

Chapter 3

The Effects of Implementing the Advanced Cargo Information (ACI) System on Egyptian Importers

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EXECUTIVE SUMMARY

Blockchain technology is gradually being applied to different customs clearance systems globally to improve the efficiency of trade transactions by digitizing customs clearance processes. This chapter explores the Advance Cargo Information (ACI) system—a blockchain-based system—implemented by the Egyptian Customs Authority (ECA) and provides recommendations for future improvements. A case study was applied on three regular importer companies in Egypt, H.B. Fuller, Ezz Steel, and Zamil Steel, to study specific customs clearance concepts related to time, documentation, and costs associated with the processes to draw a conclusion on the impacts of implementing the ACI on the import customs clearance procedures. Finally, the chapter concludes that the ACI system has had a positive impact on importers and customs employees. Nevertheless, importers still face several challenges with the customs clearance system. Therefore, recommendations are listed for the ECA to upgrade the customs clearance processes, and Misr Technology Services (MTS) to develop the ACI system's infrastructure.

INTRODUCTION

International Trade has always been shaped by technology; however, over the last few decades, technological advancements have rapidly transformed trade, in terms of what we trade, how we trade, and who is trading. Digital technologies, such as Blockchain, has affected the efficiency of the importing and exporting industries globally (World Trade Organization, 2018).

Blockchain is a decentralized open-source platform that allows a secure flow of transactions between companies and individuals, established by Ben Reeves in 2011. The idea behind this came from wanting to create a secure mechanism for digital currencies from the risk of replication, which helped create the world's first cryptocurrency, "Bitcoin". The technology has many benefits, most significantly, is time and cost savings, and the secure documents flow through encryption and sharing within the network (Frankenfield, 2021).

The World Customs Organization (WCO) has initiated work to identify possible uses of blockchain for Customs procedures and other border agencies, looking to improve compliance, trade facilitation, and fraud detection. Hence, following the WCO's protocol, the Egyptian Customs Authority (ECA) in association with Misr Technology Services (MTS) adopted the idea of using blockchain-based applications in customs clearance procedures. In 2021, the ECA implemented a new system for customs clearance and pre-registration of sea shipments called the Advance Cargo Information (ACI) system that consisted of two blockchain-based applications; the "Nafeza platform" for Egyptian importers, and the "CargoX Platform" for foreign suppliers (Egyptian Customs Authority, 2022).

The importance of this research lies in spreading knowledge about the significance of efficient customs clearance procedures to the Egyptian import market, as trade is a major factor that determines the social and economic development of the country (Japan international cooperation agency, 2008). And importing in Egypt is usually considered a complex process, as perceived by foreign suppliers, due to the difficulties in customs clearance paperwork procedures, which include registration, certification, and legalization requirements for various documents (Swiss Embassy in Egypt, 2016). Additionally, due to the lengthy customs procedures and the high rate of cargo inspection by the Egyptian Customs Authority, therefore, Egyptian importers suffer from a time- and cost-consuming importing process (Awad, 2021).

This research aims to investigate the impact of implementing the ACI system in the Egyptian customs clearance procedures on Egyptian importers and the Egyptian importation market, and recommend further potential developments to the system, through achieving the following objectives:

- Determine the difference between the Egyptian customs clearance processes in the past and present
- Present different customs systems globally
- Assess the impact of implementing the ACI system on Egyptian importers

LITERATURE REVIEW

This section reviews the literature of previous studies related to international trade, import management, and importing in Egypt specifically. In addition to, an overview of customs clearance procedures in Egypt in terms of documentation required, time spent, and costs associated with the process. Moreover, the digitalization in trade, highlighting blockchain technology's basic concepts and the study of implementing it in customs clearance procedures are discussed, focusing on the ACI system.

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