NEXUS BETWEEN CUSTOMS ELECTRONIC BUSINESS AND ORGANIZATIONAL PERFORMANCE: THE MEDIATING EFFECT OF KNOWLEDGE MANAGEMENT

Mohammad Ali Ibrahim Al Khasabah *

* Department of Business Administration, College of Business, Tafila Technical University, Tafila, Jordan
Contact details: Tafila Technical University, P. O. Box 179, 66110 Tafila, Jordan

How to cite this paper: Al Khasabah, M. A. I. (2024). Nexus between customs electronic business and organizational performance: The mediating effect of knowledge management. Corporate Governance and Organizational Behavior Review, 8(2), 152–163. https://doi.org/10.22495/cgobrv8i2p15

Abstract

The purpose of the study is to examine the effect of customs electronic business (CEB) on knowledge management (KM) and organizational performance (OP) in the Jordanian Customs Department (JCD), as well as to examine the effect of KM on OP. It also seeks to determine whether KM mediates the relationship between CEB and OP. A survey was conducted on 250 persons from the JCD. However, 230 questionnaires were retrieved, and 204 questionnaires were valid for statistical analysis. The partial least squares structural equation modelling (PLS-SEM) is used to evaluate and test the study model. According to the findings of this study, it is evident that CEB has a positive significant effect on OP and KM. The findings also showed that KM in the JCD mediates the association between CEB and OP.

Keywords: Customs Electronic Business, Organizational Performance, Knowledge Management, Jordanian Customs Department

1. INTRODUCTION

Knowledge management (KM) approaches have become a characteristic of current economies (Dečman, 2015; Al-A’wasa, 2018). Information technology and the communications revolution are distinguishing elements of the third century, including a change towards a digital organization (Azeem et al., 2015). This significant advancement was followed by a substantial sea shift in the approaches taken to performance work in all activities and businesses in the public sector as well as the private sector, which prepared these two sectors to be better capable of keeping pace with progress and absorbing diverse current and contemporary inventions (Kandalji & Al-Janabi, 2021). These multiple innovations had a positive impact on the quality of the products and services that were provided to customers, made it easier for businesses to cater to the wants and needs of customers, and made businesses more quickly able to adapt to and respond to changes in their environments (Chung et al., 2023).

According to Hossan and Ryan (2018), the fast growth of technology has resulted in the retraction of many conventional firms and a quick move toward the use of current management styles that are capable of keeping pace with technological advancement. This rapid development was also accompanied by a development in the goals and objectives of both public and private organizations. According to Alsharari and Ikem (2023), organizations have shifted their attention to become more focused on transparency, increasing the quality and efficiency of services offered to consumers, making the most optimum use of available resources, and speed in completing transactions.
Because of this transformation, doing business through the internet has evolved into not only a key tool for the organization's long-term sustainability and performance but also a crucial source for achieving a level of competitiveness (Alnatsheh et al., 2023).

The Jordanian Customs Department (JCD) is one of the departments that has replaced paper-based business technology and applications with electronic business (e-business) technology and applications in all of its activities and customs procedures in an effort to improve the effectiveness and efficiency of those procedures as well as the department's reputation and level of transparency (Hajj Naas et al., 2023). This was done to improve the effectiveness and efficiency of those procedures as well as the level of transparency within the department. According to Martinus et al. (2015), any business or organization that wants to retain its current level of success and continue to make progress must make it a priority to stay up with the most recent technological breakthroughs and integrate those innovations into all of its processes and operations. This is the only way for the company or organization to continue to make progress and maintain its current level of success.

The resource-based view (RBV) theory posits that companies compete with one another based on the resources and skills they possess. According to Nassibi et al. (2023), resources may be either actual or intangible assets that an organization owns or has acquired; capabilities, on the other hand, relate to an organization's capacity to utilize its resources to carry out the activities and tasks that it has planned for itself. According to Barney (1991), companies that are in possession of resources that are priceless, rare, one-of-a-kind, and irreplaceable are in a better position to adopt strategies that will assure their excellence, creativity, and innovation than firms that do not have these characteristics associated with their resources. According to Uddin (2010), e-business and creativity management will assist the company in the production of scarce and important information, and this will be accomplished via the dissemination of this information across the company to improve organizational performance (OP) and creativity.

This study aims to determine the impact of both customs electronic business (CEB) on OP and KM in the JCD, as well as the impact of the mediating role that KM plays in the relationship between CEB and OP in the JCD.

The importance of this study from a pragmatic standpoint stems from the fact that it provides helpful information for managers and decision-makers in the JCD to determine whether or not electronic customs business and KM as organizational capabilities, applications, and practices help in improving operational processes and its reflection on improving the quality of customs services and achieving the desired creativity and excellence. This study will also provide the first pioneering empirical evidence that KM mediates the relationship between electronic customs business and OP. This will be an important contribution to the field. The development of a theoretical framework that unites the many different parts of the research gives this study more academic relevance since it contributes new information to the body of literature that was already in existence before this investigation.

The remainder of this paper is organized as follows. Section 2 explores the literature review and formulates the hypotheses. Section 3 describes the research methodology. Section 4 analyzes the data and provides the empirical results. Section 5 discusses the findings. Section 6 presents conclusions, limitations, and future directions for research.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1. Customs electronic business

According to the research by Al-A’wasa (2018), e-business technologies play a significant role in the implementation of a variety of business and administrative activities without the limitations imposed by organizational boundaries and technological constraints. This helps to achieve what is known as business intelligence or organizational intelligence, which assists in the operation of a business in a manner that is both efficient and effective. According to Kumar and Kumar (2014), business has thus evolved into an unavoidable strategic and technical option to provide new chances or business models for the company. According to Eid et al.’s (2021) definition of CEB, this refers to the use of information and communication technology to carry out services, business, and operations electronically in place of the conventional usage of paperwork.

At the level of application, a large number of investigations have been carried out in third-world countries, such as the investigation that Chung et al. (2023) carried out on the electronic customs system used in Korea and Cameroon by looking at the factors that drive the system as well as the difficulties it faces. One of the many recommendations that came out of this study was to enhance the amount of experimental research that is carried out in countries that are considered to be in the third world. Furthermore, Addo and Avergou (2021) carried out research using Ghana as a case study to analyse the influence of information technology (IT) on the decline of administrative corruption. The researchers concluded that there is only a limited effect in the fight against corruption. Additionally, the research by Adaba and Rusu (2014) focused on the influence that electronic commerce has had on the operating processes of customs and how they facilitate trade and transit. This study concluded that the implementation of CEB helps save both time and money by delivering customs processes, as well as import and export procedures, electronically in the form of a single document that can be accessed from any location and at any time.

Al-A’wasa (2018) also conducted research to determine the impact of the CEB on the strategic goals of the Jordanian Customs Service and the degree to which Jordanian customs engage with e-business technology in the process of providing customs services. The following dimensions were considered in the research. The first aspect is the electronic infrastructure, which comprises all of the technologies, equipment, networks, and application systems that are necessary for the JCD to carry out its daily business. The second dimension is e-business systems, which may refer to any
2.2. Knowledge management

The majority of today's organizations place a significant emphasis on KM, seeing it as both a genuine wealth and an advantage for the company (Rawashdeh et al., 2021). In addition to this, Wang et al. (2014) believe it to be a potent and important instrument that can be used by businesses for them to successfully carry out their operations and put their practices into place to accomplish their aims and objectives. Hasan and Zhou (2015) stressed the significance of knowledge as well as the role it plays in the development of innovation and the successful translation of that innovation into services and goods. In addition, Gamerschlag (2013) pointed out that the implementation of KM has become widespread in many modern businesses since it contributes to the enhancement of the values of quality, innovation, and excellence while also assisting in decision-making, boosting profitability, and delivering the best possible services.

According to Ha et al. (2016), organizations that apply KM can unearth, choose, organize, disseminate, and transmit vast amounts of information that is necessary for the day-to-day functioning of work as well as the resolution of issues that may develop. In addition, the company is given the ability to organize, plan, motivate, and manage both persons and systems as a result of KM (Zawaideh et al., 2018). This allows the business to enhance its assets and make efficient use of them, this may entail the production of information as well as its dissemination by different workers (Kamaruzzaman et al., 2016).

According to Martins et al. (2019), KM is a method that enables an organisation to cultivate, acquire, organise, and use intellectual knowledge assets in order to attain excellence and long-term sustainability via the use of an integrative and collaborative approach. The process of KM, as described by Almansoori et al. (2021), is comprised of many critical stages that include the collection, storage, diffusion, and application of information. KM is a process that is based on some interrelated processes that are used in its operations. These processes include knowledge diagnosis, knowledge creation, knowledge storage, knowledge development and distribution, and knowledge development and distribution (Patwary et al., 2022; Obeso et al., 2020).

2.3. Organizational performance

It is the final result achieved from the behavior of individuals working in the organization (Rohman et al., 2023). Organizational performance is also defined as the extent to which the company can use, process, and manage its various resources to achieve its goals effectively (Obeidat et al., 2018), while Jenatabadi (2015) focused it depends on three important variables in defining organizational performance: efficiency, effectiveness, and appropriateness. Obeidat (2016), pointed out that organizational performance expresses the extent to which the organization benefits from its tangible and intangible resources.

Traditionally, measuring organizational performance has been linked to financial indicators such as profits, market share, return on investment, and return on equity (Hilman & Kaliappan, 2014; Zehir et al., 2015). As for non-financial indicators, they are represented by the organization’s marketing activities, which can be evaluated through customer satisfaction and loyalty, product quality, and the extent of their development (Shah & Dubey, 2013). Also, Masa'deh et al. (2018) indicated the following indicators: service quality, donor satisfaction, volunteer work, and user satisfaction.

In addition, Abdul-Mahmoud and Yusif (2012) proposed the following measures: team cohesion, social communication, stakeholder satisfaction, and strategic performance. According to Khalaf et al. (2019), organizational performance consists of three aspects that the organization seeks to achieve, the marketing performance of its products and services, shareholder returns and financial performance, but the basic way to measure it is to compare the actual results achieved with those expected for the organization.

Measuring the performance of organizations is affected by many internal and external factors. Internal factors include leadership style and approach, prevailing organizational culture, work design methods and human resources strategy. As for external factors, they may be the same for all companies. This includes customer preferences and market perceptions, prevailing government rules and regulations, and the state of the country’s economy (Mirza & Javed, 2013).

2.4. E-business and organizational performance

Experiments were conducted to investigate how closely e-business and performance are related to one another. In order to accomplish this goal, a variety of performance indicators were utilised, including operational performance (Arias-Pérez et al., 2020), financial performance (Oyuko, 2022), and corporate performance (Purwanto et al., 2022). Other performance indicators included OP (Al-Omari et al., 2022), marketing performance (Chong & Ali, 2022), financial performance (Mulyono et al., 2020), and institutional performance (Dhyanasaridevi & Augustine, 2021). Azeem et al. (2015) found that there is a link between e-business and the performance of firms that deal with electronic commerce in terms of enhancing their performance and raising the satisfaction of their consumers. The research conducted by Romanius et al. (2023) concluded that doing business online has a beneficial effect on a Nigerian company's overall performance. Al-Omari et al. (2022) discovered that online procurement, channel management, and service delivery skills all had a substantial influence on OP. According to the findings of many research (Ahmed et al., 2016;
Attaran & Woods, 2019; Martin-Peña et al., 2020; Ho et al., 2020), the implementation of e-business may contribute to improvements in the operational effectiveness and efficiency of a company’s performance, in terms of organisation. According to the findings of Attia’s (2022) research, there is undeniably a beneficial impact that internet commerce has on the operational efficiency of businesses that are currently active in Saudi Arabia. As a result, the following hypothesis was put out:

H1: E-business has a significant positive impact on organizational performance in the Jordanian Customs Department.

2.5. Knowledge management and organizational performance

Implementing KM in organisations, according to Alkhazali et al. (2017) and Hussinki et al. (2017), helps enhance OP and a company’s capacity to compete by more effectively managing its knowledge resources. Because of this, the organisations as a whole are able to achieve greater success. Liu and Deng (2015) carried out the study to determine the nature of the link that exists between efficient management of organisational knowledge and high levels of OP. The results of the study indicate that each component of KM has a positive and productive impact on the business outcomes of the firm, which in turn enhances the efficiency of the organisation. This is the case because each component of KM contributes to the organization’s ability to acquire and use new information. In this regard, the findings of the research that was carried out by Kimayo et al. (2015) indicated that the implementation of KM yields effective and decisive results in improving OP and that organisations must be eager to apply the principles of KM continuously in order to create new knowledge and transform this knowledge into strategies and designs in order to achieve effective OP. In addition, the findings of this research indicated that the implementation of KM yields effective and decisive results in improving OP. Furthermore, the findings indicated that a strong commitment to the continuous use of KM concepts is necessary for firms to achieve effective OP. Jyoti and Rani (2017) observed that there is a robust and favourable connection between the acquisition, transmission, and use of knowledge and the enhancement of performance inside the company. In a similar line, the investigation that was carried out by Mageswari (2020) found that the use of KM has a considerable and beneficial impact on the operational operations that are carried out by manufacturing firms in India. According to the results of a study that was carried out by Obeidat et al. (2016), efficient KM has a positive and significant impact on the amount of innovation that is accomplished by Jordanian enterprises. According to the results of the study conducted by Adam et al. (2022), efficient KM has a positive impact on the overall performance of enterprises located in Malaysia. As a direct consequence of this, the following hypothesis was developed:

H2: Knowledge management has a significant positive impact on organizational performance in the Jordanian Customs Department.

2.6. E-business and knowledge management

According to the results of the study that was carried out by Zhang et al. (2018), the complete information that is communicated between individuals and groups inside any specific company is often done in the context of an e-business or something that is referred to as business intelligence. In addition, both e-business and KM include the process of collecting, organising, coordinating, sharing, and utilising information (Singh Sandhawalia & Dalcher, 2011). IT and databases are essential to both e-business and KM and play a direct and significant role in both. KM was employed as a mediating variable in the association between e-business capabilities and innovation performance in another research that was carried out by Arias-Pérez et al. (2020). The research came to the conclusion that KM is an organisational variable that helps accomplish the efficient use of all information that results from digitally operating a company. Arias-Pérez et al. (2021) conducted a study in which they presented an analytical explanation of the working mechanism of the relationship between e-business and KM. In the same way that e-business serves as a route for information about suppliers, consumers, the market, and the environment, KM analyses, organises, saves, and distributes information that has the potential to become technical or organisational knowledge that can be employed in development. In a similar line, Eid et al. (2021) discovered that there is a statistically significant influence of e-business on institutional performance. As a result, the following hypothesis was put out:

H3: E-business has a significant positive impact on knowledge management in the Jordanian Customs Department.

2.7. E-business, knowledge management and organizational performance

The overwhelming majority of RBV researchers (Richard, 2000; Teece et al., 1997) agree that knowledge is the resource that has the characteristics of being the most important as well as the most valuable. In addition, Prahalad and Hamel (1994) argue that in this age of information, knowledge, know-how, intellectual assets, and competencies are the major factors that contribute to great performance. In addition, Kimani and Ogutu (2017) emphasise the significance of information as the most important asset that an organisation has. Cognitive assets grow as they are employed inside an organisation, in contrast to material resources, which decline as they are utilised. They also demonstrate that the sole resource that is difficult to replicate is knowledge, in contrast to other materials such as the protective share. According to Zack et al. (2009), the capacity to acquire new information and make it one’s own is not only important but also has an effect on how well an organisation performs. As a result, the following hypothesis was developed:

H4: Knowledge management mediates the relationship between e-business and organizational performance.
3. RESEARCH METHODOLOGY

3.1. Research framework

The following framework explains the connection that exists between the several distinct study factors that are shown in Figure 1. Customs electronic business (CEB) represented the independent variable while the dependent variable is organizational performance (OP). Lastly, the mediating variable is knowledge management (KM).

![Figure 1. Research framework](image)

3.2. Research design

A method known as cross-sectional descriptive survey design was used in this study so that the researcher could collect data for the current study from the respondents. The effect of the researcher is contained to the research measures alone, but it does not clash with the research settings (Williams, 2007).

3.3. Population and sample

According to the Human Resources Department of the JCD, the number of those involved in e-business is 1,400 employees. According to Sekaran and Bougie (2016), the appropriate sample size based on the target population is 302 individuals, representing 21.57% of the study population. Both the issue of the high non-response rate and the amount of sampling error were addressed by increasing the sample size to 23% of the total population based on the recommendation by Hair, Wold, Henseler, and Sarstedt (2017); 322 questionnaires were distributed, of which 235 were returned, a rate of about 73%. From the returned questionnaires, 31 questionnaires were excluded because they were not suitable for analysis, and thus 204 questionnaires were used in the analysis.

3.4. Data collection instrument

The questionnaire is divided into four distinct sections. The first part deals with answering questions related to the respondent’s background. The second section provides a summary of the 22 components that constitute the four main dimensions of the CEB, which are EI, EBS, CIS, and GCS. The third section includes 7 elements related to KM, and the fourth section contains 8 factors to measure OP. A five-point Likert scale ranging from 5 = Strongly agree to 1 = Strongly disagree was used to collect responses.

3.5. Variable measurement

In terms of measuring variables, the current study measured CEB using four dimensions and a total of 22 items. These dimensions are EI, EBS, CIS, and GCS. These items are adapted from Al-A’wasa (2018). OP was assessed based on answers to eight questions taken from Al-Marafi (2020). In addition, the KM measurement included seven components that were extracted from Younes and El-Din (2022).

3.6. Data analysis strategy

In the present study, OP served as the dependent variable, while CEB served as the independent variable. KM played the role of the mediator variable. The findings from the present research were validated with the use of smart PLS. The data were examined in two stages: in the first stage, the measurement model was put to the test, and in the second stage, the structural model was put to the test.

4. RESEARCH RESULTS

In the study that Chienwattanasook and Jermsittiparsen (2019) carried out, a multivariate statistical method called partial least squares structural equations modelling (PLS-SEM) was used to investigate theoretical models. The investigation was carried out in two stages: first, the measuring model was evaluated, and then, in the second stage, the structural model was evaluated.

4.1. Measurement model assessment

The investigation model includes two first-order (reflective) structures, which are OP and KM, in addition to one first-order structure (reflective-reflective), which is CEB, which in turn includes four first-order structures (EI, EBS, CIS, and GCS). Therefore, the approach that was used for this study consists of two stages, as recommended by Sarstedt et al. (2019), as it does not require an equal number of indicators for lower-order structures. The reliability of the measurement model and other types of validity were examined through SmartPLS version 4 in this study.
4.1.1. Convergent validity

According to Cheah et al. (2018), a statistical test known as convergent validity may be used to determine whether or not there is a disagreement between measurements. It was advised by Hair et al. (2010) that a number of different tests be carried out in order to assess convergent validity. These tests include composite reliability, outer loading, and the average variance extracted (AVE), each of which should have minimum values that are not less than 0.60, 0.60, and 0.50, respectively. In order to evaluate the dependability of the structures’ internal consistency, Cronbach’s alpha was also used, and the cutoff value was set at 0.7 (Hair et al., 2010).

Table 1. Cronbach’s alpha and convergent validity for the model for CEB

<table>
<thead>
<tr>
<th>Construct</th>
<th>Items</th>
<th>Factor loading ranges</th>
<th>AVE</th>
<th>Composite reliability (CR)</th>
<th>Cronbach’s alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>EI</td>
<td>6</td>
<td>0.738–0.811</td>
<td>0.624</td>
<td>0.909</td>
<td>0.880</td>
</tr>
<tr>
<td>EBS</td>
<td>5</td>
<td>0.743–0.817</td>
<td>0.581</td>
<td>0.874</td>
<td>0.820</td>
</tr>
<tr>
<td>CIS</td>
<td>5</td>
<td>0.733–0.812</td>
<td>0.605</td>
<td>0.804</td>
<td>0.836</td>
</tr>
<tr>
<td>GCS</td>
<td>6</td>
<td>0.724–0.828</td>
<td>0.615</td>
<td>0.906</td>
<td>0.875</td>
</tr>
</tbody>
</table>

Table 1 exhibits the convergent validity of the results, which reveal that all 22 of the CEB components received acceptable standard outer loads more than 0.70 and that the correct values for CR and AVE were greater than 0.60 and 0.50, respectively. Additionally, Cronbach’s alpha values exceeded Nunnally and Bernstein’s (1994) stated threshold value of 0.70. This demonstrates that each component has enough level of dependability to accurately measure its structure.

Table 2. Convergent validity and Cronbach’s alpha results for the overall model

<table>
<thead>
<tr>
<th>Construct</th>
<th>Items</th>
<th>Factor loading</th>
<th>AVE</th>
<th>CR</th>
<th>Cronbach’s alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEB</td>
<td>EI</td>
<td>0.869</td>
<td>0.620</td>
<td>0.936</td>
<td>0.934</td>
</tr>
<tr>
<td></td>
<td>EBS</td>
<td>0.778</td>
<td>0.900</td>
<td>0.895</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CIS</td>
<td>0.850</td>
<td>0.785</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>GCS</td>
<td>0.829</td>
<td>0.884</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KM</td>
<td>KM1</td>
<td>0.774</td>
<td>0.614</td>
<td>0.544</td>
<td>0.559</td>
</tr>
<tr>
<td></td>
<td>KM2</td>
<td>0.814</td>
<td>0.784</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>KM3</td>
<td>0.799</td>
<td>0.502</td>
<td>0.541</td>
<td>0.593</td>
</tr>
<tr>
<td></td>
<td>KM4</td>
<td>0.774</td>
<td>0.502</td>
<td>0.541</td>
<td>0.593</td>
</tr>
<tr>
<td></td>
<td>KM5</td>
<td>0.791</td>
<td>0.502</td>
<td>0.541</td>
<td>0.593</td>
</tr>
<tr>
<td></td>
<td>KM6</td>
<td>0.817</td>
<td>0.502</td>
<td>0.541</td>
<td>0.593</td>
</tr>
<tr>
<td></td>
<td>KM7</td>
<td>0.738</td>
<td>0.502</td>
<td>0.541</td>
<td>0.593</td>
</tr>
<tr>
<td></td>
<td>OP1</td>
<td>0.738</td>
<td>0.502</td>
<td>0.541</td>
<td>0.593</td>
</tr>
<tr>
<td></td>
<td>OP2</td>
<td>0.715</td>
<td>0.502</td>
<td>0.541</td>
<td>0.593</td>
</tr>
<tr>
<td></td>
<td>OP3</td>
<td>0.804</td>
<td>0.502</td>
<td>0.541</td>
<td>0.593</td>
</tr>
<tr>
<td></td>
<td>OP4</td>
<td>0.741</td>
<td>0.502</td>
<td>0.541</td>
<td>0.593</td>
</tr>
<tr>
<td></td>
<td>OP5</td>
<td>0.821</td>
<td>0.502</td>
<td>0.541</td>
<td>0.593</td>
</tr>
<tr>
<td></td>
<td>OP6</td>
<td>0.771</td>
<td>0.502</td>
<td>0.541</td>
<td>0.593</td>
</tr>
<tr>
<td></td>
<td>OP7</td>
<td>0.737</td>
<td>0.502</td>
<td>0.541</td>
<td>0.593</td>
</tr>
</tbody>
</table>

Table 2 demonstrates that the general model’s convergent validity findings achieved standardised external loadings of more than 0.70, which are acceptable except for one item of OP (OP8) that did not achieve loadings of more than 0.70 and was removed according to the recommendation made by Hair, Hult, et al. (2017). Additionally, the permissible limits for AVE and CR were both larger than 0.50 and 0.70, respectively. This suggests that all of the components have a high dependability when measuring their own constructions in their own right.

4.1.2. Discriminant validity

In the current research, the method for determining discriminant validity presented by Fornell and Larcker (1981) was used. This method compares the variance between individual measurements with the AVE of those measurements. According to Fornell and Bookstein (1982), Table 3 reveals that the value of each construct is greater than the other values outside the diagonal in each row and column in the correlation. Therefore, all constructs have adequate discriminant validity.

Table 3. Discriminant validity results

<table>
<thead>
<tr>
<th></th>
<th>CEB</th>
<th>CIS</th>
<th>EBS</th>
<th>EI</th>
<th>GCS</th>
<th>KM</th>
<th>OP</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEB</td>
<td>0.649</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS</td>
<td>0.890</td>
<td>0.778</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EBS</td>
<td>0.778</td>
<td>0.565</td>
<td>0.762</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EI</td>
<td>0.869</td>
<td>0.672</td>
<td>0.590</td>
<td>0.790</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GCS</td>
<td>0.829</td>
<td>0.609</td>
<td>0.520</td>
<td>0.587</td>
<td>0.785</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KM</td>
<td>0.646</td>
<td>0.544</td>
<td>0.502</td>
<td>0.541</td>
<td>0.539</td>
<td>0.784</td>
<td></td>
</tr>
<tr>
<td>OP</td>
<td>0.628</td>
<td>0.587</td>
<td>0.525</td>
<td>0.473</td>
<td>0.522</td>
<td>0.593</td>
<td>0.768</td>
</tr>
</tbody>
</table>
4.2. Structural model assessment

The bootstrapping method was used in order to execute and analyze the structural model (Hair, Hult, et al., 2017; Soto-Acosta et al., 2016). Direct effects were employed to test the direct hypotheses, whilst indirect effects were employed to test the mediation hypothesis.

4.2.1. Hypothesis testing

Table 4 demonstrates that CEB has a favourable and significant impact on OP at a significance level of 0.001 (β = 0.421, t = 5.619, p = 0.0001), also, the impact of CEB on KM is positive and statistically significant (β = 0.646, t = 14.159, p = 0.001). It was discovered that the impact of KM on OP was positive and statistically significant at the 0.001 level of significance (β = 0.320, t = 3.709, p = 0.001). As a consequence, the hypotheses H1, H2, and H3 were supported. This table makes it abundantly evident that the F² values for the three external predictors, respectively, are 0.190, 0.717, and 0.110, and that the magnitude of their effects, respectively, are medium, big, and average, which is in accordance with the advice given by (Draper, 2022).

4.2.2. Testing the mediating role of knowledge management

The methodology proposed by Preacher and Hayes (2008) was used in the present investigation to determine whether or not KM serves as a mediating variable in the connection between CEB and OP. Table 5 shows that the results of a bootstrap analysis indicate that the indirect impact of CEB on OP via KM was positive and statistically significant at the level 0.05, β = 0.207, t-value = 3.613, p-value = 0.000. In addition, this Bias-corrected bootstrap confidence interval (CI) did not stretch to 0 between them, as recommended by Preacher and Hayes (2008), that there was a mediating effect. The lowest possible level is 0.095, and the highest possible level is 0.323. This demonstrates that there was a statistically significant mediation effect, and as a result, the H4 hypothesis was found to be valid.

Table 4. Hypotheses testing results

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Path shape</th>
<th>Std. β</th>
<th>Std. error</th>
<th>t-value</th>
<th>F²</th>
<th>R²</th>
<th>Q²</th>
<th>p-value</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>CEB-OP</td>
<td>0.421</td>
<td>0.075</td>
<td>5.619</td>
<td>0.190</td>
<td>0.455</td>
<td>0.252</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H2</td>
<td>CEB-KM</td>
<td>0.646</td>
<td>0.046</td>
<td>14.159</td>
<td>0.717</td>
<td>0.418</td>
<td>0.000</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H3</td>
<td>KM-OP</td>
<td>0.320</td>
<td>0.086</td>
<td>3.709</td>
<td>0.110</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>Supported</td>
</tr>
</tbody>
</table>

Table 5. Mediation effect

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Relationship</th>
<th>Std. β</th>
<th>Std. dev.</th>
<th>t-value</th>
<th>p-value</th>
<th>LL (2.5)</th>
<th>UL (97.5)</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>H4</td>
<td>CEB-KM-OP</td>
<td>0.207</td>
<td>0.057</td>
<td>3.613</td>
<td>0.000</td>
<td>0.095</td>
<td>0.323</td>
<td>Supported</td>
</tr>
</tbody>
</table>

The predictive relevance of the model

R-squared (R²) values were used in this research endeavour to determine the predictive ability of the study model. Hair, Hult, et al. (2017) define 0.75 and above as strong predictive power, while they define 0.25 to 0.75 as moderate predictive power, and finally less than 0.25 as weak predictive power.
It is clear from Table 5 that the largest value of the R-squared was for OP (0.455), followed by the value of KM (0.418), which indicates a moderate predictive power in the sample for the study model.

5. DISCUSSION

According to the findings, the administration of customs e-business has a constructive effect on the overall performance of the organization. This outcome may be explained by the eagerness of the JCD and its dedication to keeping pace with progress and embracing new technology. This commitment had a favourable reflection on the speed, continuity, and quality of delivering services to consumers, which was a consequence of the positive reflection. This conclusion may also be explained by the idea held by the JCD, which is that electronic work should take the leading role for any organization that aspires to develop and succeed. The findings of this research are in line with the findings of earlier studies, such as the one conducted by Azeem et al. (2015), which found that there is a connection between e-business and performance in organizations that deal with e-commerce. The findings of this research corresponded with the findings of Romanus (2023) and Al-Omari et al. (2022), which suggested that the use of e-business led to improved performance in terms of both effectiveness and efficiency. In addition, it is consistent with the findings of the research conducted by Attia (2022), which demonstrated that e-business has a discernible and favourable effect on the OP of businesses that are active in the Kingdom of Saudi Arabia.

The results also indicated that CEB has a positive impact on KM, which is consistent with the interpretation of the study of Zhang et al. (2018) which indicated that the entire knowledge that is transferred between individuals and groups in any organization is usually in the context of e-business or so-called business intelligence, where both CEB and KM depend fundamentally and directly on each other. The results of this research are consistent with the results of a study conducted by Arias-Pérez et al. (2021). This study concluded that KM is an important organizational variable that helps achieve the successful use of all information resulting from the digital operation of companies. The results of this study are also consistent with what Arias-Pérez et al. (2021) revealed in their research, in which they concluded that e-business acts as a channel to obtain information about suppliers, customers, market and environment. On the other hand, KM interprets, organizes, stores and distributes information that may become technological or organizational knowledge used in developing new products or services to help improve OP.

The findings also suggested that effective management of knowledge has a constructive influence on the success of an organization. This outcome may be explained by the increased eagerness of the JCD to accept any type of information to enhance OP and bring the JCD into line with other digital organizations. The findings of this research were consistent with the findings of earlier studies such as the one conducted by Liu and Deng (2015), which demonstrated that every aspect of KM has a positive and effective influence on the outcomes of an organization's work and boosts the efficacy of that work. The findings of this study also coincided with the findings of prior studies such as the one conducted by Liu and Deng (2015). It is also compatible with the research that was carried out by Kimaiyo et al. (2015), which found that the use of KM has effective and decisive consequences in increasing OP. This result is also consistent with the findings of the research conducted by Jyoti and Rani (2017), which found that there is a statistically significant and positive association between gaining, transferring, and applying knowledge and boosting performance in the firm. This result is also consistent with the findings of the research conducted by Jyoti and Rani (2017).

In addition, the findings suggested that the role of KM as a mediator in the connection between CEB and OP deserves consideration. This finding is consistent with the conclusions obtained by RBV academics such as (Richard, 2000; Teece et al., 1997), who stressed that knowledge is the most significant and valuable resource of the organization. In addition, Prahalad and Hamel (1994) validated the idea that in the information era, exceptional performance is primarily driven by knowledge, know-how, intellectual assets, and capabilities. Additionally, Kimani and Ogutu (2017) highlight the fact that information is the most valuable resource that a corporation has. Knowledge assets, on the other hand, grow in value as an organization uses them more and more, in contrast to material resources, which decline in value. Zack et al. (2009) also said that the capability to learn new things and generate new information is crucial and that it has an effect on performance inside the business.

6. CONCLUSION

The purpose of this research was to investigate how the JCD uses CEB, how KM affects its operations, and how well it operates as an organization. This study provided clarification and empirical support for the direct impact of CEB on OP as well as the indirect impact through KM as a mediating variable in the relationship between CEB and OP. This research makes theoretical contributions by illuminating the many facets of CEB and its impact on enhancing the efficiency and effectiveness of the Jordanian Customs Service. The findings of this research have practical implications for the JCD, as they are likely to alert the department’s upper management to the significance of electronic infrastructure, e-business systems, customs information systems, and government customs services as reliable means of boosting the department’s efficiency and productivity.

This study has two significant limitations. The first is that it was designed using a cross-sectional methodology, which prevents researchers from tracking any changes that may have taken place throughout the course of the study. As a consequence, carrying out research that follows participants over time will help overcome this constraint, treat it, and confirm the conclusion. In addition to this, the longitudinal research will provide a more in-depth comprehension of the interplaying influences that characterize the study variables. Second, the focus of this
research was on the direct effects that CEB had on OP, as well as the indirect effects that CEB had on OP through the use of KM as a mediating variable. Future research could investigate these relationships within other economic sectors, such as the private hospital sector, the telecommunications sector, and the industrial sector. Comparative studies may also be undertaken utilizing the same research variables but in various industries. This provides greater information about the possible links that can be gleaned from such investigations.

REFERENCES


