# Case study of decision support system

**Technology** 



# Federal UAE eGovernment portals as example of decision support system

In the 21st Century, most governments focus on simplifying their functions by adopting systems that would bear the burden of the multiple activities and not the user. Most decisions in these governments are made at various levels thus with a system in place; it would ease the process of decision making (Wang & Cheng, 2006). The recent trend in modern and distributed collaboration technology is the possibility of individuals going across boundaries and collaborating between or within various communities or organisations. A collaborative DSS utilises the computer support and communication entities to help in the collaborative process of making a decision especially when the team is distributed. The collaborative DSS helps in solving semi-structured and unstructured usually by the policy makers working as a group. According to Oprean et al. (2009), an ideal collaborative DSS should be safe, efficient, effective and usable. The system has concepts of decision support system, aspects of Human Computer Interaction and attributes of artificial intelligence that are agent-oriented. The collaborative DSS helps to generate, evaluate, organise and explore ideas.

The United Arab Emirates realized the essentiality and efficacy of the eGovernment as an instrument of ensuring that the developmental plans are successful, moving towards an economy that is based on knowledge and improving the government zone. The ministry of finance was mandated to establish the general eGovernment strategic plan for the government agencies and departments and see to it that it is implemented guided by the vision, 'Transformation to a world-class knowledge-based government' (AlKhouri, 2012). Currently, the Federal eGovernment in the UAE functions in a dynamic setting not just due to the information technology changing nature but also due to the exceptional character of the country regarding being a worldwide economic center that aims at assuming the first position internationally in all realms. Furthermore, the area is presently facing transformations in aspects of the advent of the eGovernment that have realized inordinate attainments in a little time and also the increasing cognizance of the part that the modern ICT tools and the internet shaping the nations' futures.

## **UAE eGovernment Strategic Framework 2012-2014**

The federal eGovernment program officially started in 2001 with one of the first eService being the electronic card referred to as eDirham that was used to collect the government service fees (Al-Khouri, 2012). Currently, the UAE is regarded as one of the regions with the world-class and most advanced information and communication infrastructures. It is also considered among the governments that are heavily investing in adoption and implementation of the progressive ICT in the private and public sectors. According to the UN eGovernment Survey in 2012, the UAE has made significant strides in the eGovernment domain. It was ranked at position 28 from 49 in 2010. It was also ranked at position 6 in 2012 while in 2010 it was at position 86 and in the online service index, it scored the 7th place from position 99 in 2010 (Al-Khouri, 2012).

The United States Emirates established a federal eGovernment Strategic Framework for 2012-2014 that demonstrates the government's plans and

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initiatives for three years. The UAE eGovernment strategy had seven primary references including;

# **UAE Vision 2021**

It is the utmost approach that offers the country's strategic vision for which the electronic Government policy should be in alignment with and help in its realization. The United Arab Emirates Vision 2021 envisions the establishment of an economy that is based on knowledge and will be flexible and diverse shepherded by specialized Emiratis (Al-Khouri, 2012). The vision has four vital parts with thorough purposes connected to nationwide identity, health, education, and economy. It focuses on making the UAE a place of confident, determined individuals who hold onto their legacy, a competitive economy, a robust federation led by knowledgeable and creative Emiratis as well as improved quality of living in a sustainable and generous surrounding.

UAE Strategy 2011-2013

It offers a phased disposition for the central government to advance towards Vision 2021of the United Arab Emirates (Al-Khouri, 2012).

#### UAE Government ICT Strategy

It is the federal strategy to control the telecommunications subdivision. It signifies the foundation on which the electronic Government strategy was established since it describes and explains the dimensions including readiness, environment, as well as service.

#### Service Development Strategy

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It offers a breakdown of the present condition of the state administration services and comprehensive instructions on the process of developing them. It also entails variously considered initiatives that are part of the eGovernment scheme.

Federal government budget

The e-government money allocation is in alignment with the central government's quota.

**Current Situational Analysis** 

It covers three dimensions including readiness, environment, and service. It also helps in identifying the opportunities and gaps that can be handled through the specific initiatives and purposes in the eGovernment strategy.

#### Benchmarking

It entails the associations of the best electronic Government practices to assist the development of the new strategy and define the initiatives and key goals.

Three primary dimensions of eGovernment

With the eGovernment strategy 2012-2014, the federal government was confident that it would improve the UAE global competitiveness and enhance the countries eTransformation. (Mishra & Mishra, 2012). During development, it adopted a seven-strategy process after a benchmarking experience with some of the global eGovernment implementations and practices from countries such as the USA, Canada, Singapore, Southern https://assignbuster.com/case-study-of-decision-support-system/ Europe, GCC countries and the European Union. The result of the exercise was the prioritizing and definition of the initiatives and chief focus area. The development method considered three primary dimensions including ICT environment, eService and eReadiness (Mishra & Mishra, 2012).

#### Environment

It covers the regulatory policies and infrastructure that impacts the growth of the United Arab Emirates' ICT sector and particularly the usage of the productions of this subdivision in the government division. The environment is all about improving the electronic maturity of the government agencies.

#### eReadiness

It stresses on levitating the degree of the government readiness by improving governance, constructing an up-to-date infrastructure and delivering collective applications and promoting the UAE competitiveness in the area of electronic government.

#### eService

It emphasizes that the state agencies should offer services to different groupings of the customers via innovative and multiple technological channels and by utilizing the feedback from the clients.

#### Abu Dhabi Vision 2030

The government of Abu Dhabi has set priorities and guidelines for its socioeconomic progress to ensure continued success of the Emirates' development. At such the Abu Dhabi Economic 2030 is a roadmap to the https://assignbuster.com/case-study-of-decision-support-system/ Emirates growth and development progress sponsored since 2006 and present development strategies for 20 years. Its two pillars include the Abu Dhabi Urban Planning Vision 2030 and Abu Dhabi Economic Vision 2030. Abu Dhabi aims at not only becoming the top Arab capital but also gaining social, economic and cultural sustainability.

#### Dubai Vision 2021

This plan focuses on six dimensions including the people, society, government, experience, place and economy. The plan focuses on creating a pioneering and excellent government, a smart and sustainable city, a city of creative, happy and empowered people, a cohesive and inclusive society, an economic hub and the place of choice for living, working and visiting

The eGovernment strategy was crafted with the aim of building a reputable federal government that would support the advancement of the competitiveness of the United Arab Emirates and assists in ensuring that UAE is among the crème countries globally following the UAE Vision 2021(Al-Khouri, 2012). For the strategy to be fully translated into reality, the eGovernment sector ought to adopt the federal eGovernment Strategy and the leadership should also fully and firmly support the strategy. The eGovernment sector should also be empowered as the authority accountable for the execution of the eGovernment strategy and also assume the function of budget review so as to achieve the required financial saving. Finally, with proper eGovernment structure put in place, the collaborative DSS would support the decision making process because with a central portal where individuals from any state in the UAE from Dubai to Abu Dhabi can easily share their opinions online and facilitate decision making with public participation as one of the fundamentals of eGovernment.

### References

Abdou, A., Lewis, J., & Al Zarooni, S. (2013). The Evaluation of a Web-based Decision Support System for Healthcare Project Appraisal. International Journal of Project Organisation and Management 7, 5(1-2), 69-90.

Abu-Shanab, E., & Khasawneh, R. (2014). E-Government Adoption: The Challenge of Digital Divide Based on Jordanians' Perceptions. Theoretical and Empirical Researches in Urban Management, 9(4), 5-19.

Al-Khouri, A. M. (2012). eGovernment Strategies the Case of the United Arab Emirates (UAE). European Journal of ePractice, 17, 126-150.

Al-Nuaim, H. (2011). An Evaluation Framework for Saudi e-government. Journal of e-Government Studies and Best Practices, 2011, 1-12.

Chan, S. H., Song, Q., Sarker, S., ; Plumlee, R. D. (2017). Decision Support System (DSS) Use and Decision Performance: DSS Motivation and its Antecedents. Information ; Management.

Conklin, W. A. (2007, January). Barriers to Adoption of e-Government. In System Sciences, 2007. HICSS 2007. 40th Annual Hawaii International Conference on (pp. 98-98). IEEE.

Dias, G. P., Gomes, H., ; Z; quete, A. (2013). Privacy Policies in Web Sites of Portuguese municipalities: An empirical study. In Advances in Information Systems and Technologies (pp. 87-96). Springer Berlin Heidelberg. Gilbert, D., Balestrini, P., ; Littleboy, D. (2004). Barriers and Benefits in the Adoption of e-Government. International Journal of Public Sector Management, 17(4), 286-301.

Hillegersberg, J., ; Koenen, S. (2014). Adoption of Web-based Group Decision Support Systems: Conditions for Growth. Procedia technology, 16, 675-683.

Khorshid, M. (2004, September). Model-Centered Government Decision Support Systems for Socioeconomic Development in the Arab World. In Proceedings of The International Conference On Input-Output and General Equilibrium: Data, Modeling and Policy analysis; Brussels, Belgium (pp. 2-4).

Lu, J., ; Ruan, D. (2007). Multi-objective Group Decision Making: Methods, Software and Applications with Fuzzy Tet Techniques (Vol. 6). Imperial College Press.

Marques12, F., Dias, G. P., ; Z; quete, A. (2009). Security Concerns in eGovernment agent-based interoperability.

Mishra, A., ; Mishra, D. (2012). E-government: Exploring the Different Dimensions of Challenges, Implementation, and Success Factors. ACM SIGMIS Database, 42(4), 23-37.

Narayanasamy, K., ; Velmurugan, M. S. (2008). Application of Decision Support System in E-commerce. Communications of the IBIMA, 5(19), 1405-1418. Rabaai, A. A., Zogheib, B., Al Shatti, A., ; AlJamal, E. M. (2015). Adoption of egovernment in Developing Countries: the Case of the State of Kuwait. Journal of Global Research in Computer Science, 6(10), 77-101.

Riad, A. M., El-Bakry, H. M., ; El-Adl, G. H. (2010). A Novel DSS Framework for E-government. IJCSI, 7(6), 33-37.

Riad, A. M., El-Adl, G. H., Mamoun, M. H., ; El-Bakry, H. M. (2012, November). Effective and Secure DSS for E-Government. In Proceedings of the 1st WSEAS International Conference on Information Technology and Computer Networks (ITCN'12), Vienna, Austria (pp. 243-255).

Sandoz, A. (2009, May). Design principles for e-government architectures. In International Conference on E-Technologies (pp. 240-245). Springer Berlin Heidelberg.

Wauters, P., & Colclough, G. (2006). Online Availability of Public Services: How is Europe Progressing. Web Based Survey on Electronic Public Services. Report of the 6th Measurement. CapGemini on Commission from the European Commission.