

### **A Study on Operational Excellence: Sustainable Supply Chains of Manufacturing Industries during Covid-19 Pandemic**

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This paper presents an investigation on operational excellence (OpEx) models of sustainable supply chains (SSCs) in Sri Lankan manufacturing organizations during the Covid-19 pandemic. The investigation was executed with the assistance from multiple case studies (namely, 5 cases) in the following manufacturing industries: manufacture of clothing, manufacture of furniture, manufacture rubber and plastic products, manufacture of electrical equipment, and manufacture of paper and paper products. In accordance with an extensive literature review, an accumulation of SSCs, OpEx, and associated models in different viewpoints of manufacturing organizations were identified in various literature works. This research was conducted as an exploratory case study utilizing a multi-mode research choice in which data is collected through in-depth interviews, and company website/reports. By using a deductive approach, this research derived findings based on critical success factors of an existing hypothesized model known as “sustainable OpEx model” in Sri Lankan context which was utilized by manufacturing organizations for the case studies. Thereby, the study shows which organization has the more sustainable approach in order to better manage the aforementioned sustainable OpEx model. The investigation is supported through the usage of Upper-Echelons theory, which gained an insight on the perspectives of top management during the prevailing period of Covid-19 pandemic. Accompanied by a thematic analysis, findings on critical success factors of OpEx models in SSCs of the case studies were displayed. The findings illustrate that those critical success factors affecting Sri Lankan manufacturing organizations’ were sustainable to a certain extent. However, significant deviations were encountered despite the implementation of OpEx models in their SSCs, during the outbreak of Covid-19. These findings were considered non-generalizable beyond the presented case studies. A critical challenge that was faced in the duration of this research was dealing with a lack of literature work in relevance to Covid-19 pandemic.

**Keywords:** Operational excellence, Operational excellence models, Sustainable supply chains, Manufacturing organizations, Covid-19 pandemic, Sri Lanka