



# **Digitalization in the logistics industry as a support to business continuity amid black swan events**

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## DECLARATION

I declare that this assignment is my own, unaided work. It is submitted in full fulfilment of the requirements for the MSc. Industrial Engineering degree. It has not been submitted before for any degree or examination in any other university.

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Signed  this day of 2022/05/11

## **ABSTRACT**

Business continuity presents itself as a challenge, especially given the global economic impact and supply chain disruptions caused by the novel Coronavirus (COVID-19), a black swan event. Digitalization refers to the implementation of digital tools that transform the current business model of an enterprise. The aim of digital tools is to provide innovative opportunities that ultimately add value to the organization. Digital tools can deliver distinct organizational advancements such as improving the information flow within an enterprise and reducing waste across the enterprise. These organizational advancements are particularly useful and even necessary in supporting business continuity amid black swan events.

This study aimed to investigate challenges and threats experienced by Company X, a multinational logistics company, as a direct result of the Coronavirus outbreak and how a lack of digitalization could hinder the ability of Company X to react rapidly in response to these changes. Additionally, relevant digital technologies and its influence on the business model and culture of company X were explored. A generic qualitative research design was used to explore this phenomenon. Data collection comprised of six semi-structured interviews, whereby the role of digitalization in the supply network of company X was explored.

The findings confirmed consistency with previous research indicating that strong leadership, process standardization and data integration, a strong supportive enterprise culture with a low Resistance to change factor, employee and partner engagement, alignment in business and IT strategies, a strong emphasis on training and skills development of employees, agile transformation management and the leveraging of internal and external technological knowledge ensure successful digital transformation within an organization. The study found that a lack of resources and a high degree of complexity in underlying processes prevent logistics service providers from experiencing digital transformation. Additionally, the study found that digital tools supported business continuity during the COVID-19 Pandemic.

**Keywords:** black swan event; disruption; logistics industry; digitalization; COVID-19 (Coronavirus); business continuity, Sub Saharan Africa (SSA)