

Technological Solutions Offered by Industry 4.0 to Improve the Productivity of Apparel Industry During Covid-19 Pandemic: A Dynamic Capabilities View

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The world has experienced a global crisis after the outbreak of COVID-19 all over the world. These disruptive changes from the pandemic have caused serious damage to the global economy. COVID-19 is the worst economic shock in recent history. The textile and apparel industry is one of the biggest industries in Sri Lanka which also plays the main role in the Sri Lankan economy while contributing to half of the country's total exports. This unexpected pandemic impacted the Sri Lankan apparel industry in different ways. However, this health pandemic was able to grab the attention of apparel firms to rethink their processes. Most of the developing countries are now adopting new technological solutions and Industry 4.0 concepts to improve the sustainability and productivity of the apparel sector. The main objective of Industry 4.0 is to convert industrial manufacturing to a digitalization process and to avoid the misuse of the potentials of the new technologies. Industry 4.0 technologies can enhance social and environmentally sustainable development. Sri Lanka also should think about adapting to the new technological solutions. Sufficient guidance on this matter is lacking in the literature. A systematic literature review was done in which research papers were published under the keywords industry 4.0, Apparel industry, COVID-19 Pandemic, Dynamic Capabilities View and Resource-based view; to find the answers to the following research question: "How do technological solutions help to increase the productivity of an apparel sector firm during a pandemic situation?". So the objective of this research is to identify the solutions Industry 4.0 offers to improve the productivity of apparel sector firms during the pandemic. This research is carried out with the lens of Dynamic Capabilities view. Opportunities and threats can be sensed and shaped by the dynamic capabilities while seizing opportunities and maintain competitiveness. Dynamic capabilities can also enable the firms to upgrade their capabilities toward high-payoff ventures. To achieve a competitive advantage firm must be able to sense and seize opportunities continuously. Most of the firms faced major issues regarding their survival amidst a pandemic than a long-term competitive advantage. Many companies got adapted to the pandemic in a short period. The reason behind this is the availability of different resources and new ways to use them. However, the availability of flexible resources and capabilities helps the firm for their survive and gain a competitive advantage. The outcome of this research is expected to be significant in different perspectives for the Sri Lankan apparel industry as they can rethink the processes they follow and also the Sri Lankan economy as the apparel industry plays a major role in the Sri Lankan economy.

Keywords: *COVID-19 Pandemic, Dynamic Capabilities View, Industry 4.0, Resource-Based View, Sri Lankan Apparel Industry*