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The Infleuence of Online Services and Telecommunication Infrastructure on the Implementation of E-government in Military Institutions in Yemen

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ABSTRACT

Purpose: This study main objectives were to find out the impact of online services and telecommunication infrastructure on the implementation of e-government in military institutions in Yemen.
Design/ Method/ Approach: 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 questionnaire was adopted as a tool for systematic data collection, in order to obtain basic data that serve the objectives of the study and answer its questions. While the questionnaire was designed specifically for the purposes of the current study; It was also distributed to a selected sample of the study population to obtain more information on the impact of the phenomenon of the implementation of e-government in military institutions in Yemen relations and to know their views on the questions of the study.
Findings: Several tests have been conducted for the collected data. The main results found that that there is no relationship between online services and the implementation of e-government in military institutions in Yemen. Also, there is a positive and significant relationship between telecommunication infrastructure and the implementation of e-government in military institutions in Yemen.
Recommendation: In the telecommunication infrastructure sphere, the Ministry of defense could consider carrying out programs for the inclusion of new technologies for the populations, together with the Ministry of Transportation and Communications, in charge of the implementation of fiber optics in the most remote communities. as is that of the study population.

Keywords
Online Services, Telecommunication Infrastructure, Implementation of E-government
Military Institutions in Yemen

Introduction

Every day the possibility of using computer tools such as computers, telecommunications networks, the Internet, cell phones, digital newspapers, portable devices, etc., is greater. Its use has made information easier and more accessible, communication has improved, geographical distances have been reduced and even today they represent new forms of education(Raju & Phung, 2020). The use of all this new technology, its development and implementation, is called Information and Communication Technology (ICT), and is the basis for the construction of Electronic Government.

The concept of Electronic Governance (contraction of the name in English "Electronic Government"), begins to be used towards the end of the 1990s as a way to identify those government activities carried out and / or supported through the use of the Information and Communication Technologies (ICT). Promote the application and use of technology in state agencies, in order to improve access to information, procedures and services offered to citizens; increase the efficiency and effectiveness of public management and substantially increase the transparency and participation of citizens, are the main concepts associated with Electronic Government. The implementation of Electronic Government should be seen as the right of citizens to interact electronically with Public Administrations. What supposes that the Administrations are interrelated to each other in order to simplify the procedures, services, and procedures?(Raju & Poh Phung, 2020)

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At present, the use of new technologies is a fundamental tool to support the transformation processes that are being developed. The Electronic Government includes all those initiatives that enable the migration of information (procedures and services of manual procedures based on paper) to computer procedures; accessing them through multiple channels such as the Internet, mobile devices, Citizen Attention Centers, among others.

Contemporary democracy can not remain on the sidelines of the evolution provided by the new information and communication technologies (ICT: which are known worldwide as the Web). Specially to overcome the limits of political representation, by having greater and better instruments of communication, deliberation and consensus between governors and the governed.

The Web provides ideal conditions to increase deliberative actions by having effective channels of social organization and decision making that help the government and the citizens to establish solid pacts and alliances. Democracy would evolve towards a more participatory model if it took advantage, in addition to electronic platforms, of social networks.

The task of the Web in politics can be classified into three areas if it exclude "activism on line": the structural and dynamic support to intervene in the definition of public policies (democracy-electronics), the process to consolidate governance (the so-called government -Open), and the provision of public services, procedures and gestures (government-electronic). It will be observed how electronic democracy and electronic government are complementary insofar as they can consolidate governance.(Harvard Business Review, 2016)

The aim of this study is to identify the infeluence of online services and telecommunication infrastructure 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.

Literature Review

2.1 The Concept of E-government

Electronic governance or E-governance is the use of information and communication technology (ICT) to provide government services, information exchange, communication exchanges, integration of different systems and independent services between government and citizen (G2C), government business (G2B), government to government (G2G), government to employees (G2E), as well as back-office processes and interactions within the entire government framework. Through electronic administration, government services are made available to citizens in a convenient, efficient, and transparent manner(Harvard Business Review, 2016). The three main target groups that can be distinguished in the concepts of governance are government, citizens, and business/interest meetings.

Despite the fact that the two terms are used interchangeably, there is a difference between electronic government and electronic government. E-government refers to the use of ICT in a broad daytime organization that, when combined with authoritarian change and new skills, aims to improve open services and democratic processes and strengthen support for the general population(Afridi et al., 2020). However, e-government does not have any arrangement for the governance of ICT. The governance of ICTs generally requires a considerable increase in regulatory capacities and the elaboration of strategies, as well as the extra experience and the assumption processes of molds among the different social actors. The perspective of electronic governance is "the use of technologies that help govern and must be governed". The central

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objective of electronic administration is to reach the beneficiary and ensure that their service needs are met. Ideally, the government will recognize the importance of achieving this goal to maximize its efficiency.(Valliappan Raju & Poh Phung, 2019)
In addition, the electronic government uses a unidirectional communication convention, while the electronic government uses a bidirectional communication protocol. Establishing the identity of the final beneficiary is a challenge in all services focused on the citizen(Raju & Tamjis, 2018). The measurable information published by governments and world organizations generally does not reveal the certainties(Tajeddini et al., 2020). The best type of electronic government eliminates unwanted interference from an excessive number of layers when providing government services. It depends on a large infrastructure configuration with the help of neighborhood processes and parameters for governments to reach their citizens or final beneficiaries. A budget for organization, development, and development can be derived from well-distributed systems of electronic administration.

2.2 Underpinning Theory

This section explains the theory that has been adopted and used in this research as a guide. For that matter, this research has used the Comprehensive Barrier Framework Theory. E-government projects face different barriers and obstacles depending on the stage of development of e-government in each country. However, have clarified that government leaders should recognize the importance of electronic government to improve service performance towards citizens. As stated that, governments face a wide range of challenges due to the multidimensionality and complexity of e-government initiatives(Visconti & de Paz, 2016).Several academics have developed and proposed a series of frameworks and models related to the obstacles to the evolution of e-government projects. 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.
(Raju, 2019) explains different issues related to barriers as follows:

1. Strategic challenges: these are barriers, for example, absence of objectives and objectives, overly ambitious objectives, absence of ownership, absence of guidelines and issues related to money.
2. Technical challenges: they include poor ICT infrastructure, lack of architecture integration, absence of information standard and absence of security model.
3. Organizational challenges: for example, absence of preparation, accelerated pace of reform, absence of a hero, administrative / technical skills and challenges of change.
4. Policy challenges: strategic barriers include the security of citizens, the ownership of information and the evolution of the disposition of electronic government.

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.

2.3 Conceptual Framework

According to, "national awareness and solidarity are still terms with great rhetorical content: the isolation of many communities, the distance between classes, the disproportionate distribution of wealth, etc., are phenomena that hinder the process of integrating a truly national culture. "Knowing how to live in a community balances economic development with social, political and

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cultural(Abbas, 2020). Unfortunately, the economic approach in national development plans relegates cultural development to the background.

The Nahua culture originally based its model of social organization on matriarchy, and finds its maximum expression among the astecas in Mother and Goddess Coatlicue for the definition of their tribal origin and legitimacy as a nation, which then stops Huitzilopochtli god of war for parthenogenesis and with it appears the model of a patriarchal culture. On the other hand, Spanish culture also transformed from matrilineal culture to patriarchal, patrilineal culture, according to by having contact with the Mediterranean culture "where the replacement of models is as old and as visible as the image of Aton , the Egyptian god, masturbating for the gods to be born: now, it is the father who gives origin to the species.

However, it is important to point out the need to respect the cultural traditions of indigenous peoples, which were stifled by the conquest and continue to be manipulated by anthropologists, pseudotheologists and indigenists for purposes other than their claim, as: "that they want to have the natives as museum pieces or folklore objects to attract tourism. These people want (the natives) to dress as 500 years ago, not to progress, because if they do that folklore ends and cease to be the object of study for these anthropologists who have visited us in recent years indigenous peoples have the right to preserve their values, to be respected as people and to integrate as such into the world community,besides that these cultures have a lot to offer, great human and religious values that would enrich the town where they are, the culture and the church. "

The return to our community cultural origins is not without danger and conflict. The return to cultures, has the "courage to revive values of memory, identity and creation. Possess also danger of resuscitating old territorial phobias, clusters, ethnic cleansing crusades and religious fundamentalisms." However, to meet our values, our culture, we have to be open if we want to transcend our culture in the times of the postmodern globalizing dimension.

While the nationalist position of culture strengthened some aspects of our development under cultural protectionism, it was also the cause of many of our disasters. The administration of parastatal companies and decentralized agencies of the three levels of government: federal, state and municipal, as well as the distribution of subsidies and other resources, are subject to decisions in which the national culture has a strong influence. describes the situation and mentions some of its effects as negative results of our cultural nationalism: "We thus raise altars to our myths and customs and we lock ourselves in regulating our world according to them. The results are not flattering: mutilations of the riches with which other nations never dreamed, waste admitted and almost incentivized; misery as destiny and fatality. "

The governments of Yemen, under the view of considering culture as a community phenomenon and as a satisfactory one more, subject to market laws, have transferred the obligation and responsibility of maintaining the institutions of national culture in a sector private that acts with pragmatic criteria and utilitarian purposes, while voices are raised that warn about this problem and wonder if "in the long term a country is sustainable in which the public becomes deprived of a minority, the bulk of its population lives alienated from its cultural heritage and the sense of community disappears. (Townsend, n.d.)

However, serious obstacles that prevent cultural change from taking place also represent major structural barriers to accelerate regional and national development processes. reviews to unleash "the solid network of personalist relations, the intersection of private interests with public interests and the endurance of patterns of hyphanebehavior.The characteristics of the national culture that are just beginning to be taken into account, constitute a factor of great influence on the success of corporations(Rhoades & Corwin, 1990). The same objectives of corporations are

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influenced by the cultural context. There is a growing concern among researchers, to examine the extent to which national culture is an important influence in measuring corporate success.
The differences in the behavior patterns of the individuals of the different nations are being investigated and analyzed to explain the differences in the priorities of the organizations. The differences between national cultures complicate the administration of organizations, and in large part, the tasks of international work fail due to difficulties in adapting to the different cultural contexts of organizations. Therefore, much research is needed in this area, in order to analyze the cultural differences of the different nations.

Research Model and Hypotheses

defines e-Government as "The continuous optimization of Government service delivery, citizen participation and governance by transforming internal and external relationships through technology, the Internet and new media". Government, citizen participation and the exercise of authority through the transformation of internal and external relations through technology, the internet and other new media). Unlike previous definitions that insist only on the dimension of improving service delivery, Gartner's GE definition considers the importance of institutional change and transformation and the articulation of consensus among those agents and interests that are fundamental to achieve the success of the project.
In short, Electronic Government is the application of electronic commerce tools and techniques to the government's functional work processes for the benefit of all segments of society; government, citizens and companies. Therefore, each government must develop its own definition of electronic government in order to adapt it to its own realities and purposes. It is important to ensure that, when discussing electronic government, all stakeholders share the same understanding. In the particular case of the Government of the State of Sinaloa, it has been given a definition with an integrated approach that is defined as the process that transforms information and communications technology (ICT) into comprehensive services infrastructure to meet the needs of citizens, entrepreneurs and governments through professional staff using traditional and innovative service channels.(Scherer & Palazzo, 2011)
This investigation is backed by the antecedents, aimed to study the usability or ease of use of its pages and therefore of the portal as a whole given that the Official Internet websites of the cities were the object of study. A tool capable of benefiting cities through electronic government.From a policy analysis approach and Delphi panel with a sample of 30 panelists. That I reach the following conclusions: The results of this research highlight that the efficiency of a government portal in its operation is a primary characteristic for both citizens and the governments that implement it. In other words, the portal that requires spending less resources for its use and generates more results for the user was preferred. Finally, the author concluded in this study of application at the local level for Yemen, that online government offers for services such as information and communication, constitute the face-to-face basis of public administration on the Internet.(Bouranta et al., 2019)
As it was expressed by "in the next five years it will transform not only the way in which many public services are distributed, but also the pillars (institutional context) in which the relations between the Public Administrations and citizens. After e-commerce and e-business, the next revolution associated with the Internet will be e-government". Specifically, Electronic Government has been defined as "the application of internet-based technologies for commercial and non-commercial activities within Public Administrations". Other definitions eliminate the limitations to this concept, stating that relationships can extend from the online connection, through PDAs (Personal Digital Assistant), to interaction and instant messages with IRC (Internet

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Relay Chat) systems. A broader definition of GE refers to the adoption of ICT by Public Administrations, as different ways through which they connect and interact with other organizations and people, especially through their web pages, but also through email. and other tools such as mobile phones, PDAs, "video conferencing", private intranets, "extranet", cable, radio waves, or satellite. From this conceptual perspective, the use of a broader definition is based on the anticipation of an increasingly integrated use of technologies, as suggested by several authors. in his report for the Club of Rome 58 (published under the name of La Red), insists on this integration not only for digital technologies, but also describes the great advance that the Internet represents by "harmoniously embracing all previous technologies". Hence, this paper hypotheses the following:

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

H2: There is a positive and significant relationship between telecommunication infrastructure and the implementation of e-governance in the military institutions in Yemen.

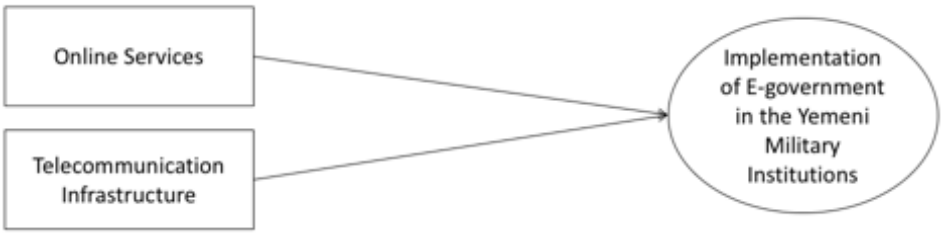


Fig. 1.Research conceptual model.

Methodology

The methodology of the research can be conceptualized as a discipline to support the other subjects that make up the curriculum of the various professional careers offered by the Technological Institutes. The present material of research methodology aims to provide a theoretical-practical framework in which students can apply in a real and objective way the process of scientific research from the detection and approach of a research problem to the solution phase and results in presentation. This requires designing the appropriate methodology to achieve this purpose.(Farooq & Raju, 2019)

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 and willingness 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 online services and telecommunication infrastructure 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

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relationship between the independent variables and the dependent variable. The regression test will be used to identify the contribution of the independent variables.(Raju & Tamjis, 2018)
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. 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 (online services and telecommunication infrastructure) on the implementation of e-governance in military institutions in Yemen.

- The measurement of online services: this variable will use 5 statements to measure the participant's perceptions towards this variable.
- The measurement of telecommunication infrastructure: 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 Response Rates

The best way to track the effectiveness of a questionnaire is to look at the analysis report to understand the trend. If the researcher finds that a questionnaire is compared to other surveys and there are more people filling in, then he/she must understand its specialties and the future questionnaire. The same approach is used in the survey to achieve the same results; the researcher can refer to the increase in the response rate of the questionnaire.
The following table 1 shows the response rate of the sample. For the purpose of reduction, the unusable questionnaire and improving the responding rate, 550 questionnaires were distributed to the sample. From the distributed questionnaires, 423 were returned and collected, 367 questionnaires were the net returned and usable questionnaires with a percentage of 76.9%, as 56 questionnaires are neglected due to incomplete information.

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Table 1: Response Rates

Response Rate	
Questionnaires Distributed	550
Returned	423
Unusable Questionnaires	56
Returned and Usable	367
Not Returned	127
Response Rate	76.9%
Usable Response Rate	66.7%

5.2 Multicollinearity

Multicollinearity refers to the fact that the model estimates are distorted or difficult to estimate accurately due to the existence of exact correlations or higher correlations between explanatory variables in linear regression models. This test uses the variance inflation factor (VIF) to measure the multicollinearity

According to table 2, the tolerate values are supposed to be between – 5 and + 5. This test results of VIF were between 1.271 and 2.306, which, means that all the variables are tolerated in the multicollinearity test.

Table 2: Test for Multicollinearity on Assessment of Tolerance and VIF Values

Constructs	Tolerance	VIF
Online services	.234	1.271
Telecommunication infrastructure	.434	2.306

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 2, the variable's online services had 8 missing values, while the telecommunication infrastructure had no missing values and the implementation of E-governance had 4 missing values. However, these results represents less than 25% of the values of the study, which the researcher has deleted the missing values..

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Table 3: Missing Values

Variable	Number of Missing Values
Online services	8
Telecommunication infrastructure	0
Implementation of E-Governance	4
Total	**12**

5.4 Convergent Validity

Convergent validity refers to the degree of similarity of measurement results when different measurements are used to determine the same feature, i.e. different measurement methods should be aggregated in the same feature measurement.

Convergence validity also referred to as convergence validity, means that the test indicators that measure the same potential traits (constructs) will fall on the same common factor.The acceptable convergent validity is the average variance extracted value to be greater than 0.5. Based on table 4, the variables are valid with an AVE range between 0.613 and 0.881, which in agreement to the recommendation of.

Table 4: Convergent Validity

Constructs	**Average Variance Extracted (AVE) (> 0.5)**
Online services	0.570
Telecommunication infrastructure	0.597
Implementation of E-Governance	0.644

5.5 Descriptive Analysis

Descriptive statistics aim to present the research results with tables and graphs, as regularly as possible or by condensing them with some statistical values (mean values, spread values, correlation coefficients).Descriptive statistics will reveal the characteristics of the demographic characteristics of the sample, such as age, gender, income level, education level, or the distribution of values of variables.If the researcher deems it necessary, he can search for descriptive statistics regarding the answers given to the questions with data collection tools. What should be known here is that descriptive statistics will only give us an idea about the sample and the variables studied, and will not prove any hypothesis for any relationship or difference.(Valliappan Raju & Poh Phung, 2019)

The aim of the descriptive statistics is to find out the mean and standard deviation of the study's variables. According to table 5 the mean statistics for the variables (online services, telecommunication infrastructure, and implementation of e-governance) were 3.831, 3.723, and 3.809 respectively. These results means that respondents are in average agreement with the items stated for each variable in the questionnaire. Therefore, the respondents confirm the role of the independent variables on the dependent variable. Furthermore, the standard deviation for the same variables were 0.669, 0.689, and 0.563.

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Table 5: Descriptive Statistics for Study Variables

Constructs	N	Minimum	Maximum	Mean	Std. Deviation
OS	367	1.00	5.00	3.831	0.669
TI	367	1.00	5.00	3.723	0.689
IEG	367	1.00	5.00	3.809	0.563

Key: OS: online services;TI: telecommunication infrastructure; IEG: implementation of e-governance

5.6 Direct Effect Analysis (Hypotheses Testing)

This section presents the result of hypotheses testing for direct effect. The results are presented in table 6, followed by some conclusions:

- There is no relationship between online services and the Implementation of E-Governance in the Yemeni military institutions.
- There is a positive and significant relationship between telecommunication infrastructure and the Implementation of E-Governance in the Yemeni military institutions with Std Beta = 0.388 and a p-value = 0.000.

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

Hypothesis	Relationship	Std Beta	Std Error	t-value	p-value	Decision
H1	OS ->IEG	0.177	0.096	1.846	0.078	Not Supported
H2	TI ->IEG	0.388	0.063	6.156	0.000	Supported

Key: OS: online services; TI: telecommunication infrastructure; 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.

6.1 Online services and Implementation of E-Governance

This study has found that there is no relationship between online services and implementation of e-governance in the military institutions in Yemen.

These results came in the context of the results of previous studies, as the index of online services assesses the ability to deliver services to citizens. It also measures the online presence of national websites, along with those of the Ministries of Health, Education, and Finance. Due to certain non-operational connections and outdated index contents, Yemen received low focus in the index of online services. For each service, there is a private website that is not linked to the entry. Therefore, the low rate of online service was attributed to these problems.

6.2 Telecommunication infrastructure and Implementation of E-Governance

This study has found that there is a positive and significant relationship between telecommunication infrastructure and implementation of e-governance in the military institutions in Yemen with beta = 0.388, t value = 6.156, and significant level = 0.000.

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These results came in the context of the results of previous studies, as it confirmed a study by in which there is a high return on investment in public infrastructure, or as points out that the drop in productivity of the United States was caused by a reduction in the growth of public infrastructure. Also, there are several estimates that indicate that the marginal product of public infrastructure or public capital is greater than that of private capital and more specific, such as find a positive effect of investment in transport and communications in economic growth, as well as, which find a positive effect of telephones in the economy.(Raju & Tamjis, 2018)

On the other hand, other research indicates that the marginal product of public infrastructure is below private capital (Holtz-Eakin1994), and that sometimes its impact is negative; also, studies by, and suggest that there is little evidence of an effect of infrastructure, particularly when fixed effects are included.

More recently, the number of estimates of public service infrastructure, such as energy and telecommunications, has increased in the countries' growth, with positive effects. Thus, and find that electric power has a positive impact on the economy; likewise, find that access to broadband internet positively affects the growth of countries. In this regard, it is important to point out that although the conclusions of the cited studies are diverse; it is possible to explain some adverse or very optimistic results, due to problems of simultaneity and spurious correlations.

For example, the traditional neoclassical model of predicts that any positive effect of an increase in the rate of investment on the economy is transitory, given that the steady state of growth is determined only by the growth of the population or by the exogenous technological progress. Under this neoclassical model, an increase in investment in public infrastructure will induce a brief period of high investment, which will decrease as capital accumulation decreases the returns to capital and the incentive to more investment, converging to the initial point. Therefore, it is important to determine if a permanent increase in investment in public infrastructure induces a temporary or merely increase in the growth of the economy.

On the other hand, the endogenous growth model proposed in this research indicates that telecommunications are an input of production that allows for constant growth rates. Thus, there is a point where the provision of telecommunications allows the greatest economic growth; therefore, below this level, an increase in telecommunications infrastructure has a positive impact on the product, while an overinvestment would generate a negative impact. In that sense, it will be interesting to analyze the sign of the coefficients, as well as to compare the importance between high, middle and low income countries, which have different levels of telecommunications infrastructure.

Conclusion

This research was developed of the purpose of finding out the barriers (online services and telecommunication infrastructure) 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 (online services and telecommunication infrastructure) and one dependent variable (implementation of e-governance). Two hypotheses were developed to analyse the proposed model.(Raju, 2018)

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 (online services and telecommunication infrastructure) on the implementation of e-governance in military institutions in Yemen.

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- The measurement of telecommunication infrastructure: 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.

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 thatthat there is no relationship between online services and the Implementation of E-Governance in the Yemeni military institutions. There is a positive and significant relationship between telecommunication infrastructure and the Implementation of E-Governance in the Yemeni military institutions.

In the telecommunication infrastructure sphere, the Ministry of defense could consider carrying out programs for the inclusion of new technologies for the populations, together with the Ministry of Transportation and Communications, in charge of the implementation of fiber optics in the most remote communities. as is that of the study population.

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