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Sri Lankan Supply Chains - Lessons Learnt during Covid-19

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The Covid-19 outbreak resulted in unexpected downturns in almost every economy in the world. The impact it made seems to be persistent and many industries are still struggling to cope up with the situation. The developing economies have been affected the most due to many reasons and among them; the disruptions to the Supply chains of these nations are paramount. Sri Lanka is also not an exemption being a nation highly dependent on imports. Therefore, the purpose of this paper is to explore the lessons learnt in the process of facing the supply chain disruptions and continuous uncertainties of Sri Lankan Supply Chains during the Covid-19 pandemic. This is a viewpoint article thus the experts' opinions and experiences during Covid-19 that are published in newspapers, magazines, research journals and websites were reviewed. Further, the information collected from webinars were also highly supplemented the subsequent data analysis carried out as a content analysis exercise. All the gathered data were carefully read and reviewed many times to identify the diverse nature of impacts made by Covid-19 and the lessons learnt from managing those disruptions in the Supply Chains of different industries of Sri Lanka. The results of content analysis showed that the impact of Covid-19 on Sri Lankan economy is massive in terms of failures at last mile deliveries, integration and collaboration of supply chains, visibility of supply chains and meeting the excessive demand emerged suddenly for Fast Moving Consumer Goods due to the panic buying behavior of the consumers. Consequently, the focus on local industries was improved with agriculture and pharmaceuticals. Alternative warehouse solutions to improve last mile delivery logistics were introduced. Industries realized the importance of having a robust business continuity plan and studying the consumer behavior during the pandemic such as the shift towards e-commerce, minimalistic consumption habits, health and wellness consciousness and also adoption of new technology to allay health concerns were observed. Improving the understanding of organizations own processes by mapping the end to end supply chains beyond tier 1 suppliers and consumers was also another important lesson learnt during Covid-19 pandemic. The importance of Supply base rationalization through alternative sources of raw materials suppliers and collaborative relationships among them in solving problems of the supply chains was also clearly evident. Multimodal connectivity, expanding port, airport and rail capacities are the areas that are directly linked with logistics improvements. In overall the prime importance of improving the visibility of own supply chains through digitalization was realized by the different industries as in the new normal scenario operating via virtual environments was the only alternative which paved the path to unveiling innovative supply chains too.

Keywords: Covid-19, Supply Chain Impact, Sri Lankan Economy, New Normal

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Healthcare Supply Chains in Sri Lanka: Responsiveness and Resilience during the COVID-19 Pandemic

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COVID-19 has affected all countries and all types of organisations around the world, especially healthcare organisations. With coronavirus infections increasing exponentially from March 2020 onwards, hospitals had to respond to the demands placed upon them within a short period of time and with limited preparedness. Procurement and supply chain professionals in hospitals had to deal with high levels of uncertainty in terms of both demand and supply for a range of products, especially for personal protective equipment (PPE), ventilators, and infection control medication. In both developed and developing countries, hospitals were unable to respond quickly to COVID-19 infected patients presented to them. Even in developed economies such as Australia, many healthcare providers experienced shortages of medical supplies for handling COVID-19, including PPE, ventilators and medications. The need for building resilient and responsive healthcare supply chains has been highlighted during this pandemic and requires immediate response from researchers, practitioners and policy-makers. It has been reported that the world's largest 1000 supply chains possess most of their facilities in quarantine areas, and with the extension of the affected areas all affected countries are quarantined, further exacerbating the supply chain problems (Linton and Vakil, 2020) and have caused delays in supply of medication, PPE and other equipment (Sharma et al., 2020). Among the disruptions to supply chain practices in the face of the pandemic, lean practices have been challenged in the inventory management practices specially of PPEs and test equipment. Responses within healthcare supply chains with respect to elements of lean are already visible through redesigned pathways for flow, staff redeployment and new multi-disciplinary teams (Leiti et al., 2021) A rising concern with the supply of PPE is the substandard quality, has been reported in India with some suppliers seeking textile solutions for affordability, accessibility, reusability and scalability (India Today, 2020). Govindan et al. (2020) suggest a decision support system for demand management in healthcare supply chains, to better manage the demand during such pandemic outbreaks. The aim of our project is to examine how healthcare supply chains are being impacted by COVID-19 in Sri Lanka and their capability with respect to responsiveness and resilience. The study will address the needs for progressing the current healthcare supply chains to become 'Smart Supply Chains' based on the utilisation of digital technologies, appropriate 'business models' and supplier relationships. Specifically, this research will identify the specific opportunities for the implementation of emerging technologies (i.e., digitalisation of supply chains and use of Big Data and Data Analytics) and building the associated human resource capability. Our data collection involves interviews conducted with procurement/supply chain managers working in hospitals in Sri Lanka. Interviews are recorded and transcribed for analysis. This paper will present our preliminary analysis from these interviews and outline our future research program in this important area.

Keywords: Personal Protective Equipment (PPE), Smart Supply Chains, Big Data and Data Analytics, Business Models, Inventory Management Practices