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Identifying the Influential Factors in Applying the Just-in-Time Delivery Method to the Material Supply Chain in Sri Lankan Apparel Companies

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Abstract - Most apparel companies are facing inventory problems when storing raw materials and finished goods every year. Just in Time (JIT) delivery method can be an efficient solution for these problems asthis method attempts to minimize the inventory level. Although apparel manufacturing companies were attempting to implement JIT delivery method, most of them were unable to sustain it. This paper focuses on giving suggestions to implement JIT method in apparel manufacturing companies. Necessary data was gathered from past studies and interviews with industry experts. Barriers to implementing JIT method and components of JIT method were identified. Thereafter, the most significant barriers and JIT-related components were identified using two separate AHP models. Then, a multiple regression analysis was conducted to identify therelationship between the most significant components of JIT and the significant barriers to JIT. Then, recommendations and implications are discussed for guiding companies to implement JIT method by highlighting significant barriers for each JIT-related component.

Keywords - apparel manufacturing companies, implementation barriers, Just in Time method, material supply chain