The Role of Organizational Challenges and Technical Challenges on the Implementation of E-government Military Institutions

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ABSTRACT

Purpose: This study aimed to find out the challenges and barriers to the implementation of the e-governance in the Yemeni military institutions. A comprehensive literature review was conducted to the study topic. A conceptual framework was proposed that contained two independent variables that represent the challenges, which were (organizational challenges and technical challenges). The descriptive analytical approach was used in this study; it is one of the most used methods in the study of social and human phenomena, and because it fits the phenomenon under study. It also examines an existing phenomenon or issue from which information can be answered to answer study questions, without the intervention of the researcher. For this research, the instrument used to collect data from the research sample in Yemen in regards to the implementation of E-governance. The measurement of the direct impact of the independent variables (organizational challenges and technical challenges) on the implementation of e-governance in military institutions in Yemen. Smart PLS has been used to conduct statistical analysis from the primary data. Several tests have been conducted for the collected data. The main results found that there is a negative and significant relationship between organizational challenges and the Implementation of E-Governance in the Yemeni military institutions. Also, there is a negative and significant relationship between organizational challenges and the Implementation of E-Governance in the Yemeni military institutions. It is proposed that the organizational and technical challenges for the implementation of the Electronic Government, has the organizational factor, as the main barrier factor, it is recommended that the military institutions implement policies for the dissemination of online services to avoid that the members of the military have to move from their home, it is observed that the institutional factor is also important, this can be improved by assigning a greater economic budget to innovate in the development of Electronic.

1. Introduction

The term E-governance is very essential concept or term in the process of removing barriers, obstacles, and delays in the daily or the annually transactions. E-governance saves money and time for both the government and the citizens because it uses less personnel’s, saves time, and cost (Mohammed et al., 2016). E-governance can be at a lot of benefits and gains to when applied and used in the military institutions. It increases the satisfaction of all affiliated to the military institutions and reduces the complaints circle among them.

The Yemeni military institutions are being attacked and destroyed since the revolutions of the Arabic Spring that stated in 2011 (Mohammed and Ibrahim, 2015). During the period since 2011 till the present day, Yemen has been struggling to find peace, all the parties in Yemen and fighting each other to win and control the country. These conflicts have cost Yemen many wars such as the civil wars and the international war with tribes groups supported by Iran (Ibrahim et al., 2015). These wars are destroying and damaging the Yemeni military institutions. The Yemeni military institutions must stands up again and rise to be able to defend the country. In the process of rising and improving the Yemeni military institutions, the E-governance can be a very important factor to help and assist this kind of improvement (Al-Wazir and Zheng, 2014).
The concept of national culture is highly complex and interesting, being able to relate not only to political, but also social, cultural, historical and anthropological aspects of a community. The question of national culture has to do with the creation of an identity and a feeling of belonging that unites all members of a society from certain easily recognizable symbols or elements.

Cultural issues have a strong influence on any authorized initiative related to change and e-government initiatives are not the difference. Cultural, demographic, political and economic influences are behind the way in which there is no universal model of electronic government implementation. Belle-Hallsworth and Gordon (2019) reported that an important reason behind the failure of e-government projects in most developing nations, if not all, is the hole experienced between the design and the reality of data systems implementation. The way in which these countries rely on external experts from abroad to establish e-government initiatives leads to little consideration of the specific national context of the area itself in terms of cultural issues that include authorized culture, geography, literacy, gender segregation and religion, despite other social problems. In addition, this will mix an extra conflict of culture and values. This research seeks to find out the gaps and obstacles that are available in the Yemeni military institutions that are preventing implementing the E-government systems. The main phenomena of this research can be characterized in finding and evaluating the main challenges factors for the implementation of E-government systems in the Yemeni military institutions.

The aim of this study is to find out the impact of organizational challenges and technical challenges on the implementation of E-government in military institutions in Yemen. The remaining sections of this research are designed as follows: Section 2 defines the literature review towards the study variables; Section 3 focuses on illustrating the model used in the study as well as the hypotheses development; Section 4 shows the methodology used; Section 5 analysis the collected data; Section 6 discusses the findings and compare them with the findings of previous studies; and finally Section 7 represents conclusion which includes future research directions.

2. Literature Review

2.1 E-governance Overview

The evolution of the term 'electronic governance' has to be seen at the intersection of two major movements - governance and information revolution. Some time ago the topic of 'governance' has been discussed. According to the Concise Oxford Dictionary (9th Edition), the word 'governance' comes from the Greek voice 'kuberna', which means "to lead". The first essays of the classical political sciences on the subject referred to the concept of 'governability' that made the rule of law the cornerstone of development (Henández-Fernández et al., 2019).

However, the concept began to take on another meaning with the interaction of three actors - the State, the market and civil society - in the post-World War II period. A quarter of a century after the Cold War, it was very evident the market, on its own, could not ensure growth, and that in reality the State had a role to play. In the West, John Maynard Keynes theoretically justified the fact that the State manipulated prices and fought unemployment and trade crises. The socialist states adopted and consolidated centralized planning systems. In the Third World, the State also assumed the role of planner, promoter, promoter and director of the accelerated development effort. Therefore, States not only had to assume a central role, but they had also created their own companies. But dealing with commercial entities with social objectives hindered competition on equal terms in the economy (Falch et al., 2018). As a result, corruption and corporate losses expanded. In many states where the tax regime was regressive, losses were assumed mainly by the poor. This led to discontent and disillusionment with interventionist policies and a demand for privatization that took the state away from its central role. However, the private sector, by itself, could not take into account the aspects of distribution that led to rethinking development as economic growth in the first place. The inability of economic gains to produce acceptable levels of redistribution, poverty reduction and political freedoms awakened civil society (Kassen, 2020).
The term 'governance' was introduced in the discourse on development around the period of the late eighties. The Human Development Report of 1991 accepts the fact that freedom and democracy, although not a necessary condition, are completely consistent with growth and development. 'International development' changed its focus from the 'economic growth' of the 1950s (decades of UN development) to 'sustainable human development', which includes concerns for people and nature to be widely accepted by the State, the market and civil society (Sachan et al., 2018). The environmental movement has argued that 'governance' is an urgency to carry out development agendas holistically. It includes not only the sector in question and the obvious stakeholders, but also the others affected in other areas. It has forced a redefinition of public interest in which nature itself is recognized as a participant (Rosenberg, 2020).

The intense globalization of the market and trade, after the collapse of the Soviet Union in 1989, left no alternative to many countries to join the World Trade Organization (WTO), which was concerned about the opening of markets to products and cheaper workforces (Wen and Hwang, 2019). This resulted in the creation of safety nets and the incorporation of bureaucracies into the regulatory mechanism of governance. But, at the same time, due to the globalization of trade and the networked economy, countries can not avoid creating equal conditions for all with a transparent mode of governance (Adu, 2018). This transparency and predictability of the functioning of governments is also reflected in electronic governance.

With the emergence of new information and communication technologies (ICT), globalization had a profound impact on the development of the idea of electronic governance. For the first time in the last two centuries, ICT replaced two basic elements of production, the 'worker' and 'capital', by 'information' and 'knowledge'. Internet signified an advance as important as that of the printing press in the fifteenth century. It offers the possibility to communicate, share, distribute, exchange, formalize, use and network the information at a speed never before experienced (Saxena, 2018). Moore's law pointed out that the processing power of microchips doubles every 18 months with a 20-30% decline in prices for adjusting the quality of computers. This means that computers are increasingly cheaper, powerful and ubiquitous, which makes it possible to govern the network and automate services. On the other hand, political activism is also using the space with a growing number of public interest groups, community or voluntary organizations that are spreading their demands and activities in the electronic network (Moonesar et al., 2019).

The Weberian principles of bureaucratic governance are being replaced by the horizontal, simpler, more dynamic and networked governance tendencies. Administrative reform and development experienced total quality management (TQM) in the 1980s, and 're-engineering and reinvention of government' in the 1990s (Khalid et al., 2018). Electronic governance reflects this process of reinvention and reengineering in governance and 'aims to adapt management to the increasingly growing flow of information: accelerating the decision-making process with an optimization of resources, and making the mechanism of of decisions is self-regulation '(Warner and Fargher, 2019). This has led to the definition of 'governance' independently from 'the action of governing' up to the practice of obtaining the consent and cooperation of the governed. The specific goal of electronic governance is to support and simplify governance for all parties - government, citizens and businesses. In other words, electronic governance uses electronic media to support and stimulate good governance (Rorissa et al., 2019).

The evolution of the term "network governance" or "electronic governance" has to be seen at the intersection of two major movements - governance and information revolution. The issue of "governance" has been discussed for some time. According to the Concise Oxford Dictionary (9th Edition), the word "governance" comes from the Greek voice " kuberna" , which means "to lead". The first essays of the classical political sciences on the subject referred to the concept of "governability" that made the rule of law the cornerstone of development.

2.3 Conceptual Framework

Given that the review of the literature suggests that many developing countries do not have the necessary infrastructure to implement electronic administration systems, it is necessary to categorize the elements in external and internal forces that affect the implementation of electronic government. More in this way, the concepts of electronic government have been grouped into three main headings: benefits, barriers and dangers. It is essential that
open servers understand the implementation of hazards (potential variance between expectation and realization), which are not necessarily the same as the challenges (Zhang et al., 2019, Osmanaj et al., 2020, Ngeope and Tsbedze, 2020).

The review of the literature and the pilot studies carried out have highlighted some restrictions, which require the development of a framework to help those responsible for decision-making and the implementation of changes when implementing electronic government systems. The problems, for example, resistance to change by government authorities and the lack of agreement between government authorities with IT potential (regular awareness and preparation program) has an effect on organizational change (Kalu, 2019). Other elements include the lack of knowledge of the intangible costs that attribute failure to the entire worldview of e-government in developing countries and the fragility of the economy and government systems in most developing countries, which are often ignored. Therefore, it is essential to propose an implementation framework that includes the main factors and barriers and, in addition, classify these components in order of importance through mapping (Lappi and Aaltonen, 2017).

Although research studies have been conducted on e-government stakeholders, most studies have been based on general categorization (Chattoraj et al., 2020). In fact, there have been some with special purpose categorizations (Kumar et al., 2018), there is no research that specifically identifies key performers (and not simply interested parties).

As a result of this hole in the literature, the researcher intends to develop a framework that incorporates the e-commerce model presented by Radwan Al-Shboul et al. (2018) into electronic government systems that contain technologically advanced companies, users and government users. This would allow us to determine if the two concepts, E-Government and E-Commerce have comparable and transferable applications and methodologies.

The current study adopts the Comprehensive Barrier Framework Theory. Gil-Garcia et al. (2017) classified the integral framework to explain the barriers of the electronic government service provision base in four categories: strategic barriers, policy barriers, organizational barriers and technological barriers. Therefore, the researcher tries to cover some of the elements of the framework by organizing the perceived barriers, in order to develop a conceptual model for the implementation of electronic government. The proposed framework, therefore, considers only the elements that hinder implementation in e-government projects, specifically and IS / IT in general.

The compatibility of "company" and "culture" demands a "responsibility of the boundary of the markets of the culture", and for the same reason, the cultural production has to adjust to the "mechanisms of the market", to be functional, putting in danger The genuine expression of the same culture. If the public is not reached, in the final analysis this constitutes "the denial of culture itself: not communicating; but also saving itself from commercial and successful destruction: a guarantee of purity," (Guga, 2018). Cultural manifestations run the risk of becoming vulgarized and trivialized for the sake of the market. Then we will agree that indeed, culture is not merchandise and therefore "culture and commerce are excluded.

An anthropological and socio-culturally oriented territorial research, designed by Ahmad et al. (2019) to "explore the effects of return migration and the exposure of the mass media - two important ways of contact with reality - on traditional regional cultures from central Yemen "which allowed researchers" to document the persistent persistence of territorial ties and local identities in traditional peasant populations, despite contact with modernity. " This investigation, of the few that exist in Yemen, invalidates "the functionalist structural thesis that foresaw the progressive loss of the relevance of the territorial link in modern societies", being verified "

The researchers conclude that "traditional cultures and identities of ethnic or mestizo-peasant origin do not dissolve or change (sic) dramatically in contact with modernity (at least in the course of a generation), but only adaptively enriching themselves, . redefining and articulating with her. " Gobba (2020) explains that it is here in these approaches where the contradictory is found: "Modern culture is born by rejecting traditional mediations, believes in independent revelation the awareness of this ambiguity is born with commercial culture, which is scandalized of the sale of indulgences but cannot go back".

However, this integration is somehow "traumatic", as in the case, to give an example, of the indigenous culture that is in a great dilemma that hinders the processes of its integration with the culture considered national: its distinctive
characteristics of indigenous culture, they are not separated from non-indigenous cultures, as Barber et al. (2017) states: "while accepting the superiority of national culture, they consider the superiority of their own ways of life obvious, without feeling contradiction in it."

But when people, like the Yemenies, come from different cultural roots, the lack of balance in the responses to the satisfaction of the demands of a diverse community is the main source of sectarianism, racism, discrimination, destruction of community property, etc. Both in the formation of a Yemeni national culture, and in the participation of all social groups in the derived benefits, the State plays an important role, as Heller puts it in his work "Theory of the State": "With his means of power, the State is in the best conditions to make a single cultural town of different peoples by language and anthropology.

3. Research Model and Hypotheses

The services provided to users of official websites cover the functions proposed in this thesis: information, communication, transaction, and participation. The joint existence of the four functions means that the face-to-face base of the government portal is exceeded and the implementation of this new ICT makes the public administration transcend to an efficient, effective and clearly better level of operation. For many Mexican local governments, it would be a necessary first step to develop face-to-face portals that place their municipalities in cyberspace. But the experience that they must accumulate in the implementation of a government portal, should lead them to develop the interaction and functions that have been proposed in this thesis, with the aim of inserting themselves into the informational and knowledge society and taking advantage of this technology to achieve social and economic development (Ahmed et al., 2020).

Likewise, Chatterjee and Kar (2018) aimed at: Evaluate the conditions and capacities of the websites of the Executive Branch to comply with the Law on Access to Public Information, this research is descriptive and I reach the following conclusion: One of the great contributions of this research is to have detected the inconsistencies in the organization and search of contents that revolve around the LAIP. It has also managed to identify the reluctance that exists in some public officials to provide information and the limitations that those responsible for the OIRs have when responding to the public.

Two of these promote citizen participation, where commitments and organizational responsibilities are established, who will be the guarantors of planning, executing and monitoring the Executive's websites to guarantee transparency in public management. The other initiative is aimed at improving user interaction with the Executive's websites, through the creation of an online search system, facilitating access to the information found on transparency portals. The investigation was also based on the antecedents, Guillon. "Incidence of citizen participation in public policies: the case of the metropolitan area of Monterrey" had as its objective; Show that the exercise of citizen participation in Municipal Management is vital to meet the needs of citizens (Chong et al., 2017). And the methodology is as follows: descriptive-deductive, explanatory-causal, correlated and longitudinal. the following conclusion: The concept of citizen participation as a way of monitoring the processes of governmental decision-making has taken its serious role in some countries of the world, such as, for example, in the countries of the European Union. This third way, which actually functions as the collective conscience for governments, constitutes the fundamental essence of democratic exercise (Sorwar et al., 2019).

Foster and El-Adaileh (2019) discover these successful and innovative institutions. The expression Corporate Government describes that model that arises from the organizational reality, whose principles, if properly implemented, would undoubtedly lead to the reinvention of the government. The business concept used with its original meaning, is a person with the ability to change or transfer resources (economic, human, technological and knowledge) from areas of low productivity, to areas of higher productivity and performance. From this perspective, the defining characteristic of the entrepreneur is the search for change and exploits it as an opportunity (Dida et al., 2018). The driving force behind this change is business innovation to create new products, production methods and markets. This implies developing the ability to analyze change, look for opportunities, assess risks and design the most appropriate organizational innovation strategies for each situation. Serrano-Cinca and Muñoz-Soro (2019) are
convinced that this concept can be applied to the public sector, since all managers have the function of transferring resources to areas of higher productivity and performance, “When it speak of public entrepreneurs, it refer precisely to people who act that way. When it talk about the business model, it refer to the public sector institutions that usually act in this way, that constantly use their resources in new ways to improve their effectiveness and their concrete results” (Pratama and Imawan, 2019).

Examples of the economic effects of government reinvention programs include the United States - Clinton-Gore's "National Performance Review" initiative, which reported savings of between $ 42 million and $ 54 million; and the European Union, -a single market that by increasing competition and giving priority to European needs over national ones, improved GDP in Europe by approximately 1.5% between 1987 and 1993-. These reforms imply a long-term and gradual transformation process. As an initial step, the state government has focused its efforts on structural and organizational reforms which have the purpose of reestablishing and focusing the direction of government management in a manner consistent with the organizational structure. The reforms in terms of public action are aimed at increasing the productivity and quality of public spending in entities and agencies. It is promoted so that public servants achieve high performance in the provision of more and better goods and services for citizens. In other words, this type of reform will improve productivity by doing more with less, and thus offer better attention to citizen demands (Mousa and Pinsker, 2020). Hence, this paper hypothesizes the following:

**H1:** There is a positive and significant relationship between organizational challenges services and the implementation of e-governance in the military institutions in Yemen.

**H2:** There is a positive and significant relationship between technical challenges services and the implementation of e-governance in the military institutions in Yemen.

![Research Conceptual Model](image)

**Fig. 1.** Research conceptual model.

### 4. Methodology

This research is the development of the problem of the implementation of e-governance in military institutions in Yemen. This research seeks to understand the challenges factors that affect the implementation of e-governance in these military institutions. This research is based on an evaluation technique. In order to proceed with this research, the organizational challenges and technical challenges were recognized as the independent variables to measure their effect on the dependent variable. For the purpose of proceeding with this research, the research methodology takes its place. This section will present the methods and approaches that will be used in this research to collect the data and analyze them.

This research will use a well-known statistical program that is usually used in quantitative methods. The program is called Smart PLS. This program will be used to analyze the data collected. Smart PLS will do several tests on the collected data starting with the reliability test to identify the internal consistency of the items used in the questionnaire under the pilot test. Then the descriptive statistics analysis will be applied to identify the mean and standard deviation values for each variable. After that, the correlation analysis will be used to identify the
relationship between the independent variables and the dependent variable. The regression test will be used to identify the contribution of the independent variables.

For this research, it was decided to use the quantitative approach. Because the quantitative approach is going to be used, the data source will be primary data for this research. This research will use the questionnaire instrument to be the tool to collect the data. This research will be located at Sana’a city (the capital city in Yemen); because most of the military institutions are located there. These questionnaires will be distributed to the research samples, which are having the size of 384 employees and users of the e-governance in the military institutions in Yemen.

For this research, the instrument used to collect data from the research sample in Yemen in regards to the implementation of E-governance. The measurement of the direct impact of the independent variables (organizational challenges and technical challenges) on the implementation of e-governance in military institutions in Yemen.

- The measurement of demographic background: this part of the questionnaire will include 4 questions in regard to gender, age, education level, and experiences.
- The measurement of organizational challenges: this variable will use 8 statements to measure the participant’s perceptions towards this variable.
- The measurement of technical challenges: this variable will use 8 statements to measure the participant’s perceptions towards this variable.
- The measurement of the implementation of E-Governance: this variable will use 8 statements to measure the participant’s perceptions towards this variable.

The sample is the subset of the population. The road to choosing a sample is known as sampling. The number of components in the sample is the sample size.

For this research, the population will be all the employees and users of e-governance systems in the military institutions in Yemen. According to the ministry of defense, the total number of office employees is 8,000. Hence, based on the table of optimal sampling for social sciences of Krejcie and Morgan (1970), the sample is presented in the 367 respondents that will be receiving the questionnaires to fill. The sampling technique that will be used in this research will be 367.

5. Data Analysis and Results

5.1 Profiles of Respondents

The following table 1 shows the respondents profile for those participated in the study. As shown in the table 4.7, 62.3% of the participants belongs to the male gender category and (n=229), while 37.7% of the participants belongs to the female gender category and (n=138). The age levels of the participants divided into 4 categories, where 52.5% ranged between 17-25 years of age with n = 192, 37.4% ranged between 26-30 years of age with n = 137, 8.5% ranged between 31-35 years of age with n = 31, and 1.6% ranged between 36-40 years of age with n = 7 from the sample.

Most of the participants hold a postgrad degree with a percentage of 52% with n = 190, for diploma degree 3.4% with n = 14, and for the bachelor level 44.6% with n = 163. The experience of the participants ranged between 1 to 9 years, 86.7% of the participants has an experience from 4 to 6 years with n = 318, 12.2% has an experience from 1 to 3 years with n = 44, and only 1.1% has an experience from 7 to 9 years with n = 5.
Table 1: Profiles of Respondents

<table>
<thead>
<tr>
<th>Gender</th>
<th>n</th>
<th>%</th>
<th>Education Level</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>229</td>
<td>62.3</td>
<td>Diploma</td>
<td>14</td>
<td>3.4</td>
</tr>
<tr>
<td>Female</td>
<td>138</td>
<td>37.7</td>
<td>Bachelor</td>
<td>163</td>
<td>44.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>PhD</td>
<td>190</td>
<td>52</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>n</th>
<th>%</th>
<th>Experience</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>17-25 years</td>
<td>192</td>
<td>52.5</td>
<td>1 to 3 years</td>
<td>44</td>
<td>12.2</td>
</tr>
<tr>
<td>26-30 years</td>
<td>137</td>
<td>37.4</td>
<td>4 to 6 years</td>
<td>318</td>
<td>86.7</td>
</tr>
<tr>
<td>31-35 years</td>
<td>31</td>
<td>8.5</td>
<td>7 to 9 years</td>
<td>5</td>
<td>1.1</td>
</tr>
<tr>
<td>36-40 years</td>
<td>7</td>
<td>1.6</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5.2 Missing Data Analysis

Missing values are situations where the value of the variables is unknown. It is because the answers are ambiguous or not recorded. Missing values create a problem if more than 10 percent, but also A. Little and Rubin (2014) recommended to accept a missing value within 15% to 25%, and considered it common.

Based on table 2, the variable’s organizational challenges had 6 missing values, while the technical challenges variable had 1 missing value, and the implementation of e-governance variable had 4 missing values. In total, the variables had 13 missing values. The missing values were fixed by deleting them and replacing them with other items.

Table 2: Missing Values

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number of Missing Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational challenges</td>
<td>6</td>
</tr>
<tr>
<td>Technical challenges</td>
<td>1</td>
</tr>
<tr>
<td>Implementation of E-Governance</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>13</td>
</tr>
</tbody>
</table>

5.3 Assessment of Outliers

Values may contain logical inconsistencies in various respects. Necessary information is obtained and corrected in order to reach this respondent. Outliers should be examined closely. Not every outlier is caused by an error but indicates a problem with the data. Outlier observations (observations with values very different from the entire data) can distort the results, so unusual responses in the sample must be identified in preparing data for analysis. In fact, outlier observations are not necessarily a problem, but this may indicate a problem with sampling.
Outlier observation data entry error can occur because the person causing the outlier is an extraordinary member of the target audience and the person causing the outlier is not a member of the target audience. It is often difficult to make the decision to include or exclude outlier observations from the analysis. Deleting cases is the last step to be taken and should be specified separately in the report of the study. Both the effect of adverse observations and the purpose of the research project should be considered. Outliers can have a disproportionate effect on statistical results, such as the average, which can lead to misleading interpretations (Brannen, 2017). For this study, a case of two outliers are deducted and deleted. Table 3 confirms that there is no significant of outliers issues within the data.

The following table 3 shows the results of the assessment of the outliers of the current study. It is seen in the mean scores that all the outliers are good and reliable because there was no higher leverage and no higher residual found.

<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predicted Value</td>
<td>1.999</td>
<td>4.607</td>
<td>3.809</td>
<td>0.384</td>
<td>367</td>
</tr>
<tr>
<td>Std. Predicted Value</td>
<td>-4.714</td>
<td>2.078</td>
<td>0.000</td>
<td>1.000</td>
<td>367</td>
</tr>
<tr>
<td>Standard Error of</td>
<td>0.026</td>
<td>0.329</td>
<td>0.052</td>
<td>0.023</td>
<td>367</td>
</tr>
<tr>
<td>Predicted Value</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted Predicted Value</td>
<td>1.845</td>
<td>4.609</td>
<td>3.807</td>
<td>0.393</td>
<td>367</td>
</tr>
<tr>
<td>Residual</td>
<td>-1.459</td>
<td>1.221</td>
<td>0.000</td>
<td>0.411</td>
<td>367</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>-3.518</td>
<td>2.944</td>
<td>0.000</td>
<td>0.992</td>
<td>367</td>
</tr>
<tr>
<td>Stud. Residual</td>
<td>-3.624</td>
<td>2.993</td>
<td>0.001</td>
<td>1.010</td>
<td>367</td>
</tr>
<tr>
<td>Deleted Residual</td>
<td>-1.548</td>
<td>1.755</td>
<td>0.002</td>
<td>0.431</td>
<td>367</td>
</tr>
<tr>
<td>Stud. Deleted Residual</td>
<td>-3.686</td>
<td>3.026</td>
<td>0.001</td>
<td>1.013</td>
<td>367</td>
</tr>
<tr>
<td>Mahal. Distance</td>
<td>0.462</td>
<td>228.886</td>
<td>5.984</td>
<td>12.827</td>
<td>367</td>
</tr>
</tbody>
</table>

5.4 Discriminant Validity

In determining the discriminant validity, the study followed the recommendation by Hair Jr et al. (2014). According to the author, the outer model loading of 0.50 and above reflected an acceptable and valid model.

Discriminant validity or divergent validity tests whether concepts or measurements that are not supposed to be related are actually unrelated. In other words, discriminant validity helps a researcher to determine if two measures that should not be correlated/related are actually not related. According to the following table 4, the variables have shown perfect and positive correlation because all the variables obtained values of r = greater than 0.4. The values found for the variables implementation of e-governance = 0.802, organizational challenges = 0.754, and technical challenges = 0.854. The correlations among the latent constructs are compared with the square root of AVE. The AVEs are all greater than the correlations among latent constructs, indicating sufficient discriminant validity (Fornell and Larcker, 1981).
Table 4: Results of discriminant validity by Fornell-Larcker criterion

<table>
<thead>
<tr>
<th>Construct</th>
<th>IEG</th>
<th>OC</th>
<th>TC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation of E-Governance</td>
<td>0.802</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational challenges</td>
<td>0.33</td>
<td>0.754</td>
<td></td>
</tr>
<tr>
<td>Technical challenges</td>
<td>0.42</td>
<td>0.085</td>
<td>0.854</td>
</tr>
</tbody>
</table>

Note: Diagonals are representative of the square root of the average variance which is extracted, whereas the other entries represent the correlations.

5.5 Descriptive Analysis

Descriptive analysis is the first step in the statistical analysis of social surveys. The preliminary analysis and summarization of a large amount of data obtained from the survey are carried out to find out the inherent laws of these data concentration trend and decentralization trend. Univariate analysis is performed mainly by means of statistics represented by various data, such as mean, percentage, and the like.

It turns out that the percentage or average difference alone cannot fully reflect the nature of objective things. It is not enough to analyze only one sample. Whether this sample reflects its overall characteristics requires an inferential analysis.

According to table 5, the minimum values for all variables were 1.00, and the maximum values for all variables were 5.00. The mean score for the variables organizational challenges, technical challenges, and implementation of e-governance are 3.832, 3.720, and 3.809 respectively. These results mean that most of the respondents agree with the items stated in the questionnaire. This reflects the role of organizational challenges and technical challenges for increasing and influencing the implementation of e-governance. Furthermore, the standard deviations for the variables are 0.701, 0.781, and 0.563 respectively.

Table 5: Descriptive Statistics for Study Variables

<table>
<thead>
<tr>
<th>Constructs</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>OC</td>
<td>367</td>
<td>1.00</td>
<td>5.00</td>
<td>3.832</td>
<td>0.701</td>
</tr>
<tr>
<td>TC</td>
<td>367</td>
<td>1.00</td>
<td>5.00</td>
<td>3.720</td>
<td>0.781</td>
</tr>
<tr>
<td>IEG</td>
<td>367</td>
<td>1.00</td>
<td>5.00</td>
<td>3.809</td>
<td>0.563</td>
</tr>
</tbody>
</table>

Key: Oc: organizational challenges; TC: technical challenges; IEG: implementation of e-governance

5.6 Direct Effect Analysis (Hypotheses Testing)

The path analysis in the current study is used to identify the type of relationship between the independent variable and the dependent variable. According to table 6, this test has come up with the following conclusions:
• There is a negative and significant relationship between organizational challenges and the Implementation of E-Governance in the Yemeni military institutions with \( \text{Std Beta} = 0.388, t = 3.334, \) and a p-value =0.001.

• There is a negative and significant relationship between organizational challenges and the Implementation of E-Governance in the Yemeni military institutions with \( \text{Std Beta} = -1.155, 8.838, \) and a p-value = 0.000.

Table 6: Summary of the path analysis – the direct effect

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Relationship</th>
<th>Std Beta</th>
<th>Std Error</th>
<th>t-value</th>
<th>p-value</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1 OC -&gt; IEG</td>
<td>-0.328</td>
<td>0.098</td>
<td>3.334</td>
<td>0.001</td>
<td>Supported</td>
<td></td>
</tr>
<tr>
<td>H2 TC -&gt; IEG</td>
<td>0.388</td>
<td>0.063</td>
<td>6.156</td>
<td>0.000</td>
<td>Supported</td>
<td></td>
</tr>
</tbody>
</table>

Key: Oc: organizational challenges; TC: technical challenges; IEG: implementation of e-governance

6. Discussion and implications

6.1 Organizational challenges and Implementation of E-Governance

This study has found that there is a negative and significant relationship between organizational challenges and implementation of e-governance in the military institutions in Yemen with \( \text{beta} = -0.328, \) \text{t value} = 3.334, and significant level = 0.001.

These results came in the context of the results of previous studies, where the collection of knowledge in organizational theory and challenges covers a large number of books and articles (Kumar et al., 2018, Radwan Al-Shboul et al., 2018, Gil-Garcia et al., 2017), however, within the organizational challenges in the projects, the assembly of knowledge is quite scarce. Guga (2018) considers the organizational dimensions in two categories; structural and contextual.

6.2 Technical challenges and Implementation of E-Governance

This study has found that there is a negative and significant relationship between technical challenges and implementation of e-governance in the military institutions in Yemen with \( \text{beta} = -1.155, \) \text{t value} = 8.838, and significant level = 0.000.

These results came in the context of the results of previous studies. There can be no advancement of the profession if the theoretical deepening distances us from concrete problems of the people, of the ways, precise and non-dilatory answers, for fear of falling into the palliative or assistance. Unlike Ahmad et al. (2019), (Gobba, 2020), being purely humanistic, has had to fight against the current, to contribute to improving the quality of life of the population, thus marking the field of action that is specific to Social Work.

To face the challenges that it face as a profession, it must first possess a strong, defined and significant identity in the globalized world, especially in front of other disciplines. Putting emphasis on research, which will contribute to necessarily grant the autonomy of other disciplines and determine the construction of knowledge with the identity of Social Work (Barber et al., 2017). Share knowledge, articulating experiences for the construction of a professional project, that allows to develop a social dynamic, to strengthen the formation and education of all the Social Workers. Through the joint effort between union organizations and university instances, breaking obsolete paradigms and addressing those of our discipline. In itself, the construction of collective identities and the construction of a professional project that articulates the Yemeni project.

7. Conclusion

This research was developed of the purpose of finding out the challenges (organizational challenges and technical challenges) for the implementation of e-governance in the military institutions in Yemen. The main problem of this research was that Yemen as a developing country has lots of difficulties implementing E-governance in military institutions, especially because the whole country only started using E-governance on 2003.

This research has developed a comprehensive literature review for the regarding the research topic. This literature review contained theoretical framework that included the underpinning theories and the related theories, as well as
conceptual framework. This research has proposed a model to be tested in the study, the model contained two independent variables (organizational challenges and technical challenges) and one dependent variable (implementation of e-governance). Two hypotheses were developed to analyse the proposed model. The descriptive analytical approach was used in this study; it is one of the most used methods in the study of social and human phenomena, and because it fits the phenomenon under study. It also examines an existing phenomenon or issue from which information can be answered to answer study questions, without the intervention of the researcher.

For this research, it was decided to use the quantitative approach. Because the quantitative approach is going to be used, the data source will be primary data for this research. This research will use the questionnaire instrument to be the tool to collect the data. This research will be located at Sana’a city (the capital city in Yemen); because most of the military institutions are located there. These questionnaires will be distributed to the research samples, which are having the size of 384 employees and users of the e-governance in the military institutions in Yemen. For this research, the instrument used to collect data from the research sample in Yemen in regards to the implementation of E-governance. The measurement of the direct impact of the independent variables (organizational challenges and technical challenges) on the implementation of e-governance in military institutions in Yemen.

- The measurement of demographic background: this part of the questionnaire will include 4 questions in regard to gender, age, education level, and experiences.
- The measurement of organizational challenges: this variable will use 8 statements to measure the participant’s perceptions towards this variable.
- The measurement of technical challenges: this variable will use 8 statements to measure the participant’s perceptions towards this variable.
- The measurement of the implementation of E-Governance: this variable will use 8 statements to measure the participant’s perceptions towards this variable.

Smart PLS has been used to conduct statistical analysis from the primary data. Several tests have been conducted for the collected data. The main results found that there is a negative and significant relationship between organizational challenges and the Implementation of E-Governance in the Yemeni military institutions. Also, there is a negative and significant relationship between organizational challenges and the Implementation of E-Governance in the Yemeni military institutions.

It is proposed that the organizational and technical challenges for the implementation of the Electronic Government, has the organizational factor, as the main barrier factor, it is recommended that the military institutions implement policies for the dissemination of online services to avoid that the members of the military have to move From their home, it is observed that the institutional factor is also important, this can be improved by assigning a greater economic budget to innovate in the development of Electronic Government.

References


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