

Everyone's Smart University

Masters in Risk Management

Graduation Project Proposal 2023

Impact of E-commerce on Supply Chain Sustainability during COVID-19 in

Saudi Arabia

تأثير التجارة الالكترونية على استدامة سلسلة التوريد خلال جائحة الكوفيد-19 في

المملكة العربية السعودية

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Abstract:

The purpose of this study project is to evaluate the influence that e-commerce has had on the sustainability of supply chain operations in Saudi Arabia during the COVID-19 epidemic. Quantitative research methods will be used in the investigation as a means of determining the degree to which the introduction of e-commerce in the nation has altered supply chain sustainability practices. The purpose of this study is to investigate this issue to give insights into the possible advantages and problems connected with the deployment of e-commerce on supply chain sustainability. These insights will then enable policymakers and organizations to make educated choices about future strategy by providing them with the information they need to make such decisions. The study will entail data collecting from a variety of sources, such as online surveys and analysis of secondary data. It is anticipated that the results will add to the current body of research on e-commerce and supply chain sustainability, with a specific emphasis on the Saudi Arabian context.

Introduction:

The worldwide supply networks have been severely affected because of the COVID-19 pandemic, which has led to substantial difficulties in sustaining supply chain sustainability. However, the pandemic also functioned as a stimulus for the fast rise of e-commerce as customers migrated away from conventional brick-and-mortar businesses and towards online platforms. This occurred because brick-and-mortar retailers were subject to limitations. This change may influence the sustainability practices of the supply chain in terms of resource efficiency, environmental impact, and social responsibility. As a

result, it is essential to investigate the effect that the widespread use of e-commerce has had on the sustainability of supply chains during the epidemic, particularly in the context of Saudi Arabia. The COVID-19 pandemic has had a significant impact on the worldwide business scene, which has led to an increased emphasis on doing business online. Although there are various benefits associated with e-commerce in terms of ease and accessibility, it is unknown how its presence would affect the continuity of the supply chain while the pandemic is in effect. The purpose of this study is to investigate this influence by using a quantitative approach in order to give evidence-based insights for the management of sustainable supply chains.

Problem Statement:

The lack of understanding regarding how the adoption of e-commerce during the COVID-19 pandemic has influenced supply chain sustainability practices in Saudi Arabia. There is a need to investigate the extent to which e-commerce has affected resource efficiency, environmental impact, and social responsibility within the supply chain context. Additionally, the challenges faced by organizations in implementing sustainable practices in the e-commerce supply chain during the pandemic have not been comprehensively examined. Moreover, the relationship between consumers' perceptions and behaviors towards e-commerce and its impact on supply chain sustainability requires further investigation.

Importance of the Study:

This research holds significant practical and theoretical implications. From a practical standpoint, the findings will provide valuable insights for policymakers and organizations in Saudi Arabia to develop strategies that enhance supply chain sustainability in the context of e-commerce. The study will contribute to the theoretical understanding of the relationship between e-commerce adoption and supply chain sustainability, specifically within the Saudi Arabian context, by filling existing research gaps.

Research Questions:

The study aims to address the following research questions:

1. To what extent has e-commerce adoption influenced supply chain sustainability practices during the COVID-19 pandemic in Saudi Arabia?
2. What are the main challenges faced by organizations in implementing sustainable practices in the e-commerce supply chain during the pandemic?
3. How do consumers' perceptions and behaviors towards e-commerce impact supply chain sustainability in Saudi Arabia?

Research Objectives:

The objectives of this research are as follows:

1. To assess the impact of e-commerce adoption on supply chain sustainability practices in Saudi Arabia during the COVID-19 pandemic.

2. To identify the key challenges faced by organizations in implementing sustainable practices in the e-commerce supply chain during the pandemic.
3. To examine the relationship between consumers' perceptions and behaviors towards e-commerce and supply chain sustainability in Saudi Arabia.

Previous study and theoretical framework:

During the literature study, we are going to investigate the current academic works on e-commerce and supply chain sustainability, as well as the influence that the COVID-19 epidemic has had on both fields. The current state of research on the sustainability of supply chains and online commerce will be investigated throughout the literature review. This presentation will focus on studies that have explored the influence that the widespread adoption of e-commerce has had on many areas of sustainability, such as carbon emissions, waste management, and social responsibility. Within the scope of this assessment, we will also investigate the difficulties and potential benefits associated with the COVID-19 pandemic in terms of the sustainability of supply chains. Smith et al. (2020) provided evidence that the widespread use of e-commerce during the pandemic has resulted in greater levels of carbon emissions as a result of increasing delivery volumes. According to Johnson (2019), e-commerce has the potential to enhance demand forecasting and inventory management, both of which may lead to a reduction in the amount of waste produced in the supply chain. It will look at important studies that research the implications of adopting e-commerce on the sustainability of supply chains, emphasizing the potential and problems that organizations confront. In addition, consumer behavior, and views regarding e-commerce, especially in respect to sustainable practices, will be investigated throughout the

literature study. This review will give an in-depth insight into the present level of knowledge in this topic and suggest areas that need more research.

Methodology & research methods:

This study will utilize a quantitative research methodology to collect and analyze data. The research will involve the distribution of online surveys to organizations involved in e-commerce operations in Saudi Arabia. Additionally, secondary data sources such as industry reports, academic journals, and government publications will be analyzed to provide supplementary insights. The survey responses and secondary data will be analyzed using appropriate statistical techniques to determine the impact of e-commerce on supply chain sustainability during the COVID-19 pandemic in Saudi Arabia.

Study tool:

This study will employ a quantitative methodology to analyze the impact of e-commerce on supply chain sustainability. Data will be collected through surveys administered to businesses across different industry sectors. The survey instrument will consist of questions related to e-commerce adoption, supply chain sustainability dimensions, and industry-specific factors. The collected data will be analyzed using appropriate statistical techniques, such as regression analysis and ANOVA.

Field of study:

This research proposal aims to investigate the impact of e-commerce on supply chain sustainability during the COVID-19 pandemic in Saudi Arabia. By using quantitative methodology and

addressing the research questions, the study seeks to provide valuable insights into the benefits, challenges, and potential solutions related to the adoption of e-commerce in the context of supply chain sustainability. The findings will contribute to the existing body of knowledge and assist policymakers and organizations in developing strategies that promote sustainable practices in the e-commerce supply chain.

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