the discrepancy. This article proposes a modification of Kansei Engineering by combining EFA (Exploration Factor Analysis) and ServQual (Service Quality) to refine Kansei words by classifying Kansei words to find out more clearly and detail customer needs for the quality of logistics services taking into account the Covid-19 pandemic situation. Then CFA (Confirmatory Factor Analysis) is taken to examine the relationship between variables. The modified Kansei engineering used in this study improves the traditional Kansei engineering in terms of the relevance of attributes that arise from emotional customer preferences. The combined use of Kansei word, ServQual, EFA, and CFA has reduced the ambiguity of the results that arise when using traditional Kansei engineering.