Combining or Separating Forward and Reverse Logistics

Purpose – While forward logistics handles and manages the flow of goods downstream in the supply chain from suppliers to customers, reverse logistics (RL) manages the flow of returned goods upstream. A firm can combine reverse logistics with forward logistics, keep the flows separated, or choose a position between the two extremes. The purpose of this paper is to identify the contextual factors that determine the most advantageous position, which the paper refers to as the most advantageous degree of combination.

Design/methodology/approach – The paper first develops a scale ranging from 0% combination to 100% combination (i.e. full separation). Second, using contingency theory the paper identifies the contextual factors described in RL-literature that determine the most advantageous degree of combination. The set of factors is subsequently tested using a case study, which applies a triangulation approach that combines a qualitative and a quantitative method.

Findings – Results show six distinct contextual factors that determine the most advantageous degree of combination. Examples of factors are technical product complexity, product portfolio variation, and the loss of product value over time.

Practical implications – For practitioners the scale of possible positions and set of contextual factors constitute a decision making framework. Using the framework practitioners can determine the most advantageous position of the scale for their firm.

Originality/value – Much RL-research addresses intra-RL issues while the relationship between forward and reverse logistics is under-researched. This paper contributes to RL-theory by identifying the contextual factors that determine the most advantageous relationship between forward and reverse logistics, and proposes a novel decision making framework for practitioners.

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