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Challenges of E-Governance in Higher Education Institutions in Sudan

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ABSTRACT

E-governance has brought significant advantages that enhance the delivery of public services, make the administration system more transparent and accountable, and encourage the participation of stakeholders in the decision-making process. Particularly in developing countries like Sudan, but due to many challenges that hinder its application, e-governance in higher education institutions is not yet fully implemented. These challenges encompass social, political, and technological considerations that beset the successful implementation of e-governance. This study aims to examine these challenges as the 21st century has brought many significant advantages to higher education institutions through the technological advancements that facilitate the delivery of education services. Some universities in the world have already implemented e-governance in order to enable easy access to educational services for students and other stakeholders. The study adopted a quantitative approach, and the data was collected using structured questionnaires via random sampling. The data was analyzed using descriptive analysis. The findings revealed that there is a need for good university governance practices, improving infrastructure, finding alternative source for electricity and allocating a good budget for higher education institutions as well as develop a vision for changes in accordance with 21st century significant advantages and commitment by the policy makers and University leadership.

KEYWORDS

E-governance, Higher education institutions, Challenges

Introduction

Higher education institutions have had certain missions to accomplish, namely teaching, research, and community outreach. However, the approaches and quality of these missions may differ depending on the country's socioeconomic status as well as educational policies because higher education stakeholders believe that the modern university can be "compared to a three-legged stool, with each leg representing one of three missions: teaching, research, and a third mission". This third mission is concerned with the university's involvement in societal needs or its contribution to socioeconomic development (Rubens et al., 2017). Societal innovation is high on the list of priorities for university education because universities may also play a significant role in societal entrepreneurship since numerous global social issues appear far beyond the traditional scope of the government sector (Blass and Hayward, 2014).

The structure of higher education institutions has evolved over the last two decades as new technology initiatives have been implemented by integrating e-governance in higher education institutions, which creates significant advantages by providing online teaching methods that are more flexible than the traditional. This is made possible by technologically implemented environments such as bulletin boards and virtual lectures. Therefore, the lecturer's role as a knowledge facilitator and the design of e-learning contribute to a potentially more adaptable organizational higher education structure because the use of technology in teaching provides valuable opportunities for the creation of online educational platforms where experts from various fields can meet and work collaboratively to investigate common social phenomena. It not only provides the most effective teaching tools to instructors (Kumar, 2013). According to Kumar (2013), e-governance in higher education can provide governing bodies at the university and student level with deep visibility, allowing them to analyze their performance and thus prepare for future requirements. E-government solutions in education, on the other hand, have changed how administration is now carried out. The solution integrates an educational institution's entire data and processes into a unified system, making the process simple, well-organized, and error-proof.

According to Edrees and Khalifa (2015), we are currently living in the "information age," in which information serves as a bridge to the future and the consequences of information and information technology on society are growing. In recent years, ICT innovations and the spectacular success of electronic commerce (e-commerce) have influenced the public sector. Electronic government (e-government) has become a buzzword for a variety of activities and efforts to innovate and modernize public administration. The twenty-first century, on the other hand, is the time for a digital revolution, or information society. In the developing world, e-government applications have proliferated rapidly. Many countries have implemented electronic government to improve, accelerate, and reduce the cost of government services while also making them more transparent, efficient, accountable, and accessible to their beneficiaries, citizens, and constituents. The twenty-first century, on the other hand, is the time for a technological revolution, or information society. As a result, in the developing world, e-government applications have proliferated rapidly. Many countries have implemented electronic government to improve, accelerate, and lower the cost of government services while also making them more transparent, efficient, accountable, and available to their beneficiaries, individuals, and businesses. While the shift to e-government has many advantages, it has also introduced new challenges. For instance, the impact of politics, economics, socio culture, and basic infrastructure on human capital has created new challenges.

The benefits of implanting e-governance in higher education institutions must extend far beyond the mere computerization of educational processes but also to a fundamental shift in the way higher education operates today. Studies that have been conducted in the area of e-governance in developing countries with an emphasis on the continent have revealed that there are numerous difficulties associated with e-governance implementation on the continent. For instance, (Onyancha, 2010) argues that African countries face various challenges when it comes to e-governance planning and implementation. He identifies several flaws associated with conceptualizing, operating, and maintaining e-governance systems. These challenges include social aspects (for instance, a lack of basic education, a low literacy level, a lack of IT literacy, different languages, a lack of public acceptance of self-service models, and a shortage of skills). The political aspects include a lack of political will and a clear leadership vision. He goes on to explain that, in terms of the level or stage of e-governance development, most countries in the region appear to be in the early stages of development, and only the government of South Africa has made significant progress in this regard. Most governments have only managed to provide information on their websites, which is the first stage in the evolution of e-governance.

The ministry of higher education and scientific research in Sudan was founded in 1970 to establish higher education policies, plans, and programs for the ministry and coordinate between its institutions, consisting of governmental and private universities and searchers. The minister of higher education and scientific research is in charge of the ministry and its executive and administrative bodies, which include the executive secretariat of the council, the ministerial executive office, the students' affairs department, the scientific research and innovation authority, the calendar and accreditation authority, and the national commission for assessment as well as accreditation of higher education. The digital era Challenges force universities to adapt their resources, academic programs, research investments, and other items to continue operating within the environment. Camelia and Marius (2011) claim that economic and technological development provides many opportunities for these institutions to improve their activities. The study considers the application of e-governance in Sudanese higher education institutions as critical and one of the demands of the twenty-first century. This will support transparency and accountability and provide a clear map for evaluating and monitoring the university institution, besides reducing administrative tasks, costs, and effort. Furthermore, e-governance in the context of universities could lead to the development of effective and transparent university governance since e-governance has significant potential for enhancing communication between students, staff, the community, and other stakeholders.

E-governance implementation confronts many challenges, namely, technological infrastructure. This is based on the fact that many developing countries still have a long way to go concerning computerizing and building the necessary telecommunications infrastructure on which many advanced e-governance systems are based. The developing countries' governments should be more practical in approaching the technology market for adaptable software to the cultural context; besides, the legal infrastructure is one of the main challenges that hinder e-governance implementation. However, laws and regulations support the transition to e-governance. Many countries have failed in their efforts to develop and implement e-governance systems because their local legal systems do not support such projects, and digital signatures are not accepted in some countries. So, with the assistance of other government agencies, the legislators should cooperate to protect the rights of all citizens and businesses. Institutional infrastructure is also among the challenges because institutions are required to support e-governance systems, and government agencies should serve as facilitators in raising awareness so that the system is fully accepted (Beckson, 2005).

According to Seddiky and Era (2015), the participation of the stakeholders is the most important factor in the success of e-governance implementation because the main issue is not IT but rather understanding between citizens and their complementary governmental entities, which serves as a critical factor in e-governance success because of the stakeholders' active participation.

Poor ICT infrastructure, ineffective policy and regulatory standards, besides a low level of technological diffusion and penetration, a weak human capital base, and insufficient access to technology, according to Misuraca (2007), are relevant features of the continent that limit the opportunities to develop e-governance.

Idowu (2020) claims that corruption remains the greatest impediment to African governance and development, which is the main challenge that explains the absence of good governance. Besides, the continual conflicts and the increasing number of acts of insecurity in Africa represent another governance challenge for the continent.

According to Petlane (2009) higher education is fundamental to economic growth, but it continues to be a low priority in Africa in terms of policies and funding because, over the last three to four decades, African universities have been steadily declining. Universities across the continent have struggled to reinvent themselves to meet the needs of the twenty-first century, despite increasing demands for their services (particularly extremely large increases in student enrollment) and reducing or stagnant infrastructure, personnel, and other resources. This has occurred in the last decade as governments and international development agencies working in Africa have renewed their interest in higher education and its role in national development (and other parts of the developing world).

As a result, there has been an increase in research on the state of higher education on the continent, spearheaded by organizations such as the World Bank and the Association of African Universities. Many universities have begun reform and/or transformation efforts at the institutional level, addressing structural, operational policy, and curriculum issues. However, the impetus has come from various sources, necessitating a variety of responses and strategies. Most universities have attempted to address the issues of relevance, resources, and survival in the face of increased competition for attention from both the public and private sectors.

According to Rip et al. (1995), amongst some of the key challenges of higher education is the demand for good governance to sustain the institution's set objectives and engage stakeholders in the processes of either informing or participating in the formation of policies, procedures, and outcomes to build and maintain trust for the institution's common good. Governance policies at higher education institutions, such as those concerning academic integrity, human capital, and industry relations, are essential components of their good governance; however, an integrated and overarching approach cannot be systematized unless they are comprehensive, and the Constructive Technology Assessment has attempted to integrate these concepts, which include higher education institutions, but from a more technological development standpoint.

Statement of the Research Problem

Many public sectors have greatly benefited from the tremendous technological advances that have occurred in the twenty-first century. Among these fields, education stands out as a major beneficiary of the vast potential offered by today's technological advances. This change has improved the lives of ordinary people while also strengthening the global economy, healthcare, and government. Therefore, in light of this educational revolution, teachers are being urged to adapt and usher in change in order

to ensure their own success and prepare their students to succeed in a globalised, technologically advanced, and competitive global economy. This effort has the potential to usher in unique and far-reaching educational innovations, allowing universities to increase their global reach, interact with students anywhere on the globe, and more effectively carry out their primary goals of teaching, research, and community service. However, in the study's context, e-governance was placed among the country's e-governance start-ups in 1997, but due to many challenges, the country is still lagging behind. These challenges hinder its application in the higher education institutions in Sudan, and this was very clear during the COVID-19 pandemic that led to the temporary closure of the universities and the extension of the education period due to the absence of alternative sources of learning. Hence, this study attempts to identify the challenges that hinder its application in higher education due to its significance in enhancing the three missions of higher education (teaching, research, and community outreach).

Research Objective

To identify e-governance challenges in the higher education institutions in Sudan

Research Question

What are the challenges of e-governance in higher education institutions in Sudan?

Significance of the Study

This study provides an understanding of e-governance application in higher educational institutions and how it could significantly improve the missions of higher education institutions in Sudan, namely teaching, research, and community outreach, and its role in changing the accustomed traditional methods.

However, e-governance has many benefits; it also has many challenges, particularly for a peripheral country like Sudan, in providing a world-class education. As a result, this study emerged as response to globalization, which encourages higher education institutions to change their traditional ways and become innovative in providing world-class education in order to compete in the higher education market and expand their institutions.

This study contributes to the achievement of the African Union Agenda 2063 by addressing the dimension of developing a well-developed continental ICT and digital economy, which will lead to long-term continental development goals. So, this study adds to the literature on e-governance in Africa generally with a focus on Sudan through its contribution to the limited literature on e-governance and higher education institutions in Sudan by drawing policymakers' attention to the significant roles that e-governance plays in the education sector, particularly higher education institutions.

Because education is the most powerful tool for individual and societal advancement, universities play a critical role in educating future leaders and agents of change needed to address 21st-century challenges. As a result, universities have to prepare graduates to be leaders of change who focus on addressing both sustainability and quality of life issues. Therefore, this study will attract the attention of e-governance specialists, academicians, scholars, syllabus designers, and policymakers specifically the bodies responsible for higher education policies to reform them as well as establish well-defined policy frameworks that serve as the foundation for e-governance implementation in higher education institutions with the objectives of ensuring transparency, effectiveness, and accountability that could lead to good unification.

As far as higher education institutions are concerned, the dissemination of the findings of this study is particularly important in spreading awareness of e-governance in higher education institutions generally and particularly in the context of the study. This would, in turn, attract education policymakers to take advantage of e-governance, contributing to less paper consumption and good education quality.

Furthermore, this study is significant for future researchers and academicians because it will inspire future studies on e-governance in higher education institutions in Africa in general, with a focus on Sudan. The study will also suggest areas for further research, specifically the challenges hindering e-governance and finding ultimate solutions.

Research Methodology

Research Design

According to Majid (2018), research design is the " use of evidence-based procedures, protocols, and guidelines which offer the tools and framework for carrying out a study is referred to as study design". The investigators make a methodological decision about the study design before beginning data collection. The research questions, objectives, phenomena of interest, population, and sampling strategies all impact the study design. These elements are combined in such a way that their union frequently suggests the nature of the study to be conducted. The nature of how these components align stems from the coherent narrative of the topic being studied, beginning with pre-existing literature and progressing to the rationale for the study, study approaches, proposed study findings and the implications of those research results on principles and practice.

This study utilized quantitative research design. Therefore, to achieve the study's objective, primary quantitative data were collected via a structured survey questionnaire on the subject matter which focused on the topic of the challenges of e-governance and higher education institutions in Sudan (case of Khartoum). The questionnaire consisted of closed-end questions that addressed the objective of the study. The researcher designed the questionnaire after reviewing the literature in the field and previous relevant studies

The survey questionnaire was randomly distributed to tertiary students, tertiary professors, lecturers, and teaching assistants from various disciplines. The respondents were directed to choose options based on the Likert scale (strongly agree, neutral, disagree, strongly disagree) because it is commonly used in questionnaire research and is the most widely used approach to scaling responses in survey research. Also, the model has received considerable interest from researchers and has been tested in various empirical settings. The sample responses were categorized using a five-point Likert scale. The degrees of agreement are as follows: strongly agree (5), agree (4), neutral (3), disagree (2), and strongly disagree (1).Despite the fact that the researcher assigned one thousand survey questions to various groups of participants (teachers, professors, etc.

Population of the Study

The research is conducted on the selected sample, and the findings are generalized to a large or entire group of targeted subjects. In research, such a group is referred to as the population. Hence before beginning research activities, the researcher must decide on and precisely define the population because a well-defined population assists the researcher in selecting a sample of sufficient size to represent the entire population since the sample is crucial to the success of research and the reliability of results (Shuklak, 2020).

This study targets all academic staff and students at Sudanese universities: the University of Khartoum, the University of Sudan for Science and Technology, and the University of Bahri. This study also targets all the university students from three different universities because they are considered the primary beneficiaries of the missions of higher education institutions. This study also includes all academic staff members in charge of teaching and research supervision and administrative positions such as secretaries of scientific affairs, deans of faculties, and department heads.

Sample of the study

The main objective of this study was to examine e-governance challenges in Sudanese higher education institutions. Therefore, the sample population included university students and various groups of researchers and university professors responsible for teaching in Sudanese higher education institutions. The researcher used a random sampling method technique in order to gather the data from the respondents.

The researcher selected three universities in Khartoum (the capital of Sudan). These universities include the University of Khartoum, which is located in Khartoum (the Capital of Sudan). The second selected university is the University of Sudan for Science and Technology, distinguished by engineering and information technology specializations. The third one is the University of Bahri.

Sample Size and Sampling Techniques

According to Majid (2018), sampling "is the process of selecting a statistically representative sample of individuals from the population of interest."Because the population of interest is usually too large for any research project to include as participants, sampling is an important method for research studies. A good sample is a statistically representative representation of the population of interest that is large enough to answer the research question.

To select sample respondents for quantitative data, the researcher used Research Advisors, (2006) scientific sampling method to determine the sample size for a finite population. The method holds that when the number of the population is known, or even if the population is large, the researcher could use the table below. The researcher used the Research Advisors (2006) scientific sample size determination table, demonstrating the scientific sampling technique for selecting sample for the study from the total population. According to the scientific table for calculating sample size (Research Advisors, 2006), the researcher should determine the sample size of the study based on the total population size, and there is no need to use the sample size formula because the table for calculating sample size has all provisions for determining the sample size.

Accordingly, the researcher first determined the total population of the three selected universities: the University of Khartoum (teachers 2230 and 27000 students), the University of Sudan for Science and Technology (35,000 students and 1800 teachers), and the University of Behri (24,000 students and 750 teachers), which stand at 86000 students and 4780 lecturers. A sample size of 776 at a 95% confidence interval with a 3.5% error margin was selected (University of Khartoum= 268, the University of Sudan for Science and Technology= 258, the University of Behri= 250) was determined from the population based on Research Advisors (2006).

Table 1: Sample Size Determination Table

Population Size	Confidence = 95.0%				Confidence = 99.0%			
	Degree of Accuracy/Margin of Error				Degree of Accuracy/Margin of Error			
	0.05	0.035	0.025	0.01	0.05	0.035	0.025	0.01
10	10	10	10	10	10	10	10	10
20	19	20	20	20	19	20	20	20
30	28	29	29	30	29	29	30	30
50	44	47	48	50	47	48	49	50
75	63	69	72	74	67	71	73	75
100	80	89	94	99	87	93	96	99
150	108	126	137	148	122	135	142	149
200	132	160	177	196	154	174	186	198
250	152	190	215	244	182	211	229	246
300	169	217	251	291	207	246	270	295
400	196	265	318	384	250	309	348	391
500	217	306	377	475	285	365	421	485
600	234	340	432	565	315	416	490	579
700	248	370	481	653	341	462	554	672
800	260	396	526	739	363	503	615	763
900	269	419	568	823	382	541	672	854
1,000	278	440	606	906	399	575	727	943
1,200	291	474	674	1067	427	636	827	1119
1,500	306	515	759	1297	460	712	959	1376
2,000	322	563	869	1655	498	808	1141	1785
2,500	333	597	952	1984	524	879	1288	2173
3,500	346	641	1068	2565	558	977	1510	2890
5,000	357	678	1176	3288	586	1066	1734	3842
7,500	365	710	1275	4211	610	1147	1960	5165
10,000	370	727	1332	4899	622	1193	2098	6239
25,000	378	760	1448	6939	646	1285	2399	9972
50,000	381	772	1491	8056	655	1318	2520	12455
75,000	382	776	1506	8514	658	1330	2563	13583
100,000	383	778	1513	8762	659	1336	2585	14227
250,000	384	782	1527	9248	662	1347	2626	15555
500,000	384	783	1532	9423	663	1350	2640	16055
1,000,000	384	783	1534	9512	663	1352	2647	16317
2,500,000	384	784	1536	9567	663	1353	2651	16478
10,000,000	384	784	1536	9594	663	1354	2653	16560
100,000,000	384	784	1537	9603	663	1354	2654	16584
##########	384	784	1537	9603	663	1354	2654	16586

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The formula used for these calculations was:

$$n = \frac{X^2 * N * P * (1-P)}{(ME^2 * (N-1)) + (X^2 * P * (1-P))}$$

Where:

n = sample size

X^2 = Chi – square for the specified confidence level at 1 degree of freedom

N = Population Size

P = population proportion (.50 in this table)

ME = desired Margin of Error (expressed as a proportion)

Methods of Data Analysis

All of the collected data were transcribed into excel texts to ease the data analysis and then the data were further interpreted through SPSS method. The data was analyzed by using simple and suitable mathematical and statistical tools like tabulation, frequency, percentage, arithmetic means and standard deviations using Microsoft Excel and then it was processed through tabulation through the presentation of the summaries and display of the data into statistical tables to facilitate their analysis and interpretation as well as testing the hypotheses. The data was analyzed using the Statistical Package for the Social Sciences (SPSS).

Descriptive Analysis

This analysis is important to transform the raw data so that data can be easy to be interpreted. It is very useful, especially for calculating large numbers of data. The descriptive analysis includes

percentage, frequency, and means analysis. Frequency and percentage statistics should be use d to represent most personal information variables. Frequency statistics should be reported whenever the data is discrete, meaning that there are separate categories that the participant can tick. The percentage is calculated by dividing the frequency in the category by the total number of respondents and multiplying it by 100%.

The Study Findings

What are the major challenges of e-governance in higher education institutions in Sudan?

Descriptive statistics were used to answer this research question.

Respondent's view on the Challenges of E-governance

Ten items were designed to answer this section on the challenges of e-governance. From the table above, all the items have a mean greater than 3, which is the cut-off mean. It shows that 62.2% (497) of the respondents generally agreed that there is an absence of good university governance practices in Sudanese higher education institutions, and 72.3% (578) of the respondents generally agreed that there is a lack of funding is considered the main challenge. 73.4% (587) of the respondents agreed that a weak electricity supply exists. 76.9% (614) believe that Poor telecommunication infrastructure plays a significant factor. 69.1% (552) agreed that Privacy concerns are regarded as challenges that hinder the effective usage of e-governance in Sudanese higher education institutions. 68.7% (549) of the respondents generally agreed that there is a lack of government commitment toward the practice of e-governance. 68.6% (548) of the respondents supported the notion that there is a lack of clear vision regarding technology usage in higher education institutions. 67.6% (540) of the respondents generally agreed that a well-defined ICTs policy is absent in higher education institutions. 65.3% (522) of the respondents agreed that resistance changes by maintaining traditional teaching methods. Also, 55.6% (436) of the respondents agreed that there is a lack of technological literacy among university staff and administrative employees.

Table 10: Frequency and Percentage of Respondent's view of Challenges implementing of E-governance.

No	Item	SA		A		NU		DA		SD			
		F	%	F	%	F	%	F	%	F	%	M	SD
1.	The absence of good university governance practices in Sudanese higher education institutions	252	31.5	245	30.7	135	16.9	96	12.0	71	8.9	3.64	1.28
2.	Lack of funding is considered the main challenge.	351	43.9	227	28.4	104	13.0	60	7.5	57	7.1	3.95	1.23
3.	Weak electricity supply.	375	46.9	212	26.5	76	9.5	70	8.8	66	8.3	3.95	1.29
4.	Poor telecommunication infrastructure plays a significant factor.	389	48.7	225	28.2	61	7.6	65	8.1	59	7.4	4.03	1.25
5.	Privacy concerns are regarded as challenges that hinder the effective usage of e-governance in	290	36.3	262	32.8	109	13.6	85	10.6	53	6.6	3.83	1.22

	Sudanese higher education institutions												
6.	Lack of government commitment toward the practice of e-governance.	310	38.8	239	29.9	106	13.3	86	10.8	58	7.3	3.82	1.26
7.	Lack of clear vision in terms of technology usage in higher education institutions.	290	36.3	258	32.3	119	14.9	81	10.1	51	6.4	3.82	1.21
8.	The absence of well-defined ICTs policy in higher education institutions.	293	36.7	247	30.9	115	14.4	90	11.3	54	6.8	3.80	1.24
9.	Resistance to change by maintaining the traditional methods of teaching.	263	32.9	259	32.4	116	14.5	98	12.3	63	7.9	3.70	1.26
10.	Lack of technological literacy among university staff and administrative employees.	242	30.3	194	24.3	144	18.0	115	14.4	104	13.0	3.44	1.39
	Grande means	**3.80**											
	SD	**.821**											

SA=Strongly Agree, A= Agree, NU= Neutral, D= Disagree, SD= Strongly Disagree, f= frequency, M=mean, SD=Standard Deviation.

Discussions of Findings

Some challenges hinder the application of e-governance in higher education institutions in Sudan

The results appear in table 10 show the major challenges hindering the application of e-governance in higher education institutions in Sudan. According to the respondents' results, the major challenge was found to be the poor infrastructure because the response was significantly higher than the other challenges. Koudiki and Janardanam (2017) support this study's result as they revealed that implementing e-governance in universities requires standard infrastructure such as hardware, software, internet access, and professional personnel.

This indicates that there is a need for the improvement of the university infrastructure in order to effectively apply e-governance. Misuraca (2007) supports the result of this study by revealing that poor ICTs infrastructure, ineffective policy and regulatory standards, a low level of technological diffusion and penetration, a weak human capital base, and insufficient access to technology are relevant features of the continent that limit the opportunities to develop e-governance. The result also supports Beckson's (2005) study that investigated the challenges and opportunities of building and deploying e-governance systems. This study discovered that e-governance implementation is confronted with many challenges, namely, technological infrastructure, and this is based on the fact that many developing countries still have a long way to go concerning computerizing and building the necessary good telecommunications infrastructure on which many advanced e-governance systems

are based. Therefore, developing countries' governments should be more practical in approaching the technology market for adaptable software to the cultural context. The second challenge, according to the quantitative result, was found to be weak electricity supply, as it was considered an important factor in the success of the application of e-governance because of its role in the effective operation of the facilities.

Conclusions

The study concluded that, while e-governance contributes to the enhancement of higher education institutions' missions, despite the fact that e-governance is not being used to its full potential, but there is a positive sign that universities have visions and strategies for further e-governance application. Currently, its use in these universities is low due to several challenges that hinder its application, which requires urgent revitalization. This can be done by allocating adequate financial resources for upgrading e-governance, reforming higher education policies, and developing strategies for adapting e-governance while also ensuring good governance.

Suggestion for Further Research

Over more, Regardless of the e-governance challenges revealed by this study, most e-governance initiatives in African countries have been failures. Accordingly, the researchers suggest that there is a demand for research to be conducted in order to investigate the ways to successful implementation of e-governance initiatives in African countries in order to identify common challenges and work towards addressing them. This can be done as a collaborative continental project sponsored by the African Union in collaboration with continental leaders in order to reveal common challenges and work collaboratively to alleviate them or find the ultimate solution in particular the issue of power supply, network shortage, resistance to change, and technological infrastructure, which are critical to the success of e-governance initiatives. Furthermore, African countries with poor technological capacities ought to take inspiration from other African countries that have achieved a high level of e-government implementation and collaborate as a mutual partnership to ensure that the benefits are continuously disseminated.

REFERNCES

Bechson, M. (2005). The Challenges and Opportunities of Building and Deploying E- an e-governance system.

Blass, E., & Hayward, P. (2014). Innovation in higher education; will there be a role for "the academe/university" in 2025? *European Journal of Futures Research*, *2*(1). https://doi.org/10.1007/s40309-014-0041-x

Camelia, G &Marius,P. (2011). Mission Statements in Higher Education: Contextual and Analysis and Research Agenda. *Bolyai University. Romania.* https://ideas.repec.org/a/ora/journl/v1y2013i2p653-663.html

Edrees, R., & Khalifa, O. (2015). Challenging Development Citizen-Centric E-Governance in Sudan. *International Journal of Innovative Science, Engineering & Technology*, *2*(8).

Idowu, H. A. (2020). Understanding governance challenges in Africa. Global Encyclopedia of Public Administration, Public Policy, and Governance, 1-8. https://doi.org/10.1007/978-3-319-31816-5_4013-1.

Koudiki,V & Janarhanam. (2017). E-Governance in Indian Universities Conceptual: A Conceptual Framework. International Journal of Research in Commerce, IT and Management, 7(5).

Kumar, S. (2013). Promoting E- Governance culture in higher education institutions. *IOSR Journal of Research & Method in Education (IOSRJRME)*, *2*(3), 24-27. https://doi.org/10.9790/7388-0232427.

Li, Q., & Osman,A. (2014). The e-government in Sudan: Challenges, barriers and prospects. *Proceedings of the 2014 International Conference on Global Economy, Commerce and Service Science*. https://doi.org/10.2991/gecss-14.2014.60.

Majid, U. (2018). Research fundamentals: Study design, population, and sample size. *Undergraduate Research in Natural and Clinical Science and Technology (URNCST) Journal*, *2*(1), 1-7. https://doi.org/10.26685/urncst.16

Misuraca, G. (2007). *E-governance in Africa, from theory to action: A handbook on ICTs for local governance*. International Development Research Center.

Onyancha,O. (2020). E-governance and e-governments in Africa: challenges, trends and issues. *Research Gate.*

Petlane, T. (2009). Integrating Governance Education into University Education in Africa: Perspectives, Challenges and Lessons. *South African Institute of International Affairs African perspectives. Global insights.*

Rip, A., Misa, T., & Schot, J. (1995). Managing Technology in Society: The Approach of Constructive Technology Assessment. London: Tomson. Available at: https://e-dokumen.com/document/6f4d7_good-governance-in education.html.

Rubens, A., Spigarelli, F., Cavicchi, A., & Rinaldi, C. (2017). Universities' third mission and the entrepreneurial university and the challenges they bring to higher education institutions. Journal of Enterprising Communities: People and Places in the Global Economy, 11(3), 354–372. Available at: https://doi.org/10.1108/JEC-01-2017-0006