

Chapter 10

Investigating the Impact of the Internet of Things on the Probability of Entry in Export Market

Saeideh Samadzad

Academic Center for Education, Culture, and Research, Iran

ABSTRACT

The integration of IoT in the export market has brought significant benefits such as improved operational efficiency, cost savings, enhanced security, and better customer satisfaction. As the technology continues to advance, we can expect further innovations and advancements in IoT applications within the export industry. On the other hand, empirical knowledge (export experience) about foreign markets is a driving force in the internationalization of companies. This research investigates the possibility of entering and growing exports, emphasizing the role of export experience for young exporters. The statistical population of the research includes all Iranian food manufacturing companies that have had exports between the years 2019 and 2022. The research data has been extracted from the statistical system of the Islamic Republic of Iran Customs Administration and the Trade Development Organization. STATA econometric software has been used for data analysis.

INTRODUCTION

The Internet of Things (IoT) has the potential to greatly impact the export market by revolutionizing supply chain management, improving efficiency, and enhancing

DOI: 10.4018/979-8-3693-0210-1.ch010

product quality and safety. Here are some key ways IoT can be applied in the export market:

1. **Supply Chain Management:** IoT devices can provide real-time tracking and monitoring of goods throughout the entire supply chain. This enables exporters to have complete visibility and control over their shipments, reducing the risk of theft, damage, or loss. IoT sensors can also monitor temperature, humidity, and other environmental factors to ensure that goods are transported under optimal conditions.
2. **Inventory Management:** IoT devices can be used to monitor inventory levels in real-time, automatically triggering reordering or restocking when certain thresholds are reached. This helps exporters avoid stock outs or excess inventory, leading to improved operational efficiency and cost savings.
3. **Quality Control:** IoT sensors can be integrated into products or packaging to monitor various quality parameters such as temperature, pressure, vibration, or even product usage data. This allows exporters to ensure that products meet quality standards throughout the export process, reducing the risk of product recalls or customer complaints (Omidi et al., 2023)
4. **Customs Compliance:** IoT devices can assist in automating customs processes by providing accurate and real-time information about shipments. This can help exporters streamline customs clearance procedures and reduce delays or penalties associated with non-compliance.
5. **Customer Experience:** IoT-enabled devices can provide exporters with valuable data on how customers use their products. This data can be used to improve product design, identify customer preferences, and offer personalized services, ultimately enhancing the overall customer experience.
6. **Remote Monitoring and Maintenance:** IoT devices can enable exporters to remotely monitor and maintain equipment or machinery located in different export markets. This can help detect and address issues proactively, reducing downtime and maintenance costs.

Overall, the adoption of IoT in the export market can lead to increased efficiency, cost savings, improved product quality, and enhanced customer satisfaction. However, it is important for exporters to consider data security and privacy concerns when implementing IoT solutions.

Increasing dependence of companies on international business and increasing competition makes entering foreign markets one of the most important decisions in international strategy (Liu et al., 2023). Today, the entry of companies into the market is one of the most important mechanisms in the economy (Ahmadi Hajiabadi et al, 2021). In a dynamic economy, the entry and exit of companies is one of the

20 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/investigating-the-impact-of-the-internet-of-things-on-the-probability-of-entry-in-export-market/334690

Related Content

Diabetes Prediction Using Cloud Computing, Blockchain, and IoT

Anushree Sahand Saurabh Rawat (2023). *Supporting Technologies and the Impact of Blockchain on Organizations and Society* (pp. 15-27).

www.irma-international.org/chapter/diabetes-prediction-using-cloud-computing-blockchain-and-iot/330031

Distributed Work Environments: The Impact of Technology in the Workplace

Edwiygh Franck (2021). *Research Anthology on Digital Transformation, Organizational Change, and the Impact of Remote Work* (pp. 2011-2032).

www.irma-international.org/chapter/distributed-work-environments/270389

The Causes and Their Influencers in the Age of Digital Business: The Instagrammers' Influence in Shaping the Attitudes for and Against the Animal Products

Edar S. Añaña (2022). *Handbook of Research on Smart Management for Digital Transformation* (pp. 292-307).

www.irma-international.org/chapter/the-causes-and-their-influencers-in-the-age-of-digital-business/298435

Financial Technology as a Future Game-Changer

Nelson Lajuni, Avnner Chardles Wellfren, Noraini Binti Abdullahand Salumah Binti Nain (2022). *FinTech Development for Financial Inclusiveness* (pp. 14-30).

www.irma-international.org/chapter/financial-technology-as-a-future-game-changer/291864

The Exploration of Autonomous Vehicles

Anthony J. Gephardtand Elizabeth Baoying Wang (2022). *Research Anthology on Cross-Disciplinary Designs and Applications of Automation* (pp. 930-944).

www.irma-international.org/chapter/the-exploration-of-autonomous-vehicles/291674