The Role of E-Readiness Rank on the Implementation of E-government in Military Institutions in Yemen

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ABSTRACT

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 one independent variables (e-readiness rank) and one dependent variable (implementation of e-governance). One hypothesis was 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.

The population of this research was the Yemeni military stakholders. The sample of the research were 367 participants.

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 positive and significant relationship between E-readiness rank and the Implementation of E-Governance in the Yemeni military institutions.

It is recommended to face e-readiness barriers to access electronic government platforms, for the Yemeni population, the implementation of cultural programs that promote the use of new technologies through education, several initiatives of virtual classrooms, community talks could also be given, introducing the use of technologies in the customs of the members of the military, at least so that the advantages they bring beyond being used as simple consultation platforms or means of the interaction of social networks.

Keywords
E-Readiness Rank, Implementation of E-government, Military Institutions

Introduction

Yemen is an Arab county that is located southwest of the Arabian Peninsula in Western Asia. It has an area of about 555,000 square kilometers and has a population of 26,687,000 according to the 2015 population projection. Yemen is bordered to the north by Saudi Arabia and to the east by Oman, with a southern coast on the Arabian Sea and a western coast on the Red Sea. Yemen has more than 200 islands in the Red Sea and the Arabian Sea, the largest of which are Socotra and Hanish. The Yemeni Constitution provides for the democracy of the state, its multi-party and political approval, its adoption of a free economic system, and adherence to the international covenants and covenants stipulated in the Universal Declaration of Human Rights. Yemen is a member of the League of Arab States, the United Nations, the Non-Aligned Movement, the Organization of Islamic Cooperation and the World Trade Organization .

The Yemeni armed forces are the regular forces of the Republic of Yemen, consisting of four main divisions: Ground Forces, Air Force and Air Defense, Navy and Coast Defense, Border Guard and Strategic Reserve Forces, which include special operations, presidential protection and missile brigades. 43 globally in the list of the world's most powerful armies for 2013, which is annually compiled by Global Fire Power specialized in armaments and ranked fifth in the Arab world after Egypt, Saudi Arabia, Algeria and Syria.

Because that Yemen is a developing country, the country needs the technology and resources in all of its shapes to develop and improve faster in efficient ways. The military institutions are the first line of defense for the country, which gives the military institutions credit for keeping the

country safer and stable. The stability of the country gives the country the greatest opportunities for the development and improvement needed.

E-governance is one of the most important pillars that can enhance the military institutions by easing the removing the obstacles raised in the internal transactions among soldiers, officers, and superiors in military institutions. Enhancing and improving the military institutions will reflect in enhancing and improving the country. Information technologies are used as support for governmental activities (E-governance) that are currently being implemented in the country. Yemen is still considered as a newborn country to the concept of E-governance. There are several sectors in the country where they already implemented the E-governance application to their services.

The aim of this study is to find out the impact of E-readiness rank 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 onillustrating the model used in the study as well as the hypothesis 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 conclusionwhich includes future research directions.(Raju&Phung, 2020)

Literature Review

2.1 Historical Overview of E-governance

Academics and researchers have tried to differentiate between E-Government and E-Governance. While the concept of E-Government is described as a bipolar that combines the key features of the technology department and the open organization and focuses on customer service - main office and authorized structure - back office; NeGSt (2005) explains e-Governance as the deployment of ICT devices and processes for efficient organization and greater revenue generation for better governance(Farooq&Raju, 2019). While the E-Government focuses on government performance in terms of implementing specific projects, e-Governance tends to have a generously proportioned vision of social objectives, including the coordination of efforts, since all that really matters for the Governance are the results.

According to UNESCO, governance refers to the exercise of political, economic, and administrative expertise in the management of a nation's problems, including the explanation of citizens' interests and the exercise of their rights and legal commitments(Chetty&Phung, 2018). Therefore, E-Governance implies "the performance of this governance through the electronic means to facilitate an efficient, fast and transparent process of dissemination of information to the people in general, and other agencies, and to carry out activities of the governmental organization".

Other researchers define e-Governance as a broader concept that deals with the full spectrum of the relationship and networks within the government regarding the use and use of information and communication technologies in a comprehensive manner. Therefore, it is a method to describe the connections between the government and its broader environment political, social, and administrative- within the context of the use of information and communication technologies in government. Electronic governability expressed as expansive, general, and more complex use of the advanced revolution.(Raju&Phung, 2019)

However, the electronic government is sometimes used interchangeably with e-government in the context of its reception or implementation in information systems. Define and evaluate the effects that technologies are having on the practice and organization of government and the relationships

between open servers and society in general. E-governance encompasses a series of steps necessary for government agencies to develop and manage to ensure the successful implementation of e-government services for people in general who are on the loose.(Harvard Business Review, 2016)

In the aspect of service provision, it is widely believed that electronic government represents the effect of information and communication technologies on government beyond the reach of the provision of electronic services by the government to citizens and other members. of the general population, while citizens receive ICT to influence government activities and inactions(Raju, 2018). Electronic governance includes new styles of leadership, better approaches to debate and decides strategy and investment, better approaches to access education, better approaches to listen to citizens, and better approaches to classify and deliver information and services.

E-governance is the use of information technology generally and e-commerce, in particular, to provide citizens and organizations with more convenient access to government information and services and to provide the delivery of public services to citizens, the business partners, and those who work in the public sector.The e-governance in the United States was led especially by the 1998 paperwork elimination act of the government and by December 17, 1999, of President Clinton, the memorandum in the E-Government, which called for the top 500 forms used by citizens who will be registered online before December 2000.

As shown below, many Latin American countries have strong e-government plans and several have developed advanced e-government solutions that have become an international benchmark. The clearest illustration of the transcendent role that electronic government begins to play in the transformation of Latin America and the Caribbean is the recently held Summit of Presidents of Monterrey, whose Declaration of Nuevo León devotes a paragraph to electronic government and its importance for the progress region of.

On the other hand, Latin America Puntogob has allowed the AICD to collaborate with a prestigious institution of FLACSO (Latin American Faculty of Social Sciences), whose contributions to the economic and social agenda of Latin America are as important in number as they are valuable in content. This document, fruit of the joint effort of FLACSO and the AICD, wants to be a tool to support the efforts of modernization and transparency that the governments of the region are carrying out and reaffirms the commitment of the IACD with a subject such as electronic government, which is becoming a key element in the development of Latin America and the Caribbean.

Since the irruption of the Internet, high expectations have been generated regarding its impact on the exercise of politics and democracy. From the point of view of the Government, the use of the Internet carries the pro-table of the increase of efficiency and the generation of savings, greater transparency in the management, and greater proximity to citizenship. From the point of view of citizenship, expectations point to the fact that more and better information can be accessed, control can be exercised over authorities, increased spaces of influence and, in general, increase efficiency in the use of time and resources means.

Regularly, a citizenry that has already begun to question the traditional way of doing things is pressuring public and political institutions. Before the Internet allowed it, no one would have imagined accessing all the files with the vote of each parliamentarian or doing online procedures, claiming for bad service from home or office.This growing communication between the State and citizens through electronic means has been a novel component of the State modernization process
What is new, however, is not the use of technology per se, but the possibility of opening more direct communication channels to bring authorities and citizens closer together. It is a new form of mediation that affects, without any doubt, traditional representation schemes(Jr. &Raju, 2018).

Another edge of this field of observation is related to the future possibility of Internet voting, as one of the great advances that will help solve practical problems in the conduct of elections.

Despite the various promises and expectations assigned to the role of technology in politics and development, Latin America has low rates of access to new technologies. In Latin America, the average access is 5% of the total population; while in countries such as Korea, Finland, Canada, and the United States more than 60% of the population accesses the Internet.

The emergence and penetration of the Internet are one of the most significant technological developments of the last century as a powerful means of two-way communication that has impacted the way of doing business, having fun, educating, and communicating, among many other activities. The vertiginous technological advances of computing and telecommunications have not only made it possible for society to change, but also provide the possibility for governments to be able to transform(García-Rodríguez et al., 2013).In the mid-1990s, many Western countries entered fully into the information age, adopting the idea that new technologies could be exploited to "reinvent" government tasks. That is, the exploitation of new information and communication technologies (NICT) is considered as the key to making governments more effective, effective, with higher quality, and democratize.

2.2 Related Theories

Each of the perspectives that make up the frameworks shows different ways of representing the relationships that derive from the division of the participating groups or domains. This division into perspectives facilitates the analysis of the issues and issues that are the result of these relationships(Chang et al., 2017). That is, the frameworks serve to present a simplified view of the relationships between the participating groups and, most importantly, facilitate the understanding and implementation of the ego government

But the understanding of the phenomenon of e-government must go beyond the theoretical explanation in terms of interactions between different perspectives, be it groups, sectors or domains, which is the result of the great attention that has been paid to the monitoring of evolution The e-government was the creation of generally accepted models that describe and predict the growth of e-government in stages or strategic phases. However, public administrators, technology analysts and academics wonder if there is any better way to understand the evolution of e-government and to develop e-government successfully(Hair, 2006).

2.3 Conceptual Framework

Organizational change often occurs when organizations are undergoing a change. It is related to the gradual improvement of existing organizational capacities. Organizational change occurs when business strategies or important sections of an organization are modified, and are sometimes referred to as restructuring, restructuring or reorganization. With technology in evolution, organizational battle with the need to meet with the constant change in strategies, processes and people. This has raised awareness of ICT in organizations in the daylight sector, where senior managers and decision makers focus on the need to improve their business processes, performance and strategies through the implementation of electronic government(Anjum et al., 2020). These changes are beneficial for all interested parties, including end users. The researcher, therefore, considers that the conceptual framework would work as a decent practice guide and a frame of reference for those responsible for decision-making and the implementation of changes, especially in the organizations of the daylight sector.

It seems that there is limited literature and some conceptual and theoretical frameworks on information systems (IS) that break down the process of implementing e-government in

developing countries. In fact, some of the models developed have been in Geographic Information Systems(Jahan&Alrajawy, 2020). However, relatively few research studies have focused on the drivers, barriers and dangers of e-government, including the elements of implementation, and most of the model developed has been based on generalizing the implementation factors and not categorizing them into internal or external elements external. In fact, the review of the existing literature indicates that some creators have classified the risk factors as a characteristic of the challenges or as a characteristic of the cost factors. Despite the drivers and barriers, the implementation of electronic government should require the evaluation of risk factors, for example, technological, political, people, organization, money, security and protection.

Institutional theory is known as variance theory because it can explain the difference that occurs between institutional types, rather than explaining the development of one or more individual bases. The systematization implies to give value to the structures, and this will be beneficial for the open servers because it has the attributes that accompany it: independence, versatility, complexity and coherence; and these attributes would allow the identification of elements that could help to measure the foundations and the level of standardization. The theory is related to different individual behaviors and different effects in decision-making.

Other researchers have suggested that the solidity of the institutional examination makes it relevant to determine the institutional heterogeneity and the forces of homogeneity, and the multiplicity of its processes within the fields and in the crossed establishments. As a result, the theory will fit perfectly in the identification of external and internal components, including the different concepts that influence the implementation of e-government within the context of developing countries.

- **E-readiness Rank**

E-readiness refers to the capacity of a nation and the state of readiness to participate in the electronic world. The state of development is usually measured by the country's information and communication technology (ICT) infrastructure and the capacity of its government and citizens to use the positive effects of ICT for sustainable development.(Scherer & Palazzo, 2011)

The measures to evaluate the electronic preparation can change of nation to nation or even depending on the level of investigation to which it is interested (small scale, or great scale) considering not only the necessity to recognize the electronic preparation of the nation still in some specific environments / areas. The basic factors that are taken into consideration to measure the electronic preparation of a nation are:

- Infrastructure of information and communications technology (ICT).
- Degree of preparation of the government of a nation, citizens, companies and NGOs to use ICT for sustainable development.
- Ranking of digital economy.

The readiness index for e-government reflects the disposition of a nation, city or government agency in terms of e-government development. The index can be described as the generic limit of the sector of the general population to make use of ICTs to provide quality services and information to the general population together with effective communication devices that promote human development.

The models for evaluating preparation for e-learning determine and evaluate the preparation of a society and an economy with influence of IT. However, in terms of device development and surveys, a few global / regional surveys have been developed to assess e-government; for example, the electronic preparedness index of the United Nations Department for Economics and

Meetings (UN-DESA), the positioning of electronic government at Brown University, the index of network readiness (NRI) of the Economic Forum World (FEM), the International Telecommunications Association (ITU) ICT Development Index (IDI) and electronic preparation rankings of the Economist Intelligence Unit (EIU).

- **Implementation of E-government**

As electronic governance supports and facilitates good governance for all parties involved, it need to understand that electronic governance is not just a website or simply a digitalisation of the provision of services.It really consists of a broader definition of the commitment and depth of relations between citizens and government. There is a slight difference in meaning between electronic governance and electronic government. Governance is the way or the process of guiding a society to better achieve its goals and interests, while the government is the institution or the instrument to carry out that work. This means that the government is one (of the many) examples of governance.

It is interesting that different international organizations argue that electronic governance, by its approach, frames governance in general(Publications et al., 2013). For example, the World Bank's concern with governance relates exclusively to the contribution it makes to social and economic development through economic and structural liberalization. Therefore, for them, electronic governance implies the use of ICT channels to change the way in which citizens and companies interact with the government to enable citizen participation in decision making, greater access to information, more transparency and the strengthening of civil society.(Benavides-Velasco et al., 2014)

The Public Administration Group (PUMA) of the Organization for Economic Cooperation and Development (OECD) focuses on three main elements of online and participatory e-governance: 'information, active participation and consult.The government of India relied on SMART to raise its point of view on electronic governance. This refers to "the application of IT to the functioning process of the government to achieve a simple, moral, responsible, sensible and transparent (SMART) by its acronym in English)". This vision helped India to map out other strategic goals and initiatives on e-governance.(Abbas, 2020)

considers that electronic governance aims to materialize processes and structures to take advantage of the potential of information and communication technologies (ICT) in various levels of government and the public sector and beyond, with the aim of strengthening good governance.Although there are different definitions, it is true that electronic governance has the potential to ensure that citizens stop being a passive consumer of the services offered to them, by allowing them to play a more proactive role in deciding which types of services They want and through what structure this service can best be provided.The conceptual debate of 'electronic governance' can be developed around the challenges of putting it into practice according to its objectives.(Graham, 1992)

Electronic governance, in cases where it refers to a 'more committed and interactive citizenship', creates a space for discussion. What does it mean when it is put into practice? It may be that the governments or legislative bodies, which are generally resistant to 'change', find it difficult to transition. The commitment, attitude change or leadership it requires stimulates debate about how the government can handle this situation(García-Rodríguez et al., 2013). The biggest obstacle that governments will have to solve to face this new challenge will be to develop administrative means and a management service, consisting of sufficient resources, funds and personnel to achieve it. The lack of political commitment may increase, particularly in cases where electronic

governance is not in the service of the political interests of the main participants, even when other factors are present.

If electronic governance refers to a greater participation of citizens through digital media, then the 'digital division' itself is an important area to take into account. The causes of the 'digital division' are not technical, but socioeconomic. Therefore, there are aspects related to access, connectivity, education, skill, financing capacity, ., which continue to be the essential elements underlying electronic governance. The 2003 UN Global Public Sector Report (E-Government at the Crossroads) suggests three prerequisites for electronic governance: a minimum of technological infrastructure, human capital and connectivity, for all. Therefore, 'the primary challenge of e-government for development is how to achieve it,' states the report.

Another important consideration is that electronic governance is a process, not a decisive end of the evolution of its meaning. Nor does it imply a standard trajectory of progression. Therefore, countries need to find the way that best fits them and must participate in a process of 'dialogue, learning, capacity building and facilitation', which is a 'learning by doing' approach.On the other hand, electronic governance, whose base lies primarily in ICT, often departs from real governance. As, 'e-governance can be of little use if it erroneously suggests that the application of ICT is an end in itself. It may be more appropriate to speak of integrated governance or, perhaps, of intelligent governance that prioritizes the objectives of governance and considers ICT as a part of the means to achieve those objectives together with people, processes and information.

Many argue that the mission of electronic governance is to bring national, regional and local administrations closer to ordinary people to offer effective and efficient services. This means that the government provides services to citizens, but less emphasis is placed on how citizens participate and make decisions in the democratic process(Sivarajah et al., 2017). The concept of electronic governance suggests an interaction in both directions and promises a wider interaction with citizens. But in the literature on electronic governance it remains uncertain when and how it would be done. In reality, governments focus mainly on the electronic provision of services and can avoid the controversial problems of good governance (such as democracy, participation, equality). Some also think that the development of electronic governance will inevitably lead to electronic democracy. Clift believes that as governments provide more online services there will be an extraordinary change in the willingness of citizens to use the different tools of electronic democracy. But the simple fact that the government participates in online activities with citizens does not necessarily mean that an electronic democracy mechanism will be produced. There are many factors involved in this. The Public Administration Group (PUMA) of the Organization for Economic Cooperation and Development (OECD) has articulated three main elements required for online transactions between government and citizens: information, active participation and consultation.

Research Model and Hypotheses

Electronic Government is not only an efficient mechanism that will improve the quality of services, but also a tool that will allow governing in a different way because it brings society closer to the institutions. According to a press release from the United Nations on the V World Forum on Government Reinvention, governments from all over the world, regardless of their level of development, have in common the important difficulties of maintaining and improving capacities of its public administration to deal with national and international environments of increasing complexity(Fulgoni, 2014). The public sector is expected to modernize its infrastructure and guarantee public education and health services in order to achieve the Millennium Development Goals aimed at improving the living conditions of citizens. However,

governments are also under pressure from financial markets and their constituents, who demand that they cut their deficits and cut tax increases. "The public sector must continually strive to improve the way it works,".

E-Government can be described in terms of a marketing campaign. It can also be said that it is a tool to improve efficiency, a new form of communication, that it is the future, etc. However, when it is explained that the Electronic Government will be available to citizens permanently and accessible, it is quickly and easily understood not only its function but also its essence without the need for further explanations. Although the tools to govern will change, the goals of government will remain the same, and so will the needs of society. It is not a novelty to point out that the rulers have failed to improve the situation of broad social sectors. Therefore, if everything continues to be done in the same way but in a faster and more efficient way, it is very likely that the situation of many people will continue the same or even worse.

mentioned: Citizen participation is the mediations between society and government so that different social subjects intervene, based on their diverse interests and values, and influence public policies and government structures, based on the claim of the right to intervene in matters that concern them. Canto tells us that it is the mediation between the government and satiety based on their collective interests and in that way, they can influence public policies and demand their right to intervene in matters that concern them. stated: Participation as the political and legal capacity of citizens to intervene individually and collectively, directly or through their legitimate representatives and through different modalities in the management processes of the municipality, especially those that affect the conditions material, social, political, economic, and cultural life of the population. Citizen participation is a political process that involves relationships between various actors, one of which is the local authority. For this reason, the path of participation is complex and problematic, something that is not always taken into account.

Develop capacities and high availability services associated with processes, in which one or more institutions participate, and are accessed from a single window in order to reduce request processing times, promote the development of citizens, improve the institutional competitiveness, and transparency of the State, through the intensive use of information and communications technology(Raju&Phung, 2018). In the current context of the development of Electronic Government in Peru, a definition of basic standards is necessary, to allow the interoperability of systems within the public sector and with the private sector, for this reason, it is necessary to define them: Information exchange processes documentary through digital media. Interfaces and information exchange schemes through information services (web services)

Methodological standards in project management in technology and application of information security policies, software development cycle, and process modeling. Development of portals and administration of institutional content and websites, through the use of technologies that facilitate the exchange of information(Farooq&Raju, 2019). Technologies and components of the open and modular architecture that allow the interoperability of Electronic Government applications (protocols, interfaces, messages, data structure, encryption). What the ongei mentions is to take advantage of and use ICT by promoting the participation of one or more public institutions, thus reducing the time in processing applications or other procedures and promoting transparency in the public administration

. Hence, this research hypotheses the following:

H1: There is a positive and significant relationship between e-readiness rank and the implementation of e-governance in the military institutions in Yemen.

Fig. 1.Research model.

Methodology

The methodology of the research provides both the student of higher education and the professionals with a series of theoretical-practical tools for the solution of problems through the scientific method. This knowledge represents an activity of rationalization of the academic and professional environment, promoting intellectual development through the systematic investigation of reality.

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 willingness factors that affect the implementation of e-governance in these military institutions(Farooq et al., 2019). This research is based on an evaluation technique. In order to proceed with this research, the e-readiness rank factor was recognized as the independent variable to measure its 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 of the quantitative approach is going to be used, the data source will be a primary data for this research. This research will use the questionnaire instrument to be the tool to collect the data(Raju&PohPhung, 2020). 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 variable (e-readiness rank) 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 e-readiness rank: this variable will use 5 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 , 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.

Data Analysis and Results

5.1 Profiles of Respondents

The following table 2 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 2: Profiles of Respondents

	n	%		n	%
Gender			**Education Level**		
Male	229	62.3	Diploma	14	3.4
Female	138	37.7	Bachelor	163	44.6
			PhD	190	52
Age			**Experience**		
17-25 years	192	52.5	1 to 3 years	44	12.2
26-30 years	137	37.4	4 to 6 years	318	86.7
31- 35 years	31	8.5	7 to 9 years	5	1.1
36- 40 years	7	1.6			

5.2 Normality Tes

The used values for this test are the Skewness and Kurtosis statistics. If skewness is less than -1 or greater than 1, the distribution is highly skewed. If skewness is between -1 and -0.5 or between 0.5 and 1, the distribution is moderately skewed. If skewness is between -0.5 and 0.5, the distribution is approximately symmetric. According to table 2, the distribution is between -1.162 and -0.701, which means that the distribution is moderately skewed. All the data ranged between -3 and +3 as recommended by.

Table 3: Results of Skewness and Kurtosis for Normality Test

Constructs	Skewness	Kurtosis Statistic
E-readiness rank	-.701	.965
Implementation of E-Governance	-1.162	2.240

5.3 Missing Data Analysis

There are many reasons for the occurrence of missing values, which are mainly divided into mechanical and human causes. The mechanical cause is the lack of data caused by the failure of data collection or storage due to mechanical reasons, such as data storage failure, memory corruption, a mechanical failure caused by a period of data not collected (for timing data collection). The human reason is due to the lack of data caused by subjective mistakes, historical limitations, or intentional concealment. For example, in the market survey, the respondent refused to disclose the answers to the relevant questions, or the questions answered were invalid, and the data entry personnel mistakes were missed data.

Based on table 4, the variable's e-readiness rank and the implementation of e-governance had 9 missing values, which were deleted and replaced.

Table 4: Missing Values

Variable	Number of Missing Values
E-readiness rank	5
Implementation of E-Governance	4
Total	**9**

5.4 Construct Reliability

The construct reliability test is used to ensure that all the research variables items are clear and understandable for the respondents. This test uses two types of values, which are Cronbach's alpha and composite reliability. The accepted values for both types are to be greater than 0.7.

According to table 5, the variables' items have got very good results where the Cronbach's Alpha values were between 0.724 and 0.772, while the composite reliability values were between 0.840 and 0.844. These results mean that there is great internal consistency among the research variables' items.

Table 5: Construct Reliability

Constructs	Cronbach's alpha (> 0.7)	Composite Reliability (> 0.7)
E-readiness rank	0.772	0.840
Implementation of E-Governance	0.724	0.844

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 dataconcentration 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 6, 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 E-readiness rank and Implementation of E-Governance are 3.641 and 3.809. These results mean that most of the respondents agree with the items stated in the questionnaire. This reflects the role of E-readiness rank for increasing and influencing the Implementation of E-Governance. Furthermore, the standard deviations for the variables E-readiness rank and Implementation of E-Governance are 0.707 and 0.563.

Table 6: Descriptive Statistics for Study Variables

Constructs	N	Minimum	Maximum	Mean	Std. Deviation
ERR	367	1.00	5.00	3.641	.707
IEG	367	1.00	5.00	3.809	.563

Key: ERR: E-readiness rank; 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 7, this test has come up with the following conclusion:

- There is a positive and significant relationship between E-readiness rank and the Implementation of E-Governance in the Yemenimilitary institutions with beta = 1.181, t value = 8.087, and significance level = 0.000.

Table 7: Summary of the path analysis – the direct effect

Hypothesis	Relationship	Std Beta	Std Error	t-value	p-value	Decision
H1	ERR ->IEG	1.181	0.146	8.087	0.000	Supported

Key: ERR: E-readiness rank; IEG: Implementation of E-Governance

Discussion and implications

This part is going to discuss the found results according to the finding of the previous studies.

This study has found that there is a positive and significant relationship between e-readiness rank and implementation of e-governance in the military institutions in Yemen with beta = 1.181, t value = 8.087, and significant level = 0.000.

These results came in the context of the results of previous studies, as the readiness index for e-government reflects the disposition of a nation, city or government agency in terms of e-government development. The index can be described as the generic limit of the sector of the general population to make use of ICTs to provide quality services and information to the general population together with effective communication devices that promote human development.

The models for evaluating preparation for e-learning determine and evaluate the preparation of a society and an economy with the influence of IT. However, in terms of device development and surveys, a few global/regional surveys have been developed to assess e-government; for example, the electronic preparedness index of the United Nations Department for Economics and Meetings

(UN-DESA), the positioning of electronic government at Brown University, the index of network readiness (NRI) of the Economic Forum World (FEM), the International Telecommunications Association (ITU) ICT Development Index (IDI) and electronic preparation rankings of the Economist Intelligence Unit (EIU) (UN, 2004).

Each model has a particular method for measuring electronic preparation. The studies of explained some evaluation models for the preparation of e-government and highlighted the complementary approaches:

1.   The Economist Intelligence Unit deals with the ICT infrastructure of the country and consumers, businesses and the government's ability to use ICT to its benefit. Specifically, the indexes are part of the technological and connectivity infrastructure, the business environment, the reception of consumers and businesses, the legal environment, social and social infrastructure, the government's approach and vision, and electronic support services.

2.   The Network Readiness Index (NRI) of the World Economic Forum (WEF) measures the level of preparedness of the country/network to participate and takes advantage of IT developments with the corresponding indexes; environment sub-index, preparation sub-index, use sub-index, and effects sub-index.

3.   The UNDESA electronic government preparation index is a composite measure of the nation's ability or tendency to use e-government for ICT-centric development. The indices include web measurement index, telecommunications infrastructure index, and human capital index.

In addition, there are several reports explaining the electronic readiness of countries around the world, including Yemen. In fact, the UNDSEA reports explained the electronic government index in Yemen more clearly in all the sub-indices with indicators from 2003-2014. In this sense, in this document, UNDESA will be used to investigate the positioning of electronic preparation in Yemen.

Conclusion

This research was developed of the purpose of finding out the readiness rank factor 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 one independent variables (e-readiness rank) and one dependent variable (implementation of e-governance). One hypothesis was developed to analyse the proposed model.(Polas et al., 2020)

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 variable (e-readiness rank) 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 positive

and significant relationship between E-readiness rank and the Implementation of E-Governance in the Yemeni military institutions.

It is recommended to face e-readiness barriers to access electronic government platforms, for the Yemeni population, the implementation of cultural programs that promote the use of new technologies through education, several initiatives of virtual classrooms, community talks could also be given, introducing the use of technologies in the customs of the members of the military, at least so that the advantages they bring beyond being used as simple consultation platforms or means of the interaction of social networks.

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