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## Digital government and SMART services - How the "Radical Openness" Effects the

# Quality of SMART Services

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#### ARTICLEINFO ABSTRACT

*Keywords:* Digital transformation, Digital government, Radical Openness, Service Quality

Received: Jan, 28, 2024 Accepted: Feb, 11, 2024 Published: Apr, 30, 2024 The study was aimed at identifying and understanding the need for the implementation of radical openness and the impact of radical openness on the SMART government. The means by which radical openness can be implemented by the government and the challenges that are included in the process of implementation had also been identifying through the study. The study included the collection of information from secondary sources like journals by authors and scholars. The primary data for the study had been collected through the conduction of interviews among various personalities from different government sectors of the UAE. The study found out that radical openness was an essential element of the model of SMART government as it highly improved the quality of service that the government provides to the people of the country. The use of technology in the process enables the government to perform efficiently, uplift the standard of living of the people and foster good communication and information flow within the country. The rights of the people are better observed through the concept of radical openness. Access to important and useful information is a primary need for the people of a country which is enabled through the implementation of radical openness.

## 1. INTRODUCTION

The publishing industry faces a dynamic landscape In recent times, the path to success as considered by several organizations, as well as the government, is radical openness [1]. Earlier, most government sectors from keeping pertinent information inaccessible. However, at present, SMART organizations (government & private) are considering a radical change towards openness to embracing transparency to achieve more success in the business more steadily [2]. SMART government includes Social, Mobile, Analytics, Radical openness, and Trust. The purpose of the present research is found out the impact of radical openness, to improve the SMART government of the UAE through its application [3]-[6]. SMART government is in the growing demand for it lets easy access of information by any device, available

services according to preferences of the individuals, services being shaped according to the needs of the people, and more importantly government transparency. Therefore, the present research aims to understand why the radical government is being used by the government and by which method. It further aims to analyze how to approach radical openness and the different variables of radical openness.

## 2. LITERATURE REVIEW

# 2.1. SMART government and importance of radical openness

According to [1][7], radical openness has positively impacted innovation as well as entrepreneurship as it provides unique knowledge and complementarities from each of the organizations. He argues that radical openness is important, especially in smart cities to co-develop innovative products and services [8]-[11]. Governments play an important role in stimulating and promoting innovation and entrepreneurship in the ecosystems of smart cities through increased collaboration with different organizations. According to [4][12][13], an open structure in smart cities improves economic, social, and cultural factors of new businesses and promotes diversification which helps in new entrepreneurial ventures and opportunities. [5][14], argues that the job of the government is to be committed to the services of the people, for which they focus on the non-monetary outcomes of the newly introduced services with an aim of sustainability. SMART government services aim to deliver innovative services to the public through innovative solutions [15][16]. The importance of radical openness, therefore, gives transparency, with letting people access information easily. Radical openness reduces collaboration and transaction costs [17][18]. It also improves the pace of collaboration metabolism which helps in improving the overall performance of the government.

#### 2.2. Challenges of radical openness

According to [6], open innovation has been a part of the private organization for a long period. However, it was not much used in the public or government organizations. Very little can be known regarding the innovations in government sectors due to limited research and the peculiar nature of the innovation. [6][7][19][20], highlights the challenges faced by the government sectors in implementing innovation through radical openness [21]-[25]. The main barrier in governance and administration is the lack of rules, responsibilities, and tasks in case of new projects done in a small group. The other challenges include the lack of resources and technological know-how of the employees of the government employees. [7][26][27], argues that although many private organizations have implemented radical openness, in many cases, Government sectors often feel the need to keep their pertinent information a secret and do not give access unless enforced by law [29]-[34]. This is a common challenge to use radical openness. The other challenge that radical openness face is the consideration by an organization to maintain the privacy of people and

in the case of government, the question of national security arises. According to [8][35][36][37], openness may compromise sensitive data and also compromise the national security of a company. Due to the lack of an effective system in identifying the data threatening national security, a government refrains from applying radical openness.

## 2.3. Improving SMART Government

According to [4], radical openness has become mandatory by law in many parts of the world. For instance, in Dubai, a data initiative took place through the creation of SMART Dubai. [9] argues, that to create a SMART government, it is important to establish an efficient framework needs to be created so that data can be used as well as accessed in real-time and help in building a smart city [38][39]. Data can be improved with the engagement of the citizens. [10], argues that the of disruptive communication advancement technology influences the patterns of interactions and behavior. Therefore, improving engagement with the citizen on various channels will facilitate a better understanding of the needs of the citizens. [11][40][41], argues that SMART government can be achieved through radical openness through increased communication and informed decisions. If the decisions of the people come from a credible source, it will contribute to a better outcome. It will also enhance the trust between the government and its people.

## 2.4. Variables of Radical openness

[12], pointed out two important elements that factor into radical openness. These are working with transparency, and active engagement of the citizen. In SMART governance, the government aims to enhance the efficiency in service delivery to the public. Using SMART technologies such as smartphones, people can effectively communicate with the government [42]-[46]. The main focus of radical openness is on accountability and transparency. Therefore, government using radical openness, the government will focus on maintaining their services to the people, which will automatically increase communication between the government and the people creating active engagement of the public. In the opinion of [13][47][48], one of the important variables of radical openness is cybersecurity. With openness

and easy access to various data, the government needs to focus on its cybersecurity to protect the national security along with its people [49][50]. The feature of radical openness that defines open by design and also open by default engages people in co-creation and lets organizations apply these data for better innovations.

#### 2.5. Hypothesis

H 0 – Radical Openness does not contribute to improving SMART services quality in UAE.

H 1 – Radical openness contributes to improving the SMART services quality in UAE.

#### 3. RESEARCH METHOD

The present research will use the qualitative approach to carry out the study. The research approach guides the research throughout the process. It supports the overall framework of the study from start to finish. The approaches that are used in research include - Deductive Approach and the Inductive Approach. In the case of the deductive approach, a hypothesis is formed before the investigation, and the hypothesis is tested against relevant data from primary and/secondary data through analysis. In the Inductive approach, the hypothesis is formed after conducting the study and analysis of the data collected through primary and secondary sources. Based on the collected data and its analysis conclusion is drawn which can give rise to new theories or assertions. In this study, the Deductive approach has been used, since the hypotheses have been developed before the collection of the data. The present study hypothesis states that Radical openness plays an important role in the improvement of SMART government. The research paradigm that will guide the study is positivism. Positivist research philosophy is based on the objective interpretation of the collected data through observation. Positivism is applied here as it will facilitate the testing of the hypothesis.

Research design helps the different activities of a study to take place seamlessly and incoordination. Research designs depend on the nature of the study and its objective. Based on that, research is generally of three types – explanatory, exploratory, and descriptive. The present study uses a descriptive research design. It is applied in case the analysis of the data needs description along with summarizing its points to create a pattern that fulfills all the forms of the data. Only qualitative data has been worked within this study. Qualitative

data is the kind that characterizes a phenomenon. It can be recorded and observed. In this study, qualitative data has been collected, both from primary as well as secondary sources. The primary data has been collected using the interview method. The interview has been conducted through four open-ended questions from 4 participants from 4 different companies in the UAE. The secondary data has been collected from various authentic journal articles, books, and papers by authors who have researched radical openness and Smart government. The primary data is then analyzed using descriptive analysis and tested against the findings of the secondary data in the literature review. This is done to test the relevance of the collected data with the objective of the study. Finally, using the deductive approach, the hypothesis of the present study will be tested.

#### 4. ANALYSIS

#### 4.1.Findings and discussions

The interview for the study had been conducted among the four different companies based in the UAE. The questions asked to the respondents of the interview were open-ended and were focused on the significance of radical openness on the concept of smart government in the UAE [51]-[56]. The responses of the respondents revealed that the main challenge of observing radical openness in practicality was the threat of security to the state [14][57]-[61]. The security of the state has a high chance of being threatened due to the disclosure of sensitive information that is related to the countries administration and security [62]. The leakage of such information could lead to adverse situations that could encourage terrorism within the state and hamper the security of the citizens of the country [63]-[68]. The leakage of such information by the government is thus a reason that could use danger on the people and the government [14][69]. The project of building SMART Dubai is an ambition of the government but the threat to the safety and the security of the people is of utmost importance for the state as a result of which radical openness is an impractical approach [70][71]. The maintainable of cybersecurity is considered significant by the government of the country as a result of which the confidential information is protected by the government for the prevention of threats on cybersecurity [72][73]. Despite the restriction regarding the sharing of super confidential data, the law of sharing data is active in UAE so that the people of the country can actively participate in the affairs of the state. Hence, the ultimate goal of the government of the country is to promote the maximum engagement of the citizens of the country [7][74][75]. The transparency of the government and the citizens of the country as a result of radical openness between the government and the people of the country were viewed positively by the respondents of the interview [76]-[80]. The respondents of the interview presented their opinions which were in svnc with each other and sync with the principles of radical openness. The bond between the government and the people of the country was improved through the concept of radical openness and limitless sharing of information [81][66]. The sharing of valuable information between the government and the country resulted in reducing the gap between the government and the people [82]-[85]. Hence, it can have revealed from the responses of the interviews of the respondents that the transparency between the people of the state and the government is improved and trust is established through the implementation of radical openness [3][86][87][88][89]. The communication between the government and the citizens of the country is also improved due to the increase in transparency and free flow of information. Hence it can be said that the relation between the people of the country the state is improved through the and implementation of radical openness [90]. The efficiency of the functions of the government of the country is thus promoted with the implementation of radical openness. The government can deliver better services to the people of the country by implementing the strategy of radical openness [45][91][92][93]. Collaboration and cooperation between the people and the government are improved as a result of radical openness between them. The technological advancements are also better implemented within the policies and the strategies of the country through the implementation of radical openness [14][94][95][96]. A technologically advanced process like digital payments and data security application and the use of big data has been used by the government lately for managing data [97]. This has promoted the technological advanced process and digitization and help to advance

towards the progress of the nation [98]. Hence, it can be concluded from the responses of the respondents of the conducted interview that the concept of radical openness is beneficial for the government as it helps the government to delivered high-quality services and promotes the progress of the country [99]. The efficiency of the government is increased and the communication between the government and the people of the country is improved which leads to the strengthening of the relationship between the people of the country and the government [15][100][101][102]. The principles of SMART government are well maintained through the implementation of radical openness [16][103]. The findings of the interview also indicated that the implementation of radical openness has been beneficial for the organizations of UAE due to the easy and quick access of information which is useful to survive within a competitive environment and also for improving the overall performance of the company. Smart governance in UAE has raised the living standards and access to remote areas has become easier and achievable by UAE's government [104]-[110]. The managers of the four chosen companies including ADNOC, Emirates, Fly Dubai and Etisalat had responded about the challenges faced in implementing radical openness since the history of the company [111]-[115]. The responses of the interviewees and the literature collected both reveal that one of the main problem was the protection towards the use of radical openness within the company was the protection of the personal details of the employees and the customers [116]. The policy of the company and the rights enjoyed by the company including the flying routes of emirates and fly Dubai could not and cannot be disclosed for the sake of the company's security.

#### 4.2. Linkage with the literature

The challenges of implementing the concept of radical openness in the administrative sector of UAE are the dynamic nature of the information that the state owns [14][117][118][119]. The confidentiality of information related to the state's security has to be maintained due to which radical openness is violated [120]-[134]. The responses of the interview respondents and the collected literature both indicate that the concept of radical openness is not possible to be fully implemented

due to the maintenance of the confidentiality of specific information that is sensitive and related to the country's security and wellbeing [135]-[141][142]. Another fact collected from the primary data collection is the transparency and accountability of the government as a result of radical openness [143]-[149]. The respondents of the interview have agreed and opined that radical openness of the government sectors has led to transparency between the government and the people of the country through improved communication between both parties and increased flow of information [4][150][151]. The collected literature also suggests that the increased transparency between the government and the people also builds up trust and accountability [152]-[158]. At the same time, the variables that have been identified through the literature include communication, information flow, cybersecurity, transparency, and accountability which have matched with the opinions of the interviewees [159]-[164]. The issue of cybersecurity and terrorism has been identified as the challenges for which radical openness could become a threat for the country by the respondents and radical openness has been identified to be the source of transparency and communication that builds up trust and accountability between the government and the people of the country [165]-[170].

5. CONCLUSION

It can be concluded from the study that radical openness is a significant and essential component of SMART government. It is responsible for improving the efficiency of the government and uplifting the lifestyles of the people through the smart use of technology and digital means. The basic concept of radical openness fosters strong communication between the people of the country and the government and reduces information gaps. This results in strengthening the trust between the increasing the loyalty parties and and accountability of the government. The service quality of the government of a country is highly improved through the implementation of radical openness. The incorporation of technological advancements and transformation towards digitization is fostered through the implementation of radical openness. The study found out that radical openness is a great contributor to raising the lifestyles of the people by improving their access to information. The true sense of democracy and collaboration between the people and the government is established through the concept of radical openness. This is because the right of sharing information and the right to know everything is promoted along with collectivism and cooperation. Hence, it can be said that the various types of variables of radical openness that have been identifying through the study have led to SMART governance by adding to the conveniences of the people.

- 6. RECOMMENDATION
- Open data can be made available to all through technological applications and challenges regarding lack of technological knowledge should be met by imparting education through training so that everyone can get access to the data.
- Circulation of sensitive data that may arouse controversy among people should be carried out efficiently and carefully. The opinion regarding the situations should be collected through virtual polling so that the true essence of democracy is established through radical openness.
- The creation of information hubs or virtual information banks should be initiated to enable people quick, faster, and easy access to any piece of information [164]. This could add to the convenience of the people, increase the efficiency of the government and upgrade the lifestyles of the people which are the true essence of a SMART government.
- Important information regarding • the availability of primary resources can also be circulated through the use of software applications [171]-[177]. The collection and management of data can be done through the implementation of advanced and smart technology. The primary needs of the people can be satisfied in this method with the help of this plan in times of crisis. The plan would also be a problem-solving mechanism for the government for serving the remote parts of the country efficiently.

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## APPENDIX Interview questions

#### Question 1-

What challenges have you faced since the glorious history of your company regarding the less involvement of smart government?

Manager 1 from ADNOC- Our company had been set up in the year 1971 but the most bothering problem had been faced due to the faulty structure of the organization. The communication between the company authorities and the employees was ineffective. Hence the company had to be restructured in the year 1981. The challenges that had been faced regarding the less involvement of smart government was the lack of bond and communication among the employees. The communication and the information flow among the employees could not be improved easily and the poor employee to employee relation was a hindrance towards radical openness. The implementation of radical openness and the change of the organizational structure led to the improvement of the company and took it to the top 12 companies producing oil and petroleum.

Manager 2 from Emirates Airlines- The threat of security and information leakage was a very significant challenge faced by Emirates due to low presence of smart government in its early days of development. After the company had been set up in 1985, it had focused on building up a strong policy towards the protection of the privacy of information that was confidential and crucial for the security of the state and the for the passengers. The security of the passengers has been of the topmost priority for the company since its glorious history. This was a massive challenge for the implementation of radical openness.

Manager 3 from Fly Dubai- The confidential information about the flying rights and privileges enjoyed by the company, the details about the passengers and the employees of the company are confidential information which could pose danger on the passengers as well as the employees of the company. Without complete sharing of information radical openness cannot be implemented. Hence this a great challenge towards the implementation of radical openness. At the beginning of the company's journey since 2008. The company is comparably a new company and the threat of information leakage could result in a complete

#### shutdown.

Manger 4 from Etisalat- The company had been set up in the year 1976 and the main problem that had been faced since then was the implementation of radical openness. The company had been in operation around the world in almost 16 countries and this problem had been common in all the countries. This is because a lot of confidentiality has to be maintained by the company due to the security of the customers for the protection of their personal details. This a challenge of implementing radical openness as the security of the customers cannot be at stake otherwise the reputation of the company might be hampered.

## Question 2

What have been the factors or challenges that acts as hurdle for your company to achieve radical openness?

Manager 1 from ADNOC - The main challenge of implementing radical openness by the government is the need for confidentiality in matters of the state. Confidential information has to be maintained safely by the statement as a result of which radical openness cannot be implemented.

Manager 2 from Emirates Airlines - The suspicion towards the use of unfair means and fraudulent activities of the government leads to the problem in the implementation of radical openness.

Manager 3 from Fly Dubai - Sensitivity of some information needs to be preserved by the government. Information that could create unnecessary create panic among the general public of s country is risky to be disclosed by the government.

Manger 4 from Etisalat - Strong information regarding the country's economy could encourage terrorism and pose threat to the security of the state as a result of which information leakage is dangerous for the country's security.

Question 3

What is the importance of a SMART government? Manager 1 from ADNOC- the SMART government is significant for the growth of the economy and the progress of a country.

Manager 2 from Emirates Airlines- The governance leads to the up-gradation of living standards. It leads to the improvement of the services provided to the general public by the government.

Manager 3 from Fly Dubai- An advanced society can be built with the help of a SMART government

due to the incorporation of technological advancements.

Manger 4 from Etisalat- SMART approach makes a government well equipped to serve the nation better and reach out to the most remote societal sections.

Question 4

What impact did radical openness and SMART government have on your organization?

Manager 1 from ADNOC - Radical openness has been a positive impact and fostered the improvement of teamwork within our organization. SMART has shaped the policies and the organizational structure better and in a progressive way.

Manager 2 from Emirates Airlines - Transparency and employee engagement have improved within our organization due to the implementation of radical openness.

Manager 3 from Fly Dubai - problems regarding conflicts and miscommunications have been resolved due to the adoption of radical openness in the organization.

Manger 4 from Etisalat - the SMART government has made it easier for the company to get access to useful information and data for coping up with the high level of market competition and also for improving performance.

Question 5

What impact does radical openness have on the transparency between the government and the people of a country?

Manager 1 from ADNOC - The radical openness of the government helps in establishing transparency between the people of the country and the government.

Manager 2 from Emirates Airlines - The trust of the people is firmly established in the government through radical openness.

Manager 3 from Fly Dubai - Radical openness leads to the improvement of the relations between the government and the citizens of a nation. The communication between the government of a country and the citizen improves due to the radical openness of the government.

Manger 4 from Etisalat -Radical openness is one of the main components of a SMART government. It enables a government to function efficiently and deliver proper service to the citizens of the country.