



# **NATIONAL OPEN UNIVERSITY OF NIGERIA**

**91, Cadastral Zone, University Village Jabi, Abuja**

## **FACULTY OF MANAGEMENT SCIENCES**

### **DEPARTMENT OF ADMINISTRATION**

#### **COURSE GUIDE**

**Course Code: MPA 843**

**Course Title: E-GOVERNANCE IN THE PUBLIC SECTOR\ELECTRONIC  
GOVERNANCE AND ADMINISTRATION**

**Course Writers:** **Dr. (Mrs.) Maryam O. Quadri**  
(University of Lagos)

**Course Editor:**

**Programme Coordinator:** **Dr. (Mrs.) Nwamaka P. Ibeme**  
(National Open University of Nigeria)

**Head of Department:** **Dr. (Mrs.) Yemisi Ogunlela**  
(National Open University of Nigeria)

**Dean of Faculty:** **Dr. Timothy O. Ishola**  
(National Open University of Nigeria)

National Open University of Nigeria

**Headquarters**

University Village

Plot 91 Cadastral Zone

NamdiAzikiwe Expressway

Jabi, Abuja.

Lagos Office

14/16 Ahmadu Bello Way

Victoria Island, Lagos

e-mail: [centralinfo@noun.edu.ng](mailto:centralinfo@noun.edu.ng)

URL: [www.nou.edu.ng](http://www.nou.edu.ng)

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## **CONTENTS**

## **PAGE**

Introduction.....	
Course Aims.....	
Course Objectives.....	
Course Materials.....	
Study Units.....	
Assignments.....	
Tutor –Marked Assignments.....	
Final Examination and Grading.....	
Summary.....	

## **Introduction**

This course, MPA 857: E-governance in the Public Sector/Electronic Governance and Administration is a three credit unit compulsory for students studying public administration and related programmes in the School of Management Sciences.

The course has been arranged for you in twenty distinct but related units of study activities. In this course guide, you will find out what you need to know about the aims and objectives of the course, components of the course material, arrangement of the study units, assignments, and examinations.

## **The Course Aim**

The course is aimed at acquainting you with the knowledge in the world of electronic governance (e-governance) in the public sector. The course is premised on the knowledge that technology and service levels are intimately interwoven factors in the emerging e-Government services. The course is therefore designed to update your knowledge on the shifting role of how services are delivered through the use of Information and Communication Technology (ICT). To ensure that this aim is achieved, some important background information will be provided and discussed. These include:

- Conceptualizations of e-governance, e-government, e-democracy and e-participation

- The role of Information and Communication Technology

- E-service in the public sector

- Approach of E-service in the public sector

- Online tools of engagement and policy process

- E-service Benefits

- E-Health and E-Learning

- E-government in developing countries

- Challenges of E-governance

## **The Course Objectives**

At the end of the course you should be able to:

- Discuss the principles of e-governance and its objectives
- Examine and discuss types of service delivery in e-governance
- Examine the objectives of e-government
- Examine the role of ICTs in e-government
- Discuss some of the reasons why governments use ICT in its operation
- Examine the models of e-democracy and their characteristics
- Examine the various forms which e-participation can take;
- Discuss how technology-enabled information can improve policy process.
- Discuss the outcomes of e-participation
- Discuss public network project;
- Discuss the various models of e-service development
- Examine E-service benefits
- Discuss the trends in the world of e-government across the globe

## **Course Material**

The course material package is composed of:

- The Course Guide
- The Study Units
- Self-Assessment Exercises
- Tutor-Marked Assignments
- Further Reading Sources

## **The Study Units**

The study units are as listed below:

### **MODULE 1: E-GOVERNANCE IN THE PUBLIC SECTOR**

Unit 1 Introduction to E-Governance

Unit 2 E-government in Administration

Unit 3 Information and Communication Technology

Unit 4 E-Democracy

Unit 5 E-Participation

### **MODULE 2: DIGITAL GOVERNMENT AND PUBLIC POLICY**

Unit 1 Public-Making Process

Unit 2 E-participation and Policy-Making

Unit 3 Management and Digital Government

Unit 4 Public Network

### **MODULE 3: PUBLIC SERVICE DELIVERY IN DIGITAL AGE**

Unit 1: Public E-Service

Unit 2: Models of E-Service

Unit 3: E-service in the Public Sector

### **MODULE 4: TRENDS IN THE WORLD OF E-GOVERNMENT DEVELOPMENT (COMPARATIVE)**

Unit 1 E-government development around the World

Unit 2 E-government in Africa

Unit 3 E-government in Europe

Unit 4 E-government in America

Unit 5 E-government in Asia

Unit 6 E-government in Oceania

## **MODULE 5: CHALLENGES OF E-GOVERNANCE**

Unit 1: Governance Networks

Unit 2: Challenges of E-governance in Developing Countries (focus on Africa)

### **Assignments**

Each unit of the course has a self assessment exercise. You will be expected to attempt them as this will enable you understand the content of the unit.

### **Tutor-marked Assignment**

The Tutor-Marked Assignments at the end of each unit are designed to test your understanding and application of the concepts learned. It is important that these assignments are submitted to your facilitators for assessments. They make up 30 percent of the total score for the course.

### **Final Examination and Grading**

At the end of the course, you will be expected to participate in the final examinations as scheduled. The final examination constitutes 70 percent of the total score for the course.

### **Summary**

This course, MPA 857: E-governance in the Public Sector/Electronic Governance and Administration is very relevant in the discourse on modern usage of technology in the world of public administration. This course will enable you come to the knowledge of the shifting paradigm in public service delivery via information and communication technology (ICT). The shift is not only on service delivery but also on the way citizens participate in policy-making process through the tools of online engagement.

## **MODULE 1 E-GOVERNANCE IN THE PUBLIC SECTOR**

**Unit 1: Introduction to E-Governance**

**Unit 2: E-government in Administration**

**Unit 3: Information and Communication Technology**

**Unit 4: E-Democracy**

**Unit 5: E-Participation**

## **UNIT 1 INTRODUCTION TO E-GOVERNANCE**

### **TABLE OF CONTENT**

**1.0 Introduction**

**2.0 Objectives**

**3.0 Main Content**

**3.1 What is E-Governance?**

**3.2 Principles of e-governance and Objectives**

**3.3 Major Administrative and Democratic Improvements of E-governance**

**3.4 Types of Service Delivery in e-governance**

**3.4 Domains of e-governance**

**4.0 Conclusion**

**5.0 Summary**

**6.0 Tutor-Marked Assignment (TMAs)**

**References and Further Reading**

### **1.0 INTRODUCTION**

In this unit, student will be introduced to the concept of E-governance. Technological advances have changed the way people go about their daily activities. Whether we are checking our e-mails or texting or sending messages with our phones, mobile communication is growing, and our ability to navigate the World Wide Web is improving dramatically. We use the internet to shop on-line, do banking transactions, book for our flight tickets and make payment on-line, check the weather, do research on any subject and connect with network. You may wonder what this has to do with public administration. As Internet usage grows, and the use of technology in general grows, so too does the use of technology and Internet by government. E-governance is the general term used to describe the government's use of technology in performing its multiple responsibilities (Holzer and Schwester, 2011). This



unit is meant to develop student's knowledge and understanding on how government services are performed through the modern technology.

## **2.0 OBJECTIVES**

At the end of this unit, you should be able to;

- Examine the term e-governance;
- Discuss the principles of e-governance and its objectives;
- Examine and discuss types of service delivery in e-governance
- Discuss the major administrative and democratic improvements of e-governance.

## **3.0 MAIN CONTENT**

### **3.1 What is E-governance?**

The e-Governance has become an accepted methodology involving the use of Information Technology in improving transparency, providing information speedily to all citizens, improving administration efficiency, improving public services such as transportation, power, health, water, security and municipal services.

Governance has always been dependent upon technology, in the broadest sense of knowledge, skills, techniques and epistemological strategies, as well as devices, hardware, software and power circuits. As the reach of governance has spread into new areas of the globe as well as new aspects of hitherto personal relationships, it has come to rely upon more complex assemblages of technically stored and disseminated knowledge (Coleman, 2008).

E-governance is the public sector's use of information and communication technologies with the aim of improving information and service delivery, encouraging citizen participation in the decision-making process and making government more accountable, transparent and effective. E-governance involves new styles of leadership, new ways of debating and deciding policy and investment, new ways of accessing education, new ways of listening to citizens and new ways of organizing and delivering information and services. E-governance is generally considered as a wider concept than e-government, since it can bring about a

change in the way citizens relate to governments and to each other. E-governance can bring forth new concepts of citizenship, both in terms of citizen needs and responsibilities. Its objective is to engage, enable and empower the citizen (UNESCO)([www.unesco.org](http://www.unesco.org)).

E-governance entails the digitized coding, processing, storage and distribution of data relating to three key aspects of governing societies: the representation and regulation of social actors; the delivery of public services; and the generation and circulation of official information (Coleman, 2008).

E-governance is more than just a government website on the Internet. The strategic objective of e-governance is to support and simplify governance for all parties; government, citizens and businesses. The use of ICTs can connect all three parties and support processes and activities. In other words, in e-governance electronic means support and stimulate good governance.

### **3.2 Principles of E-governance and Objectives**

The principles of e-governance are to:

- Build services with citizen choices in mind;
- Increase government accessibility;
- Foster social inclusion;
- Disseminate information in a responsible fashion; and
- Use taxpayers resources effectively and efficiently (Holzer and Schwester, 2011).

Let us consider some of the objectives of e-governance.

According to Ojo cited in Maduabum (2008:670), objective of e-governance include the following:

To ensure transparency in the workings of government;  
To ensure greater efficiency, objectivity, accountability and speed in providing services and information to the public;  
To provide qualitative and cost-effective services;  
To provide a single window for all government services;  
To evolve responsive administration;  
To provide a friendly, speedier and efficient interface; and  
To eliminate the middlemen.

### **3.3 Major Administrative and Democratic improvements offered by e-governance**

cheaper and more effective management and processing of information;  
a freer flow of information between departments, agencies and layers within government;  
more professional administrators, supported by standardised, electronically-embedded decision-making systems;  
the routine provision of services according to impersonal rules, as opposed to clientelist arrangements;  
transparency, particularly in relation to the procurement of government services;  
opportunities to work in partnership with the private sector in modernising governmental processes;  
a freer flow of information between government and citizens;  
the strengthening of intermediary democratic institutions, such as parliaments, local government, civil-society organisations (CSOs) and independent media;  
opportunities for citizens to participate more directly in policy development;  
opportunities to combine traditional and modern methods of accountability.

### 3.4 Types of Service Delivery in e-governance

The quest to improve service delivery through the use of ICTs in governments typically focuses on four main dimensions. These are:

1. **G2C (Government-to-Citizens):** This focuses primarily on developing user-friendly one-stop centers of service for easy access to high quality government services and information.
2. **G2B (Government-to-Business):** This aims to facilitate and enhance the capability of business transactions between the government and the private sector by improving communications and connectivity between the two parties.
3. **G2G (Government-to-Government):** This is an inter-governmental effort that aims to improve communication and effectiveness of services between federal, state and local governments in the running of day-to-day administration. It is generally aimed at improving the efficiency and effectiveness of overall government operations.
4. **Intragovernment:** This aims to leverage ICT to reduce costs and improve the quality of administration and management within government organization (Islam and Ahmed, 2007).

### 3.4 Domains of e-governance

There are three main domains of e-governance:

E-administration: improving government processes

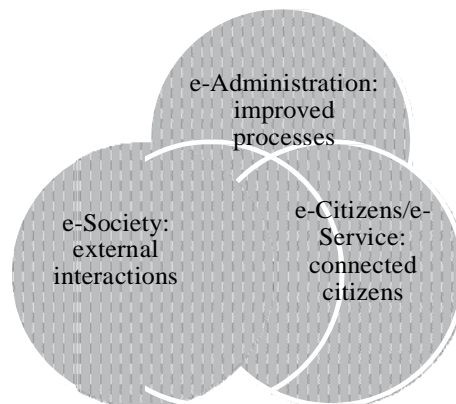
E-services: connecting individual citizens with their government

E-society: building interactions with and within civil society.

- **E-administration** – the main purpose of e-administration is to improve the internal working of the public sector by cutting process costs, managing process performance,

creating strategic connections within government bodies, and creating empowerment. Shortening the lead time for passport application from two weeks to one day is an example of e-administration.

- **E-service** initiative focus mainly on improving the relationship between the government and its citizens by increasing the information flow between them – which notably, involves two- way communication – and improving the service levels of government towards its citizens. Public service institutes offering citizens the opportunity to apply for business licenses through a government websites is one example of e-services.
- **E-society** initiatives extend e-service domain by focusing on institutional stakeholders, such as private sector service providers, other public agencies, and not-for-profit and community organizations. E-society focuses on building long lasting partnerships and social/economical communities: for example through the creation of a business community portal.



The three domains of e-governance are seldom separate in their implementations; rather, they involve overlapping activities as part of the same initiative (Arjan de Jager, 2008).

### Self-Assessment Exercise

1. Enumerate the principles and objectives of e-governance
2. Discuss the major types of service delivery in e-governance

#### **4.0 CONCLUSION**

E-governance as we observe from our discussion may enhance access to government by citizens. It may increase access by those who work within government and those who work with government. It facilitates good governance for all stake holders.

#### **5.0 SUMMARY**

In this unit, we have looked at the various meanings of e-governance. As we can see, e-governance is more than just a government on the website. The strategies of e-governance can enable government and citizens to engage and partner with each other and other stakeholders. We also discussed the objectives of e-governance as well as the types of service delivery in e-governance. Subsequent units will discuss some other aspects of e-governance.

#### **6.0 TUTOR-MARKED ASSIGNMENT**

1. What is your understanding of e-governance?
2. Identify and discuss the main domain of e-governance.
3. Examine and discuss the major types of service delivery in e-governance.

#### **REFERENCES AND FURTHER READING**

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## **UNIT 2 E – GOVERNMENT IN ADMINISTRATION**

### **TABLE OF CONTENT**

- 1.0 Introduction**
- 2.0 Objectives**
- 3.0 Main Content**
- 3.1 What is E-Government?**
- 3.2 Objectives of e-government**
- 4.0 Conclusion**
- 5.0 Summary**
- 6.0 Tutor-Marked Assignment (TMAs)**
- References and Further Reading**

### **1.0 INTRODUCTION**

In the last unit, we learnt a lot about e-governance. In this unit we are focusing on the term ‘e-government’ confusion still reigns concerning the difference between the two terms ‘e-governance’ and ‘e-government’. E-governance denotes a “wider concept that defines and assesses the impacts technologies are having on the practice and administration of governments and the relationships between public servants and the wider society, such as dealings with the elected bodies or outside groups such as not for profits organizations, NGOs or private sector corporate entities” and e-government as “a narrower discipline dealing with the development of online services to the citizen, more the e of any particular government service – such as e-tax, e-transportation or e-health Sheridan and Riley cited in Palvia and Sharma (2007). This unit therefore will enhance student’s knowledge on the concept of ‘e-government’.

### **2.0 OBJECTIVES**

At the end of this unit, you should be able to:  
Discuss the term ‘e-government’;  
Examine the objectives of e-government.

### **3.0 MAIN CONTENT**

#### **3.1 What is e-government?**

There are many definitions of E-government. Let us consider some of these definitions.

E-government is the use of information technology to free movement of information to overcome the physical bounds of traditional paper and physical based systems.

It is the use of technology to enhance the access to and delivery of government services to benefit citizens, business partners and employees.

The aim of e-government therefore is to provide efficient government management of information to the citizen; better service delivery to citizens; and empowerment of the people through access to information and participation in public policy decision-making (Basu 2004).

E-government is the use by government agencies of information technologies (such as Wide Area Networks, the Internet, and mobile computing) that have the ability to transform relations with citizens, businesses, and other arms of government. These technologies can serve a variety of different ends: better delivery of government services to citizens, improved interactions with business and industry, citizen empowerment through access to information, or more efficient government management. The resulting benefits can be less corruption, increased transparency, greater convenience, revenue growth, and/or cost reductions (World Bank, 2011) ([www.worldbank.org](http://www.worldbank.org)).

E-government is the use of new information and communication technologies (ICTs) by governments as applied to the full range of government functions. In particular, the networking potential offered by the Internet and related technologies has the potential to transform the structures and operation of government (OECD, 2009).



E-government involves using information technology, and especially the Internet, to improve the delivery of government services to citizens, businesses, and other government agencies. .

The common theme behind these definitions is that e-government involves the automation or computerization of existing paper-based procedures that will prompt new styles of leadership, new ways of debating and deciding strategies, new ways of transacting business, new ways of listening to citizens and communities, and new ways of organizing and delivering information.

Ultimately, e-government aims to enhance access to and delivery of government services to benefit citizens. More important, it aims to help strengthen government's drive toward effective governance and increased transparency to better manage a country's social and economic resources for development (Basu, 2004).

### **3.2 Objectives of e-government**

Objectives of e-government as provided by Ajayi in Maduabum (2008:670) are:

- To replace traditional governance with electronic governance;
- To create knowledge-based governance;
- To enhance Simple Moral Accountable Responsive and Transparent (SMART) governance;
- To reduce bureaucracy;
- To maximize productivity and quality;
- To eliminate waste;
- To increase efficiency;
- To create an easy and free access to government information; and
- To reduce the cost of service delivery.

Beyond these general objectives, we can also consider two distinct objectives of e-government. As regards the objectives of e-government a distinction should be made between the objectives for internally focused processes (operations) and objectives for externally focused services.

**External strategic objectives.** The external objective of e-government is to satisfactorily fulfill the public's needs and expectations on the front-office side, by simplifying their interaction with various online services. The use of ICTs in government operations facilitates speedy, transparent, accountable, efficient and effective interaction with the public, citizens, business and other agencies.

**Internal strategic objectives.** In the back-office, the objective of e-government in government operations is to facilitate a speedy, transparent, accountable, efficient and effective process for performing government administration activities. Significant cost savings (per transaction) in government operations can be the result.

#### **Self-Assessment Exercise**

Enumerate the objectives of e-government

#### **4.0 CONCLUSION**

E-government is contributing to making public administration more efficient and effective. By enabling access to government services, e-government has the potential of enhancing social and economic development of any country. When citizens have better access to information on available services, making payments online, doing e-transfer etc all these can enhance productivity at both the private and public levels. Effective use of e-government can also improve the efficiency and effectiveness of the public sector and linkages between government agencies.

#### **5.0 SUMMARY**

We have learnt in this unit that e-government is the use of new information and communication technologies (ICTs) by governments as applied to the full range of government functions. It is the use of information technology to enhance government activities, for example document processing, database, payroll, employee records amongst

others. We have also learnt the main objectives of e-government. We have also distinguished between externally focused and internally focused objectives.

## **6.0 TUTOR-MARKED ASSIGNMENT**

1. What is your understanding of e-government?
2. Discuss the main objectives of e-government, and distinguish between internal and external objectives.

## **REFERENCES AND FURTHER READING**

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## **UNIT 3 INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)**

### **TABLE OF CONTENT**

- 1.0 Introduction**
- 2.0 Objectives**
- 3.0 Main Content**
  - 3.1 Information and Communication Technology**
  - 3.2 Objectives of ICT Policy**
  - 3.3 Role of ICTs in e-government**
- 4.0 Conclusion**
- 5.0 Summary**
- 6.0 Tutor-Marked Assignment (TMAs)**
- References and Further Reading**

### **1.0 INTRODUCTION**

We mentioned in the last unit that the use of ICT in government operations facilitates speedy, transparent, accountable, efficient and effective interaction with the public, citizens, business and other agencies. There is a growing recognition worldwide that effective public sector governance requires the use of ICT to achieve more efficiency in the functioning of government and to improve the delivery of government services for organizations and individuals. Our focus in this unit is on the

### **2.0 OBJECTIVES**

At the end of this unit, you should be able to;

- Discuss what ICT means;
- Discuss the objectives of ICTs policy;
- Examine the role of ICTs in e-government;
- Discuss some of the reasons why governments use ICT in its operation.

### **3.0 MAIN CONTENTS**

#### **3.1 Information and Communication Technology (ICT)**

Most of the developing countries understand the enormous potential of ICT, not only as a tool for improving governance and creating more jobs, but also more significantly as a means to enhance the standard of living of the people. The ICT policy aims at increased application of IT in all occupations, enhancing the IT industry base, creating a robust state information infrastructure and creating human resources for IT (Basu, 2004). Although the policy statements differ from country to country however there are some fundamental similarities in the objectives, which can be summarized as following:

#### **3.2 Objectives of ICT policy**

Upgrading of the standard of living of the people of the state through use of IT in all sectors as a tool to enhance productivity, efficiency and optimum utilization of resources, and through full exploitation of the employment potential of the IT sector.

Establishment of an information infrastructure comprising a high speed broadband communication backbone, nodes, access network, distributed data warehouses and service locations to cater to the needs of trade, commerce, industry and tourism and also to enhance the delivery of government services to the people.

Facilitating the flow of direct investments.

Development of human resources for ICT through increased use of ICT in educational institutions and through academic and training programmers that improve the employability of educated youths in the ICT sector.

Facilitation of decentralized administration and empowerment of people through the application of ICT (Basu, 2004:118).

E-governance which we discussed in the first unit is said to have its firm root in the power of ICTs which provide three basic change potentials for good governance and development. These change potentials can, in turn bring five main benefits to a developing economy.

### **Benefits**

- Government that is cheaper - Producing the same outputs at lower cost.
- Government that does more – Producing more outputs at the same total cost.
- Government that is quicker – Producing the same outputs at the same total cost in less time.
- Government that works better – Producing more outputs at lower total cost in less in less time and to a higher quality standard
- Government that is innovative – Producing new outputs.

The first three groups of benefit are classified as the efficiency gains while the last two could be regarded as the effectiveness gains (Maduabum, 2008).

### **3.3 Roles of ICTs in E-Government**

Supporting Economy of Implementation – ICTs increases the efficiency of government administration (this is a direct result of the replacement of street level bureaucrats' by electronic information devices). Management is further enabled to more strictly control administrative activities of the workforce through the use of ICT application (Snellen, 2005).

Supporting Public Service Provision – both private and public sectors now apply ICT to integrate and improve their service delivery. Through e-Business, the expectations of people with respect to the service level of public administration are rising.

Supporting Democracy – representative democracy relies on the belief that best way to make a decision is wider participation for all citizens having access to relevant information. ICT promises direct democracy in the form of continuous opinion polling, instant referenda, tele-conferencing, digital cities, and discussion groups. ICT can enhance interactive policy-making for effective democratic governance. The

Internet-related ICT facilities which are used in this respect are e-mail, usenets and newsgroups, Internet relay chat, and the World Wide Web (Snellen, 2005).

#### **Issues**

##### **Decision and policy making initiated by government**

#### **Opportunities and challenges**

ICT can exploit the vast reserves of data the public sector has available to develop, model, visualise and simulate decisions and policies. Also by involving constituents through political representatives or directly through processes of information, consultation, active participation and elections.

##### **Empowerment from the bottom**

ICT can help to leverage the voices and expertise of huge numbers of individuals and groups, setting their own agendas and developing their own policies in new forms of „crowdsourcing“, mass collaboration and mass creativity. This can also result in short term single issue politics, and sometimes in instant street politics and forms of mob-rule, but can potentially also build to more permanent countervailing power bases possibly at odds with governments.

##### **Empowering communities and localities**

ICT can support the extension of participation beyond formal politics and the ballot box, by promoting subsidiarity at local and neighbourhood level. This leverages local resources, know-how and skills for developing new forms of advocacy, support and social capital, which can both strengthen diverse cultures and interests as well as bridge between them.

##### **Transparency and openness**

Can be supported by ICT through freedom of information and consultation, to reveal the purposes, processes and outcomes of government, also through real-time tracking and tracing. This will help place responsibility, reduce corruption and make decisions more responsive, although legitimate privacy and the space for risk taking should be safeguarded.

##### **Accountability, rights and responsibilities**

ICT contributes to these becoming blurred as decision and policy-making are opened up and government shares the stage with other actors. Important questions are raised about whose voices are heard and who do they represent, with the ever present danger of trivialisation and short-termism unless the right to participate in policy making is balanced with some responsibility for policy impacts.

### Reasons why Government use ICT in its Operations

1. Priority development needs that require government involvement. E-government applications are best embedded in areas that are perceived as closely related to the priority development needs of the society. This approach creates broad supports, making it easier to overcome inherent difficulties and to sustain attention, commitment and funding.
2. Efficiency and effectiveness as key success criteria of government involvement. It is best if the role that government plays in such area is judged partly or predominant by factors that ICT can bring.

However, whether government will make use of ICT in its operation, and the ability of government to do so will depend on the following factors provided by Arjan de Jager (2008).

1. Availability of (initial) funding. The initial pilot e-government operation should start with a good understanding of the cost involved and with assured funding that follows careful analysis of opportunity costs.
2. Skills and culture of the civil service. Civil servants must be able (through ICT, change and programme management and partnership building skills) and willing to support e-government, or at a minimum must be eager to learn and change.
3. Co-ordination. This involves the necessary 'backroom' co-ordination and effort – within and between government agencies, and this must take place before any e-government application goes on-line in order to avoid duplication, assure interoperability and meet the expectations of users.
4. Legal Framework. Legal requirements should be dealt with at the initial stage of the ICT operation by the government.
5. ICT Infrastructure. Infrastructure needs should be assessed against the background of requirements and desired results of e-government development plans.
6. Political leadership and long-term political commitment. The chief executive officer of the public sector must be committed to e-government; he must lead and build broad support for it, and must be eager to learn.



7. Public engagement. The public should have a personal stake in e-government development. Their engagement should be reinforced by actively, genuinely and continuously soliciting people to participate in the development of e-government applications so that there are custom-crafted to the way people live and work.
8. Plans for development of human capital and technical infrastructure. There should be a vision and plans for closing the existing gaps in ICT skills and access, otherwise, neither the public administration nor the citizenry can hope to become ICT literate and capable, which are important ingredients for e-government success.
9. Partnership. The government should involve business firms and civil society organization (CSOs) as its partners in securing access and adequate capacity to service the ICT network.
10. Monitoring and evaluation. Setting clear responsibilities and realistic benchmarks for e-government, as well as for its transparent monitoring, is an important ingredient for eventual transparency and accountability framework in the public sector (Arjan de Jager, 2008).

### **Self-Assessment Exercise**

Examine in detail factors that will determine whether government will make use of ICT in its operation.

## **4.0 CONCLUSION**

In our discussion above, we can deduce that ICTs are very much likely to lead to more efficient service delivery. ICTs are at the core of modern transformations of public administration. ICTs applications can play a role in the enhancement of the internal effectiveness and efficiency of the executive functions and by so doing bring a great deal of improvement on government services.

## **5.0 SUMMARY**

In this unit, we have examined the importance of ICT in government operations. We discussed the objectives of ICT, roles of ICT in e-government and the reasons why Government use ICT in its Operations. We also discussed those factors that will determine whether government will make use of ICT in its operations.

## **6.0 TUTOR MARKED ASSIGNMENT**

1. Why do you think government will make use of ICT in its operation?
2. Discuss the role of ICTs in e-government.
3. Examine the objectives of ICT policy.

## **REFERENCES AND FURTHER READING**

Arjan de Jager (2008) E-governance in the Developing World in Action: the Case of the DistricNet in Uganda. The Journal of Community Informatics. Vol. 4, No 2.

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## **UNIT 4 E-DEMOCRACY**

### **TABLE OF CONTENT**

- 1.0 Introduction**
- 2.0 Objectives**
- 3.0 Main Content**
- 3.1 E- democracy- Meaning**
- 3.2 Models of E-Democracy**
- 4.0 Conclusion**
- 5.0 Summary**
- 6.0 Tutor-Marked Assignment (TMAs)**
- References and Further Reading**

### **1.0 INTRODUCTION**

In this unit, student will be introduced to the concept of ‘e-democracy’. There is increasing recognition of the need to consider the innovative application of ICTs for participation that enables a wider audience to contribute to democratic debate. This unit will discuss this issue in detail.

### **2.0 OBJECTIVES**

At the end of this unit, you should be able to:

- Discuss the concept of “e-democracy”
- Examine the models of e-democracy and their characteristics

### **3.0 MAIN CONTENT**

#### **3.1 E-democracy – What does it mean?**

E-democracy is concerned with the use of information and communication technologies to engage citizens, support the democratic decision-making processes and strengthen representative democracy (Macintosh, 2004)..

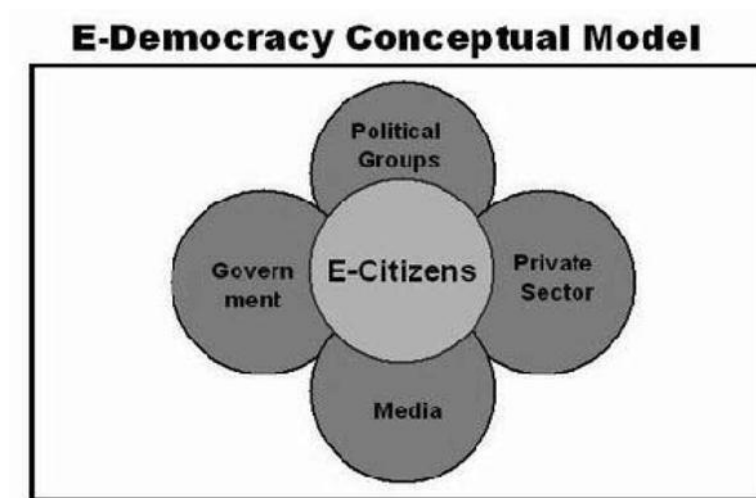
The concept of E-democracy refers to the use of information and communication technology (ICT) in political debates and decision-making processes, complementing or contrasting

traditional means of communication, such as face-to-face interaction or one-way mass media. (Paivarinta and Saebo, 2006).

E-democracy is the use of information and communication technologies and strategies by “democratic sectors” within the political processes of local communities, states/regions, nations and on the global stage.

The “democratic sectors” include the following democratic actors:

- Government
- Elected officials
- Media (and major online Portals)
- Political parties and interest groups
- Civil society organizations
- International governmental organizations
- Citizens/voters



Source: Clift (2003) E-Democracy, E-Governance and Public Net-work

This model illustrates e-democracy activities as a whole. Governments provide extensive access to information and interact electronically with citizens, political groups run online advocacy campaigns and political parties campaign online, and the media and portal/search sites play a crucial role in providing news and online navigation. In this model, the ‘Private Sector’ represents commercially driven connectivity, software and technology.

### 3.2 Models of E-democracy

Citizens set the agenda	<b>Partisan Democracy</b>	<b>Direct Democracy</b>
Government (politicians and officers) set the agenda	<b>Liberal Democracy</b>	<b>Deliberative Democracy</b>
	Citizens mainly implicitly included in decision making processes	Citizens have an explicitly defined role in decision making processes

Let us consider some of the characteristics of these models of e-democracy as analyzed by Paivarinta and Saebo (2006).

#### **Partisan Democracy**

Partisan democracy initiatives are characterized by citizen-initiated participation and implicit citizen intervention in the decision-making process. Active citizens participate in the political debate, but not through traditional channels or solely through representatives. Information technology seeks to obtain visibility for alternative political expressions and criticism without interruptions from the political elite. Unrestricted discussions set the agenda. Examples include use of independent online communities discussing politics, chat room discussions, Usenet discussions, and blogging (2006).

#### **Liberal Democracy**

Liberal democracy in general is characterized by a representative government, where citizens form the electorate, giving mandates to representatives at the local level but also participating in the public debate. Online communication becomes part of the issues here as citizens may

be asked to submit suggestions to the public authorities, citizens can be given opportunities to communicate with representatives and government officials.

### **Deliberative Democracy**

The ideal of Deliberative Democracy connects citizens more explicitly and directly to decision-making processes and emphasizes the role of open discussions in a well-functioning public sphere. Politicians and citizens share an interest in dialogue and discourse leading to the formation of political opinion. Deliberative E-Democracy implementations, with explicitly defined relationships to the actual decision-making processes, may increase the level of citizen participation, if compared to traditional means of political discussion between citizens and decision-makers.

### **Direct Democracy**

Direct Democracy focuses on how traditional institutions lose power in favour of network-based groups or individuals.

In Direct Democracy, network-based groups and individuals take over the role of traditional institutions. A direct E-Democracy initiative requires communication technology to support coordination among a great number of decision-makers, i.e. citizens, possibly geographically scattered, with diverse interests and backgrounds (Paivarinta and Saebo, 2006: 823-827).

By looking at the main purposes of discussion forums for different democracy models Paivarinta and Saebo illustrate how the framework can be used to identify differences in how a particular technology may work under different conditions (democracy models).

### Analyses of Discussion Forums

	<b>Partisan Democracy</b>	<b>Direct Democracy</b>
Citizens set the agenda	<p>Discussion forums are channels for expressing opinions by citizen groups often criticizing existing power structures.</p> <p>No explicit connection to existing governmental or political decision-making processes is defined beforehand. Citizens set the agenda for public discussion but not for decision-making.</p> <p>ICT seeks to obtain visibility for alternative political expressions uninterrupted by political elite.</p>	<p>Discussion forums represent a direct channel to raise issues and affect decisions.</p> <p>The citizens are online affecting the decisions to be made (mostly at the local level). Citizens set the agenda both for public discussion and decision-making.</p> <p>ICT is a crucial pre-condition for democracy to support coordination among decision makers.</p>
	<b>Liberal Democracy</b>	<b>Deliberative Democracy</b>
Government (politicians and officers) set the agenda	<p>The candidates inform citizens about their arguments whereas the citizens try to lobby the candidates. The purposes of communication are defined beforehand by the authorities,</p> <p>The democracy is regarded as occurring after the citizens have been informed about the candidate viewpoints, and vice versa, before the elections, and about the decisions made in between.</p> <p>ICT seeks to improve the amount and quality of information exchange between government and citizens.</p>	<p>Discussion forums are used for targeted purposes actually involving citizens in public decision-making processes. The politicians and officials are continually sensitive to the opinions from the field.</p> <p>The citizens have a good reason to expect that their voices are heard concerning a particular matter initiated by the government.</p> <p>ICT is developed for increased citizen participation and involvement in decision making processes.</p>
	Citizens mainly implicitly included in decision making processes	Citizens have an explicitly defined role in decision making processes

Source: Paivarinta and Saebø (2006) "Models of E-Democracy" *Communications of the Association for Information Systems*.

The use of the framework to analyse particular implementations can reveal the democratic ideas beneath the surface, and address particular ways to use a technology according to the pursued democracy model (Paivarinta and Saebø, 2006).

### **Self-Assessment Exercise**

Examine the characteristics of partisan democracy, direct democracy and deliberative democracy.

### **4.0 CONCLUSION**

Engaging your “own” citizens or constituents through digital media includes enhancing active participation in law-making, policy-making, and legislative process, all of which are influenced by a variety of forces— public opinion, debate, lobbyists, special interest groups, consultation with constituents, committee hearings, and expert testimony (Caldow, 2004). This perception actually concludes our discussion in this unit.

### **5.0 SUMMARY**

This unit has enhanced our knowledge on e-democracy. We have also gained an insight into the idea of the models of e-democracy and how they impact on the nature of democratic process.

### **6.0 TUTOR MARKED ASSIGNMENT**

1. Discuss in detail the models of e-democracy
2. Examine how citizens set the agenda under partisan democracy and contrast to the process under direct democracy

### **REFERENCES AND FURTHER READING**

Caldow, J. (2004) e-Democracy: Putting Down Global Roots. Institute for Electronic Government | IBM.

Macintosh, A. (2004) Characterising E-Participation in Policy-Making. Proceedings of the 37<sup>th</sup> Hawaii International Conference on System Sciences.

Paivarinta, T. and Saebo, O. (2006) “Models of E-Democracy” *Communications of the Association for Information Systems*: Vol.17, Article 37.



## **UNIT 5 E-PARTICIPATION**

### **TABLE OF CONTENT**

- 1.0 Introduction**
- 2.0 Objectives**
- 3.0 Main Content**
  - 3.1 E- participation- Meaning**
  - 3.2 Forms of Participation Offerings**
  - 3.3 Levels of Participation**
  - 3.4 E-participation Outcomes**
- 4.0 Conclusion**
- 5.0 Summary**
- 6.0 Tutor-Marked Assignment (TMAs)**
- References and Further Reading**

### **1.0 INTRODUCTION**

In the last unit we discussed the term ‘e-democracy’ in detail. In this unit we are still discussing an issue that is related to democracy. Democracy is about popular participation – getting people to be involved in the process of decision-making. Democratic political participation must involve them means to be informed, the mechanisms to take part in the decision-making and the ability to contribute and influence the policy agenda. Using ICT in the course of democratic participation is particularly attractive to a number of target users, including citizens living abroad, younger generations, and companies and organizations which would otherwise not be able to participate.

### **2.0 OBJECTIVES**

At the end of this unit, you should be able to:

- Discuss the term “e-participation;
- Examine the various forms which e-participation can take;
- Discuss the outcomes of e-participation

### **3.0 MAIN CONTENTS**

#### **3.1 E-participation – What does it mean?**

E-participation involves the extension and transformation of participation in societal democratic (ICT), primarily the Internet. It aims to support active citizenship with the latest technology developments, increasing access to and availability of participation in order to promote fair and efficient society and government and consultative processes mediated by information and communication technologies (Saebo, Rose and Flak, 2008).

E-participation is a relationship based on partnership with government in which citizens actively engage in defining the process and content of policy-making. It acknowledges equal standing for citizens in setting the agenda, proposing policy options and shaping the policy dialogue – although the responsibility for the final decision or policy formulation rests with government (OECD, 2001).

Many forms of ICT with the potential to support participation include chat technologies, discussion forums, electronic voting systems, group decision support systems, and Web logs (blogs).

Let us consider some of the objectives of e-participation.

Objectives of e-participation are given as:

1. Reach a wider audience to enable broader participation.
2. Support participation through a range of technologies to cater for the diverse technical and communicative skills of citizens.
3. Provide relevant information in a format that is both more accessible and more understandable to the target audience to enable more informed contributions.
4. Engage with a wider audience to enable deeper contributions and support deliberative debate (Macintosh, 2004).

### **3.2 Six forms of participation offerings are identified below:**

(1) **Information:** Offers which are related to the provision of, access to and development of information of public agencies and which are conditions for the success of other forms of participation.

(2) **Transparency through third parties:** Informal offers with reports concerning measures taken by the legislator or by the executive, thereby enabling public control.

(3) **Consultation:** Forms of participation by which expertise as well as votes from citizens, interest groups and stakeholders from the business community and civil society are sought for on various topics.

(4) **Applications / complaints / petitions:** Offers which enable the submission of proposals or criticism to agencies and public authorities with decision-making powers, usually via intermediary institutions created specifically for this purpose.

(5) **Cooperation:** Offers which are designed to enable consensus-based cooperation between administration agencies, policymakers, citizens as well as stakeholders from the business community and civil society and which lead to collective preferences and hence (also) to results which diverge from initial positions.

(6) **Activism / campaigns/ lobbying:** Forms of participation where individuals or organized groups take measures which are designed to generate attention and support for topics and positions as well as particular interests and which hence contribute towards the formation of political opinion and will (Albrecht et al., 2008).

### **3.3 Three levels of participation that can be used to characterize e-democracy initiatives.**

The first level is the use of technology to enable participation:

**E-enabling** is about supporting those who would not typically access the internet and take advantage of the large amount of information available. The objectives include how technology can be used to reach the wider audience by providing a range of technologies to cater for the diverse technical and communicative skills of citizens. The technology also needs to provide relevant information in a format that is both more accessible and more

understandable. These two aspects of accessibility and understandability of information are addressed by e-enabling.

The second level is the use of technology to engage with citizens:

**E-engaging** with citizens is concerned with consulting a wider audience to enable deeper contributions and support deliberative debate on policy issues. The use of the term 'to engage' in this context refers to the top-down consultation of citizens by government or parliament.

The third level is the use of technology to empower citizens:

**E-empowering** citizen is concerned with supporting active participation and facilitating bottom-up ideas to influence the political agenda. The previous top-down perspectives of democracy are characterized in terms of user access to information and reaction to government led initiatives. From the bottom-up perspective, citizens are emerging as producers rather than just consumers of policy. Here there is recognition that there is a need to allow citizens to influence and participate in policy formulation (Macintosh, 2004).

### **3.4 E-participation outcomes**

#### **For project owners:**

- Cost reduction, resource rationalisation
- Greater productivity and efficiency
- Staff who are more competent and skilled in their jobs and thus achieve greater output, etc.

#### **For intended users:**

- Successful access to and use of eParticipation tools and services by intended users
- Changed eParticipation use patterns, e.g. more and better use
- Increased user satisfaction
- Greater empowerment of citizens, businesses, communities

**For all stakeholders:**

- Time savings and more convenience
- Simplified procedures
- Increased security
- Less bureaucracy and administration
- More transparency, accountability, etc.
- Better policy development
- Better policy-making
- Better decision-making
- Improved legislation

**Self-Assessment Exercise**

Discuss e-participation outcomes for project owners, intended users and all stakeholders

**4.0 CONCLUSION**

E-participation aims to support active citizenship with the latest technology developments, increasing access to and availability of participation in order to promote fair and efficient society and government.

Democratic political participation must involve the means to be informed, the mechanisms to take part in the decision-making and the ability to contribute and influence the policy agenda. With greater opportunity being made available to citizens to participate in decision-making through the use of internet for example, it is assumed that citizens will be able to influence governmental decision.

**5.0 SUMMARY**

In this unit, we have examined the concept of 'e-participation' as it relates to citizens involvement in decision-making. We discussed the main objectives of e-participation and the

major types of e-participation offerings. We also discussed the levels of participation that can be used to characterize e-democracy initiatives, as well as the outcomes of e-participation.

## **6.0 TUTOR MARKED ASSIGNMENT**

1. Discuss the three levels of participation that can be used to characterize e-democracy initiatives.
2. What is e-democracy? What are its main objectives?

## **REFERENCES AND FURTHER READING**

Albrecht, S et al. (2008) "eParticipation –Electronic Participation of Citizens and the Business Community in eGovernment". Study on Behalf of the Federal Ministry of the Interior, Division IT 1. Bremen.

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Saebo, O. Rose, J. and Flak, L.S. (2008) The shape of e-Participation: Characterizing an Emerging Research Area. Government Information Quarterly 25, 400–428

## **MODULE TWO DIGITAL GOVERNMENT AND PUBLIC POLICY**

**Unit 1: Public-Making Process**

**Unit 2: E-participation and Policy-Making**

**Unit 3: Management and Digital Government**

**Unit 4: Public Network**

### **UNIT 1 PUBLIC MAKING PROCESS**

#### **TABLE OF CONTENT**

**1.0 Introduction**

**2.0 Objectives**

**3.0 Main Content**

**3.1 What is Public Policy?**

**3.2 Policy-Making Process**

**4.0 Conclusion**

**5.0 Summary**

**6.0 Tutor-Marked Assignment (TMAs)**

**References and Further Reading**

#### **1.0 INTRODUCTION**

In this unit, we are discussing the process of policy-making (known as policy cycle). This is to enable student have the basic understanding of how policies are made. Starting from the agenda stage all through policy formulation, policy adoption, implementation and policy evaluation, decisions are made by actors in these stages and this invariably involve applying modern technology like ICTs. This unit is to prepare student for the subsequent units which deal with digital government and public policy and some management concerns.

#### **2.0 OBJECTIVES**

At the end of this unit, you should be able to:

Discuss the concept of public policy

Examine and discuss the stages of policy-making

### **3.0 MAIN CONTENT**

#### **3.1 What is Public Policy?**

Public policy is concerned with how problems and issues are identified, defined, and constructed; how they are placed on political and policy agenda; how policy options emerge; how and why government act or do not act and the effects or consequences of government policy on various stakeholders or actors.

Public policy is defined as a “relatively stable, purposive course of action or inaction followed by an actor in dealing with a problem or matter of concern” – (Anderson, 2011).

Public policy is what government chooses to do or not to do (Dye, 1972).

#### **Some Important Functions of Policy**

They reflect the ideology and values of an organization or institution.

They are the principles that guide action.

They are planning tools for goal setting and service delivery.

They provide the terms of reference for setting program priorities and guiding program development.

They help set roles and delimit or define areas within the organization's role.

They house the rules and regulations and provide guidance for routine, unique and controversial decisions.

They provide the justification for and the sanctioning of resource allocations (e.g., budget, staff time).

They provide a tool to assist in evaluating progress and in providing accountability to constituents, funding agencies, etc. (Dukeshire and Thurlow, 2002).



### 3.2 The Policy Making Process

**1. Agenda setting:** establishing the need for a policy or a change in policy and defining what the problem to be addressed is. This may arise as the result of a change of government; a sudden change in the environment; a growing development; a new problem or a continuing problem. Information, consultation and participation are all important for this stage. In particular active participation allows citizens the opportunity to determine possible agenda items.

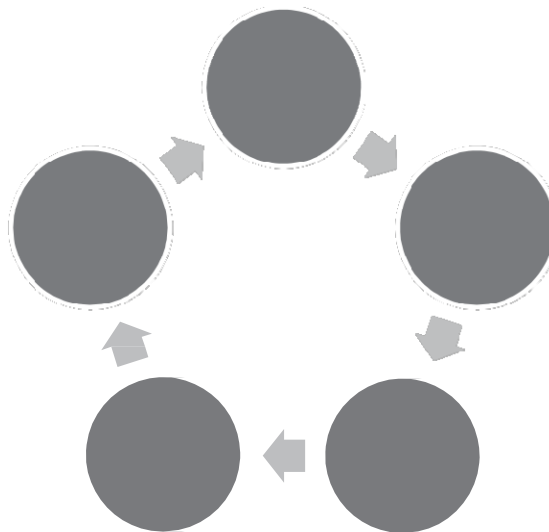
**2. Analysis:** defining the challenges and opportunities associated with an agenda item more clearly in order to produce a draft policy document. This can include: gathering evidence and knowledge from a range of sources including citizens and civil society organisations; understanding the context, including the political context for the agenda item; developing a range of options (including doing nothing) and conducting cost benefit analysis for each one and providing advice to Ministers who take a decision on which option to pursue. Again, information, consultation and participation are all important for this stage. Active participation allows citizens to determine the range of options under review.

**3. Creating the policy:** ensuring a good workable policy document. This involves a variety of mechanisms which can include: formal consultation, risk analysis, undertaking pilot studies, and designing the implementation plan. Ministers take decisions. At this stage information and consultation are important but there is possibly limited scope for active participation.

**4. Implementing the policy:** this can involve the development of legislation, regulations, guidance, and a delivery plan. At this stage information and consultation are important but there is also scope for active participation (e.g. in the delivery of public goods and services by civil society organisations).

**5. Monitoring the policy:** this can involve evaluation and review of the policy in action, research evidence, views of users and horizon scanning. Information, consultation and participation are all important for this stage. Active participation allows citizens the opportunity to give their views on the policy in action and to suggest changes.

At this point the process can loop back into stage 1, as the policy may be modified on the basis of experience with implementation.



**Policy-making life cycle**

### **Self-Assessment Exercise**

Discuss the main functions of policy.

## **4.0 CONCLUSION**

Public policy is depicted as the activities of government. Policymaking usually incorporates the stages or some category of activities, and also involves actors at various stages. The policy-making process is composed of series of steps or sequences which can be identified beginning from the stage where problems are identified to the stage of implementation, basic principles and strategies for dealing with problems are developed as this unit has shown.

## **5.0 SUMMARY**

In this unit, we discussed what public policy is. We considered some functions of policy. We also examined the stages of policy-making which is also referred to as the policy-making process.

## **6.0 TUTOR-MARKED ASSIGNMENT**

1. What is public policy?
2. Examine the stages of policy-making.

## **REFERENCES AND FURTHER READING**

Dukeshire, S. and Thurlow, J. (2002). A Brief Guide to Understanding Policy Development. Rural Communities Impacting Policy Project. ISBN 0-9780913-0-2

## **UNIT 2 E-PARTICIPATION AND POLICY- MAKING**

### **TABLE OF CONTENT**

- 1.0 Introduction**
- 2.0 Objectives**
- 3.0 Main Content**
- 3.1 ICT and Policy-Making**
- 3.2 Key Dimensions for Effective Engagement**
- 5.0 Summary**
- 6.0 Tutor-Marked Assignment (TMAs)**
- References and Further Reading**

### **1.0 INTRODUCTION**

In this Unit student will be introduced to key dimensions that are needed to characterize e-participation initiatives. Democratic policymaking involves effective participation of citizens in the deliberations of issues in the political arena.

### **2.0 OBJECTIVES**

At the end of this unit, you should be able to:

- Discuss key dimension needed to enhance citizens participation in policy process
- Discuss how technology-enabled information can improve policy process.

### **3.0 MAIN CONTENT**

#### **3.1 ICT and Policy-Making**

ICT provides the potential to allow policy-makersto go directly to users of services and those at whom the policy is aimed to seek their input. Citizens may be able to have greater influence on policy content through consultation earlier in the policy making process rather than later. It can be argued that consultation at the stage of a draft policy document (stage 3) requires citizens to have the communication skills to interpret the typical legalistic terminology of the document before commenting appropriately. Whereas if the wider

audience of citizens are given the opportunity to comment before this stage in policymaking they will still need to be well-informed on issues, but the information could be made more readable and understandable (Macintosh, 2004).

The objective of technology-enabled information dissemination, consultation and participation is to improve the policy-making process through a range of devices designed to enable:

- Reaching and engaging with a wider audience through a range of consultation and participation technologies adapted to cater for the diverse technical and communicative skills of citizens thereby enabling broader participation.

- Providing relevant information in a format that is both more accessible and more understandable to the target audience to enable more informed participation.

- Enabling more in-depth consultation and supporting deliberative debate online.

- Facilitating the analysis of contributions to support policy-makers and to improve policy.

- Providing relevant and appropriate feedback to citizens to ensure openness and transparency in the policy-making process.

- Monitoring and evaluating the process to ensure continuous improvement.

### **3.2 Key Dimensions for Effective Engagement**

When we talk of policy-making process, there are certain key dimensions that need to be considered before citizens can engage effectively in the process.

The table below highlights the summary of these dimensions.

<b>Dimension</b>	<b>Description</b>
1. Level of participation	what level of detail, or how far to engage citizens
2.Stage in decisionmaking	when to engage
3. Actors	who should be engaged and by whom
4. Technologies used	how and with what to engage citizens
5.Rules of engagement	what personal information will be needed/collected
6. Duration & sustainability	for what period of time
7. Accessibility	how many citizens participated and from where
8. Resources and Promotion	how much did it cost and how wide was it advertised
9. Evaluation and Outcomes	methodological approach and results
10. Critical factors for success	political, legal, cultural, economic, technological factors

### **Level of participation**

This key dimension considers to what level, or how far, citizens are engaged. Democratic political participation must involve the means to be informed, the mechanisms to take part in the decision-making and the ability to contribute and influence the policy agenda,

### **Stage in Policy-Making Process**

This key dimension considers when to engage citizens.

**Actors**

This key dimension considers who should be engaged and by whom. It should specifically identify the stakeholders and their respective roles and the target audience.

**Technologies used**

This key dimension considers how and with what to engage citizens and support participation. The main characteristics here are the application of the technology, e.g. e-consultation or e-referenda and the underlying technology.

**Rules of engagement**

This key dimension considers what personal information will be needed/collected, how it be used by the system, and also what citizens can and cannot do during the e-participation. As such, the amount of personal information requested should be described along with any privacy statement on how it will be used.

**Duration and sustainability**

This key dimension considers for what period of time the initiative lasted.

**Accessibility**

This key dimension considers how many citizens participated and from where. It identifies both the channel and the locality of participation for example whether it is from a cyber café, public library, town hall or other location.

**Resources and Promotion**

This identifies financial implications of using ICTs to support participation.

### **Evaluation and Outcomes**

This key dimension is concerned with how the initiative was evaluated (presuming that it was), the results of the evaluation and also the overall results from the initiative.

### **Critical factors for success**

This dimension provides a place for some background information as to why the initiative achieved what it did.

### **Self-Assessment Exercise**

Discuss the key dimensions needed for effective citizens' engagement.

## **4.0 CONCLUSION**

This unit has increased our knowledge of the idea that democratic political participation must involve the means to be informed, the mechanisms to take part in the decision-making and the ability to contribute and influence the policy agenda. Bottom-up decisions are enhanced by e-participation tools for expressions and deliberations. Effective participation in decision-making by citizens requires that tools are made available to them.

## **5.0 SUMMARY**

We have learnt in this unit that online engagement of citizens requires tools for effective participation. We discussed the necessary tools required. We also discussed various key dimensions that need to be considered for effective citizens' engagement.

## **6.0 TUTOR-MARKED ASSIGNMENT**

1. Certain key dimensions are needed to be considered for effective citizens engagement, discuss these dimensions.
2. Discuss how technology enabled information can improve policy process.



## **REFERENCES AND FURTHER READING**

Macintosh, A. (2004) Characterising E-Participation in Policy-Making. Proceedings of the 37th Hawaii International Conference on System Sciences.

OECD (2003) Promise and Problems of E-Democracy: Challenges of Online Citizen Engagement

## **UNIT 3 MANAGEMENT AND DIGITAL GOVERNMENT**

### **TABLE OF CONTENT**

#### **1.0 Introduction**

#### **2.0 Objectives**

#### **3.0 Main Content**

#### **3.1 Policy and Management**

#### **4.0 Conclusion**

#### **5.0 Summary**

#### **6.0 Tutor-Marked Assignment (TMAs)**

#### **References and Further Reading**

### **1.0 INTRODUCTION**

In this unit student will come across a set of management and policy concerns that must be understood in an integrated way in order to avoid the challenges that government managers may come across in the world of digital government. This unit is structured to examine this issue in detail

### **2.0 OBJECTIVES**

At the end of this unit, you should be able to:

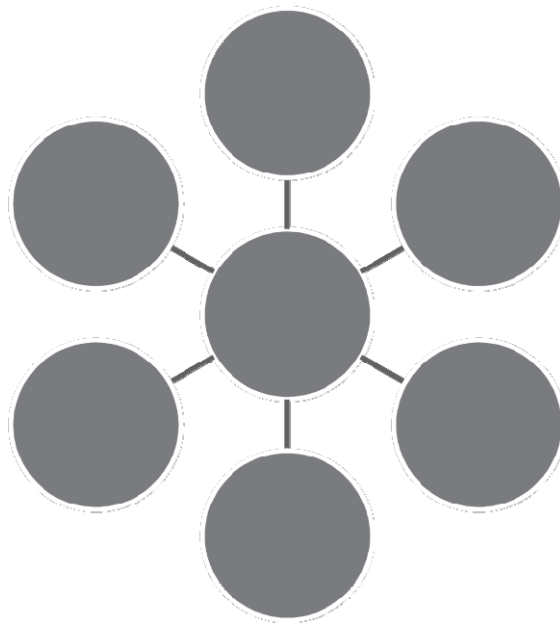
Discuss the main public policy and management concerns for digital government.

### **3.0 MAIN CONTENT**

#### **3.1 POLICY AND MANAGEMENT**

Digital government research can be valuable to government leaders and managers who are responsible for IT adoption and deployment. It can help them appreciate the strategic possibilities that technology presents for creating, improving, or streamlining government processes, functions, and programs (Dawes, 2008).

Government managers may however be confronted with challenges in their effort to operate in the world of modern technology. The graphic below shows a set of management and policy concerns that government managers need to understand in their operation.



Public policy and management considerations in digital government initiatives (Dawes, 2008)

### **Policy and Management Considerations in Digital Initiatives**

Strategy  
Policies  
Skills  
Data Challenges  
Costs  
Technology

#### **Strategy**

In both business and government, strategic thinking is concerned with mission-critical objectives, with an emphasis on customers and stakeholders. Strategies place a high value on human, organizational, and technological resources and seek maximum return on those investments, rather than minimized costs.

The first element of strategy is a clear and agreed upon description of the business, policy, or program need that is the reason for the effort.

Strategy also addresses existing reality. Every new information system goes into some pre-existing situation. The situation may include other, older information systems, business processes that channel work and information flow, and standard operating practices that have grown up over time to accommodate past problems and changing needs.

A strategy should have a reasonably long life so that it can guide action into the foreseeable future. Technology is the one component of information-based strategies that is likely to change quickly. Consequently, technologies that can be integrated in to or readily replace existing infrastructure create the fewest undesirable dependencies, conflicts, and costs.

At the strategic level, communication needs to be clear, consistent, focused on the essentials, and delivered in plain language.

## **Policies**

Information policies in the form of laws, regulations, executive orders, and other official statements guide actions and decisions about why, how, when, and who uses information.

Information policies are also instruments of public management. In this case, policies generally fall into two main categories: policies that promote information stewardship and policies that promote information use.

Stewardship is a conservative principle that recognizes government information is a public 'good' like clean air and safe streets. It is concerned with accuracy, integrity, preservation, and protection of information. Policies that promote stewardship address such topics as data definitions, data and system security, records management, personal privacy, confidential treatment of sensitive information, and long term preservation of information with enduring social, legal, or historical value.

The usefulness principle recognizes that government information is a valuable government-wide or public asset that can generate real benefits through active use and innovation. These policies promote the use of information to improve the quality or lower the cost of services. They encourage agencies to use information to create new services or to devise better ways of doing business.

**Skills**

Every information-intensive government project needs a variety of skills. Analysis and interpretation skills are necessary at every stage of an information project. They start with problem definition, the process by which an organization describes current symptoms and uncovers the processes, policies, and practices that are contributing factors. At this stage, process analysis, system audits, stakeholder analysis, customer satisfaction surveys, performance reviews, statistical trending, or similar activities are needed. In later stages, analysis of user needs, business process alternatives, work flow, and information flow become more important.

**Data Challenges**

Public managers must bridge the gap between business needs (i.e. program initiatives and work practices) and the relevant data available to support them. Data is the raw material for decision making and planning- the foundation for actions taken by the agency. Turning data into usable information requires an understanding of what work must be accomplished as well as the data available to help.

**Cost Factors**

Three kinds of relationships must be considered in estimating the relationship costs in a project. The first is managing the relationships inside the day-to-day working environment of the project. The second has to do with maintaining relationships with immediate project sponsors, who may be in different parts of the government. The third is managing relationships in the larger environment. Identifying external stakeholders, securing strategic partnership with them, and maintaining those relationships all require more time and money than most organization recognize.

**Technology**

Technology choices have powerful immediate and long-term implications. These choices influence many aspects of an organization, including skills and staffing patterns, work

processes, and the choice and operation of other technologies. New technology usually comes with new business rules, practices, and processes that become resistant to change after implementation. Thus, once implemented, a particular technology becomes embedded in the way people work and influences the way they perceive and understand what they do.

The status of the existing technology infrastructure is another critical factor in decision about which technology to choose and how to deploy it. Changes in the type and number of users, responsiveness, capacity, level of security, types of connection, and interfaces with legacy systems will all need to be considered in both acquisition and implementation (Dawes, 2008:104-121).

### **Self-Assessment Exercise**

Discuss the issue of strategy as one of the policy and management considerations in digital initiatives.

## **4.0 CONCLUSION**

Government managers in the days of modern technology are bound to face with a lot of challenges in their operations. Obtaining quality data, information, strategy to be employed are some of the considerations for digital initiatives of these people. Therefore there is the need for them to be abreast of the challenges confronting them and how they can be tackled.

## **5.0 SUMMARY**

In this unit the main discussion has focused on the examination of those policy and management considerations in digital initiatives.

## **6.0 TUTOR-MARKED ASSIGNMENT**

Examine the main policy and management considerations in digital initiatives.

## **REFERENCES AND FURTHER READING**

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## **UNIT 4 PUBLIC NETWORK**

### **TABLE OF CONTENT**

#### **1.0 Introduction**

#### **2.0 Objectives**

#### **3.0 Main Content**

##### **3.1 Public Network**

##### **3.2 Public Network Projects**

#### **4.0 Conclusion**

#### **5.0 Summary**

#### **6.0 Tutor-Marked Assignment (TMAs)**

#### **References and Further Reading**

### **1.0 INTRODUCTION**

Recall our discussions in the previous units on the connections between information technology and how this can improve the public policy-making process by providing opportunity for citizens to contribute to the policy process. In this unit we are going to discuss this issue further by examining a new concept ‘public network’ and see how this can also impact on the policy process.

### **2.0 OBJECTIVES**

At the end of this unit, you should be able to:

- Discuss public network project;
- Examine online features.

### **3.0 MAIN CONTENT**

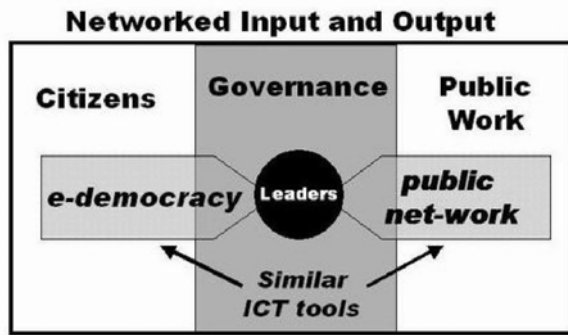
#### **3.1 Public Network Concept**

According to Clift (2004) public net-work is a new concept. It represents the strategic use of ICTs to better implement established public policy goals and programs through direct and diverse stakeholder involvement online.

If e-democracy in government represents input into governance, then public net-work represents participative output using the same or similar online tools. Public net-work is a



selective, yet public, approach that uses two-way online information exchange to carry out previously determined government policy.



Source: adapted from Clift (2004) E-democracy, E-governance and Public Network

The above “bow-tie” model suggests a more fluid communication environment that can be used to bring citizens and public work stakeholders closer to the center of governance. It also suggests that policy leaders can reach out and develop closer relationships with citizens and stakeholders.

### 3.2 What are public net-work projects?

Public net-work projects have the following things in common:

1. They are designed to facilitate the online exchange of information, knowledge and/or experience among those doing similar public work.
2. They are hosted or funded by government agencies, intergovernmental associations, international government bodies, partnerships involving many public entities, non-governmental organizations, and sometimes foundations or companies.
3. While they are generally open to the public, they are focused on specific issues that attract niche stakeholder involvement from other government agencies, local governments, non-governmental organizations, and interested citizens. Essentially any individual or group willing to work with the government to meet public challenges may be included. However, invite-only initiatives with a broader base of participants are very similar to more strictly defined “open” public net-work initiatives.

4. In a time of scarce resources, public network is designed to help governments more effectively pursue their established missions in a collaborative and sustainable manner (Clift, 2004).

### **Feature of Public Network Project**

To succeed, these projects must adapt emerging models of distributed information input and information sharing and develop models for sustained knowledge exchange/ discussion. They must also build from the existing knowledge about online communities, virtual libraries, e-newsletters, and Communities of Practice/Interest.

Some of the **specific online features** include:

1. Topical Portal – The starting point for public network is a web site that provides users a directory to relevant information resources in their field – these often include annotated subject guide links and/or standard Yahoo-style categories.
2. E-mail Newsletter –. Most projects keep people up-to-date via regularly produced e-mail newsletters. This human edited form of communication is essential to draw people back to the site and can be used to foster a form of high value interaction that helps people feel like they are part of the effort.
3. Personalization with E-mail Notification – Some sites allow users to create personal settings that track and notify them about new online resources of interest. New resources and links to external information are often placed deep within an overall site and “What’s New” notification dramatically increases the value provided by the project to its users.
4. Event Calendar – Many sites are a reliable place to discover listings of key current events and conferences.
5. FAQ and Question Exchange – A list of answers to frequently asked questions as well as the regular solicitation of new or timely questions from participants. Answers are then gathered from other participants and shared with all via the web site and/or e-newsletter.

6. Document Library – Some sites move beyond the portal directory function and gather the full text of documents. This provides a reliable long-term source of quality content that often appears and is removed from other web sites without notice.

7. Discussions – Using a mix of e-mail lists and/or web forums, these sites encourage ongoing and informal information exchange. This is where the “life” of the public net-work online community is often expressed.

8. Other features include news headline links from outside sources, a member directory, and real-time online features (Clift, 2004).

#### **4.0 CONCLUSION**

With effective application of ICTs, combined with democratic intent, governments can be made more responsive; citizens can equally be connected to effectively meet public challenges.

#### **5.0 SUMMARY**

In this unit we have discussed how public network can improve policy process. Public network represents participative output using the same or similar online tools. It involves the strategic use of ICT tools for better implementation of public policy goals. Its effective use invariably can improve public service delivery.

#### **6.0 TUTOR-MARKED ASSIGNMENT**

1. What are network projects?
2. Discuss some specific online features.

#### **REFERENCES AND FURTHER READINGS**

Clift, S. (2004) E-Democracy, E-Governance and Public Network. Open-Source-Jahrbuch 2004, hrsg. von Robert A. Gehring und Bernd Lutterbeck, Berlin (Lehmanns Media) 2004.

## **MODULE 3 PUBLIC SERVICE DELIVERY IN DIGITAL AGE**

**Unit 1: Public E-Service**

**Unit 2: Models of E-Service**

**Unit 3: E-service in the Public Sector**

### **UNIT 1 PUBLIC E-SERVICE**

#### **TABLE OF CONTENT**

**1.0 Introduction**

**2.0 Objectives**

**3.0 Main Content**

**3.1 The Concept of E-service**

**3.2 Barriers to E-service Development**

**3.3 E-Health and E-Learning**

**3.4 Advantages of Using Online Tools**

**4.0 Conclusion**

**5.0 Summary**

**6.0 Tutor-Marked Assignment (TMAs)**

**References and Further Reading**

#### **1.0 INTRODUCTION**

In this unit, student will be introduced to the concept of e-service, different aspect of e-service as well as benefits that are derived from e-service. The unit will also discuss different elements that constitute barriers to e-service development.

#### **2.0 OBJECTIVES**

At the end of this unit, you should be able to:

Discuss the concept of e-service;

Examine different aspect of e-service;

Identify and discuss barriers to e-service development

Discuss the concepts of 'E-Health' and 'E-Learning'.

### **3.0 MAIN CONTENT**

#### **3.1The Concept of E-Service**

The concept of e-service represents one prominent application of utilizing the use of information and communication technologies in different areas.

E-services are deeds, efforts or performance whose delivery is mediated by information technology. Such e-service includes the service element of e-tailing, customer support and service delivery (Rowley, 2006).

This definition reflects three main components: service provider, service receiver and the channels of service delivery (i.e., technology). As concerned public e-service, public agencies are the service provider and citizens as well as businesses are the service receiver. Internet is the main channel of service delivery. Other classic channels include, telephone, call center, public kiosk, mobile phone and television.

#### **E-service Benefits**

E-service benefits include the following:

- Accessing a greater customer base
- Broadening market reach
- Lowering of entry barriers to new market and cost of acquiring new customers
- Alternative communication channels to new customers
- Increasing services to customers
- Enhancing perceived company's image
- Gaining competitive advantages
- Potential for increasing customer knowledge

### **Different aspects of an e-service**

There are different aspects of e-service which can be considered. A public e-service is about two actors communicating. A company needs information from the municipality in order to make decisions about the business and the application, i.e. the company needs to be informed by the municipality and the municipality needs to inform the company. The company needs to send an application to the municipality to get a decision from the municipality; i.e. the company needs to inform the municipality and the municipality needs to be informed about the application from the company. The company is both a sender and a receiver and these are also the roles of the municipality in the communicating process.

A public e-service is also about two organisations conducting their respective tasks. One important task for a municipality is to give permission to firms doing business, and for the company it is important to get permission in order to produce results, e.g. selling food in a shop or in a restaurant. This means that the e-service developed is created to support the producing processes in two different types of work practices, one producing food permissions (a municipality) and the other producing food to customers (Rostlinger and Cronholm, .

### **3.2 Barriers to E-service Development**

Hassan, Shehab and Peppard (2010) gave a variety of elements that get in the way of e-service development. Those elements can be grouped under six major categories. However, many elements can fall under more than one category, depending on different perspectives. These categories are:

Political barriers - Those barriers are related to the political leadership such as lack of potential will and support, lack of vision and strategy, absence of an E-government champion, over-ambitious milestone, and absence of detailed policy.

Administrative barriers - Those barriers relate to the complex issues that can arise as a result of poor organisational infrastructure, complexity and poor project management,

lack of coordination among organisations/ departments, conflicting priorities of organisations, old structure and processes, lack of e-service applications, lack of partner readiness and cooperation difficulty in reengineering of internal processes.

**Resistance barriers** - This category relates to barriers around resistance to innovation by all levels of government personnel which can slow down, impair or prevent the necessary redesign of organizations and their processes required to deliver effective e-service. The employees may resist the shift of power resulting from the introduction of e-service. Further, this initiation will require structural reforms in the organization, modification of job descriptions and change in duties.

**Technological barriers** - Many e-services are based on the evolution of earlier public administration systems and ICT network infrastructures, which can create technical incompatibilities between systems within one administration. Other technological challenges include developing secure identification and authentication systems, poor infrastructure, lack of standards for quality, design of websites/portals, unreliable internet connections and issues related to security and privacy.

**Cultural barriers** are those associated with either organisational or social culture.

Examples may include: lack of awareness/ information, inactive citizens' participation, opposition by professional or union interests, e-literacy, multi-lingual/ multicultural issues, resistance to change by citizens, and government's reluctance for citizens' involvement.

**Legislative barriers** relate to the existence of appropriate laws, regulations, directives that allow or facilitate the deployment of electronic services. Lack of suitable legal framework/ Unsuitable legislations, complexity of required policies and lack of methods for productivity and progress monitoring, are examples of the legislative barriers

We may consider two services that may be produced and delivered online.

### **3.3 E-Health and E-Learning**

#### **E-Health**

E-health is defined as the cost-effective and secure use of information and communication technologies in support of health and health-related fields, including health-care services, health surveillance, health literature and health education, knowledge and research (WHO)

Eysenbach offers the definition of e-health as:

**“E-health = Medicine+Communication+Information+Society”**

Eysenbach listed 10 other "e's" implicit in eHealth. These are:

1. To increase Efficiency in health care;
2. Enhancing quality of care;
3. Evidence-based;
4. Empowerment of consumers and patients;
5. Encouragement of a new relationship between patient and health professional;
6. Education through online sources;
7. Enabling information exchange and communication in a standardized way between health establishments;
8. Extending the scope of health care beyond its conventional boundaries;
9. Ethical considerations;
10. Equity, as all measures need to be taken to bring benefits to all people without exception.

eHealth applications vary widely and can be used to:

store, process and transmit patient information;

manage the diverse clinical, administrative and financial information generated in hospitals;



provide mechanisms for diagnostics and treatment between health professionals separated by distance;

build capacity by offering health sciences training and continuing education courses online to students and health professionals;

take advantage of the growing number of mobile devices to offer innovative approaches to health care;

make highly complex biomedical research achievable through distributed computing or Grids (ECOSOC, 2009).

## **E-learning**

E-Learning is defined as all forms of electronic supported learning and teaching, which are procedural in character and aim to effect the construction of knowledge with reference to individual experience, practice and knowledge of the learner. Information and communication systems, whether networked or not, serve as specific media to implement the learning process.

E-learning is essentially the computer and network enabled transfer of skills and knowledge. E-learning refers to using electronic applications and processes to learn. E-learning applications and processes include Web-based learning, computer-based learning, virtual classrooms and digital collaboration. Content is delivered via the Internet, intranet/extranet, audio or video tape, satellite TV, and CD-ROM. It is used by the educational Institutions to enhance and support the class room teaching and offering courses to a larger population of learners across the Globe. It can be self-paced or instructor led and includes media in the form of text, image, animation, streaming video and audio (Nagarajan and Jiji, 2010).

Before implementing eLearning, organizations need to set common **goals** or **objectives**. Common goals and objectives include the following:

- To reduce learning costs
- To motivate employees

- To improve flexibility of course delivery
- To expand the capabilities of the business
- To reduce the need for classroom training
- To track employee progress
- To track training effectiveness (or absorption)
- To link training with Knowledge Management
- To reduce time away from the job
- To improve job performance
- To support business objectives
- To make learning available anytime, anywhere (Nagarajan and Jiji, 2010)

E-Learning represents an innovative shift in the field of learning, providing rapid access to specific knowledge and information. It offers online instruction that can be delivered anytime and anywhere through a wide range of electronic learning solutions such as Web-based courseware, online discussion groups, live virtual classes, video and audio streaming, Web chat, online simulations, and virtual mentoring.

E-Learning enables organizations to transcend distance and other organizational gaps by providing a cohesive virtual learning environment. Companies must educate and train vendors, employees, partners, and clients to stay competitive, and eLearning can provide such just-in-time training in a cost-effective way (Nagarajan and Jiji, 2010).

### **3.4 Advantages of Using Online Tools**

- Keeping in line with global trend
- Sharing and gleaning of ideas
- Free innovative, interactive online learning tools
- Useful online lectures
- Make teaching and learning less stressful and informative

Provides solution to space problems  
Overcrowding challenges at classes abated  
Teaching/learning made 'actually' interactive  
Time and cost effective (Agbaeze, 2010).

### **Self-Assessment Exercise**

Discuss the barriers to e-service development.

## **4.0 CONCLUSION**

There is increasing efforts to provide e-services in many countries through the use of information technology since information technology is recognized as a powerful tool for accelerating economic development. it is highly recognized that health and education are information- and knowledge-intensive sectors amongst others that requires extensive use of information and communication technologies (ICTs).

## **5.0 SUMMARY**

In this unit, we have looked at the concept of e-service, discussed the benefits of e-service. The unit has also discussed different aspect of an e-service as well as various barriers to e-service development. The unit also examined the concepts of e-health and e-learning, discusses their importance to citizens in the areas of health and education.

## **6.0 TUTOR-MARKED ASSIGNMENT**

1. Discuss critically those elements that constitute barriers to the development of e-service.
2. What are the main benefits of e-service?
3. Discuss common goals that organizations will need to set before implementing e-learning.

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## **UNIT 2 MODELS OF E-SERVICE**

### **TABLE OF CONTENT**

- 1.0 Introduction**
- 2.0 Objectives**
- 3.0 Main Content**
- 3.1 E-service Models**
- 4.0 Conclusion**
- 5.0 Summary**
- 6.0 Tutor-Marked Assignment (TMAs)**
- References and Further Reading**

### **1.0 INTRODUCTION**

This unit looks at different stages of e-service as discussed by Persson and Goldkuhl. Student will be introduced to different stages of e-service development as provided by the two authors. There are the Swedish model presented by SAFAD, the model by Layne & Lee, the model by the National Auditing Office in Australia (ANAO), and a model by Hiller and Belanger. These models have several properties in common; they categorize the development into different stages, the models from Australia and Sweden have purposes to measure, point out direction and evaluate the emergence of e-services in a national context and the Layne & Lee model attempts at categorizing the development and to point out difficulties at each stage (Persson and Goldkuhl, 2005).

### **2.0 OBJECTIVES**

At the end of this unit, you should be able to:

- Discuss the various models of e-service development.
- Make a comparison between the models.

### **3.0 MAIN CONTENT**

#### **3.1 E-SERVICE MODELS**

##### **The ANAO Model**

This model is developed by the Australian National Auditing Office to categorize the government agencies electronic service delivery via the Internet. This model divides the delivery of services into 4 categories or stages, indicating that this is a model pivoting the emerging e-services and the development of e-services.

##### **Stage 1: Publishing information:**

At this stage providing static information about the agency and downloadable and readable publications from the agency to the users are the pivoted and focused issues. Access to information is not limited. Interaction between user and e-service are limited to an inquiry and search functionality.

##### **Stage 2: Interaction:**

This stage involves limited interaction possibilities in government agency databases to the users. This is done with expanded search and filtering possibilities as well as calculation services for calculating, debts or levels of government subsidies. There is still no limitation regarding accessibility to the site and services.

##### **Stage 3: Transaction of secure information:**

Stage 3 requires secure identification related to the individual interacting with the government agency. Data access is restricted to a specific individual who is provided personal information and services. The providing of personal information requires a higher level of secure channels between agency and the user. Example services are retrieving cargo import information, and lodgment of tax returns. Creating services on this stage involves addressing risks involving security, privacy and financial transactions. What separates this stage from the two prior stages is the need for secure identification of the user identity.

##### **Stage 4: Sharing information with other agencies:**

The last stage covers the exchange of information between different government agencies regarding a specific user (A business, organization or individual). ANAO exemplifies this with an agency notified of a change of address, a bit of information of interest for all government agencies involved in providing services to this individual. This information is to be shared with these other agencies. As in stage 3 this exchange of information need the user to be identification to make sure that the information provided and spread is correct.

### **SAFAD model**

This model is based on the assumption that technology and service levels are intimately interwoven factors in the emerging e-Government services.

#### **Stage 1: Information**

This stage pivots on the presentation of static material such as publications and information about the services provided by the agency. SAFAD describes this information as “packaged” by the agency with only limited possibilities to interact with the website. This functionality is basically limited to search and inquiry as in the Australian model above. According to SAFAD this stage include services such as presenting the mission of the agency, parliament bills relating the services of the agency and providing mail access for inquiries.

#### **Stage 2: Interaction**

SAFAD describes this stage as providing “interactive information”. This includes the possibility for basic interaction with the website. At this stage services as searching in agency databases, ordering printed publications, downloading and ordering forms relating agency services and subscribing to newsletters from the agency. This stage range from completely public services such as searching in databases to basic identification of the client that is limited to email addresses or mail addresses.

### **Stage 3: Transaction**

This stage includes picking up and leaving personal information related to the services provided by the agency. This includes initiating and following agency specific services by the agency. To be able to provide this type of services online the client need to be securely identified. This stage ranges from initiating a simple case with identification of the client to more advanced transactions such as tax declaration online.

### **Stage 4: Integration**

The last stage of the SAFAD model addresses the integration of services between government agencies. This is the realisation of a one-stop government that regardless of organizational boundaries provides services at one point of entry even where several agencies are involved. Addressed at this stage is the complete process of a service provided online, from initiating the case to paying the service, tax or what the service is about online. This mean that the organisational boundaries in the government structure is somewhat erased or is left with no or little visibility to the clients.

### **Layne & Lee model**

This model is derived from observations on the evolving eGovernment in the United States.. Layne and Lee (2001) state that the model and the related discussion initiated from the state level but can be used on federal as well as local level. Layne and Lee see the development of government agencies as a natural progress in which the agency evolves because of and in response to functionality needs and customer expectations. In the realization of these four stages the result will be true one-stop shopping for the citizens.

### **Stage 1: Catalogue**

This stage focuses on establishing an online presence for the government agencies. This includes the efforts of many government agencies in the basic web development of presenting information about the agency and publications made at the agency. According to Layne and Lee the movement into this stage is initiated because of external pressure in terms of citizen and business expectations. The name of this stage, catalogue, is derived from the



typical functionality that is afforded by the agency. The agency will at this stage publish documents and information that is of general nature. This is information in general terms about the agency and its services. At the end of this stage the agency will address the need for an organised portal site that present the published documents and information in a structured and usable way.

### **Stage 2: Transaction**

The second stage according to Layne and Lee is a focus shift towards integrating the internal systems in the agency with the website. In doing this the agency will allow the clients to interact with personal information in transaction-based services provided by government agency. This stage will allow citizens to renew licences and pay fines online in integration with agency internal systems. The end of this stage will according to Layne and Lee be focused on the full integration of agency systems with the web interface allowing the transactions between client and agency to be posted directly into the agency systems minimizing the interaction with agency staff.

### **Stage 3: Vertical integration**

This stage and the last stage are based on the distinction between government functions and government levels. The vertical integration addresses the integration between different levels of government but in the same functional areas. Layne and Lee exemplifies this with the integration of local level business license application being linked to state and government level to obtain an employer identification number. In other words this stage will consist of the linking of local level systems to higher-level systems.

### **Stage 4: Horizontal integration**

This last stage focuses on the integration of information systems in government agencies with different functionality that has some relation in common to the clients. An example of horizontal integration is the possibility to pay different business fees and taxes to different

agencies at the same time because of the integration of these systems in the different agencies.

These last two stages involve that the government agencies will not only address publishing information, information systems development and integration of website and internal systems but the organisational development in focusing on the processes in the agency relating to other government agencies.

### **Hiller & Belanger model**

This model by Hiller and Belanger differ from the models above in adding a fifth stage stating the importance of political participation.

#### **Stage 1: Information**

This is according to Hiller and Belanger the most basic form of eGovernment, where information is simply posted on the agency website. These information websites contain general information about services provided by the agency and information directed towards the public including businesses, politicians or other government agencies. The biggest challenge is to maintain the quality of information to ensure that the information is updated and accurate. This stage is in a high degree implemented in the government agencies.

#### **Stage 2: Two-way communication**

At this stage government agencies allow users to interact with the agency in simple requests. According to Hiller and Belanger this is often the case of email services provided by the agency. This stage includes services as requesting information from the agency or requesting the government agency to send back personalised services via mail or email. Hiller and Belanger exemplify this as applying for new Medicare cards or benefit statements from the government.

**Stage 3: Transaction**

At this stage government agencies provide the possibility to interact with the agency and to conduct transactions completely online. According to Hiller and Belanger this is the most advanced level of eGovernment widely available. Services at this stage can be renewing licences for businesses and individuals and paying fines and taxes online. At this stage public servants are replaced at large extent by the possibility for clients to conduct self-services online.

**Stage 4: Integration**

This stage contains the integration of government services. This can and is most frequently done with a single portal allowing clients to access services at a single point of entry. By using a single point of entry clients can access services at one place no matter what agency that actually offers them. One of the biggest obstacles according to Hiller and Belanger are the lack of integration of back-office systems between government agencies. Integration of back-office systems and online services could mean saving a lot of time and resources for the government agencies involved.

**Stage 5: Political participation**

The last stage of the model political participation includes services such as voting online and posting comments online. Hiller and Belanger argue that although this can be seen as a part of stage 2, two-way interaction, the importance of the political dimension motivate a separate category or stage for this type of services. Currently there are very few services available that fall into this category. The uniqueness of the privacy and security concerns in this stage is one of the main factors behind stating this as a separate category. In the future of transaction-based eGovernment include the possibility of voting online.

The table below shows the stages of e-service by Hiller and Belanger.

	STAGES OF E-GOVERNMENT				
	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
Type of government	Information	Two-way communication	Transaction	Integration	Political participation
Government to Individual — Services	Description of medical benefits	Request and receive individual benefit information	Pay taxes online	All services and entitlements	N/A
Government to Individual — Political	Dates of elections	Receive election forms	Receive election funds and disbursements	Register and vote. Federal, state and local (file)	Voting online
Government to Business — Citizen	Regulations online	SEC filings	Pay taxes online Receive program funds (SBA, etc.) Agricultural allotments	All regulatory information on one site	Filing comments online
Government to Business — Marketplace	Posting Request for Proposals (RFP's)	Request clarifications or specs	Online vouchers and payments	Marketplace for vendors	N/A
Government to Employees	Pay dates, holiday information	Requests for employment benefit statements	Electronic paychecks	One-stop job, grade, vacation time, retirement information, etc.	N/A
Government to Government	Agency filing requirements	Requests from local governments	Electronic funds transfers		N/A

Source: adapted from Persson and Goldkuhl, 2005).

All of these models start off with a stage of providing information to the public. After this stage the models begin to differ from each other in a more substantial way. ANAO and SAFAD continue with an interaction stage where there is increasing interaction between agency website and the client. Hiller and Belanger continue in their second stage with two-way communication a stage where the client and agency exchange email and order publications in communication with the agency. The third stage In ANAO, SAFAD and Hiller and Belanger and the second stage of Layne and Lee are more or less the same. At these stages the client and agency exchange personal information about the client in a secure fashion. SAFAD is focusing less on financial transfers between client and agencies; the other models state this as an important feature of the applicable stage.

The models by SAFAD and ANAO are very similar altogether. The division into 4 stages that are basically the same except for the last stage where SAFAD pivot the realization of networking agencies and ANAO limit the discussion to sharing information. On this point we argue that the sharing of information is only a small part of what integration of governments in e-service development will include. The next step in the models is the integration of government agencies. In Layne and Lee this is divided into vertical; cross-hierarchical integration and horizontal; cross-functional integration. The other models do not separate the cross-functional and cross-hierarchical integration from each other.

Only one model (Hiller and Belanger) discusses the participative dimension of e-Government (Persson and Goldkuhl, 2005: 2-7).

### **Self-Assessment Exercise**

Discuss the process of Hiller and Belanger model of e-service

## **4.0 CONCLUSION**

The models of public e-service discussed above categorise the developments of e-service into different stages. All the models offer us some perspectives on how we can develop public e-service.

## **5.0 SUMMARY**

In this unit, we have examined various models of e-service as provided by ANAO, SAFAD, Hiller and Belanger as well as the model developed by Layne and Lee.

## **6.0 TUTOR-MARKED ASSIGNMENT**

1. Discuss the ANOA and SAFAD models of e-service
2. What are the processes involved in Layne and Lee model of e-service.

## **REFERENCES AND FURTHER READING**

Persson, A. and Goldkuhl, G (2005) Stage-models for public e-services – investigating conceptual foundations. Scandinavian Workshop on e-Government, Copenhagen.

## **UNIT 3 APPROACH OF E-SERVICES IN THE PUBLIC SECTOR**

### **TABLE OF CONTENT**

- 1.0 Introduction**
- 2.0 Objectives**
- 3.0 Main Content**
- 3.1 E-service Models**
- 3.2 E-Service Benefits**
- 3.3 Procedure for E-service Model Construction**
- 4.0 Conclusion**
- 5.0 Summary**
- 6.0 Tutor-Marked Assignment (TMAs)**
- References and Further Reading**

### **1.0 INTRODUCTION**

In this unit, student will be introduced to the concept of e-service, i.e. provision of services through electronic networks. E-service may be regarded as a result of automating the business process of traditional service. The model of constructing e-service is also discussed in this unit.

### **2.0 OBJECTIVES**

At the end of this unit, you should be able to:

- Discuss the procedure for constructing e-service model

- Examine E-service benefits

- Discuss the procedure for e-service model construction

### **3.0 MAIN CONTENT**

#### **3.1 Services in public sector**

The focus is on modeling in the public sector e-services that are basically referenced from the Common List of basic public services (e.g., Personal Documents – Passports, eID, Driver Licenses, Car Registration, Application for Building Permission, Birth and Marriage Certificates, Announcement of Moving, Registration of a New Company, etc.), but the list is

not restricted and may cover other public or commercial e-services as well. For delivering all these services, Internet-based or non-Internet technologies and different access media and devices including personal computers, mobile phones, electronic kiosks and other equipment could be used (Ostasius and Petraviciute, 2010).

### **3.2 E-Service Benefits**

E-service is offering a large number of benefits to their users:

- Familiarizes individuals with electronic information and educates them about the benefits of using advanced technology.
- Enables telecommuting.
- Provides integrated informative systems with social, cultural and economical aspects of the individuals.
- Transparency of information
- Removes time and location barriers
- Enhances data acquisition, transformation and retrieval, unlike the data chaos in a traditional service provider
- Promotes reuse of information
- Reduces operation time
- Reduces costs
- Improves information access for decision-making
- Cultivates better relationships with customers
- Reduces overhead costs such as benefits administration
- Speeds process turnover such as expense reimbursement
- Allows searches of large volumes of heterogeneous data (documents, pages, database, messages, multimedia)
- Involves the citizens in governmental activities providing easy access to information using Internet (Batagan and Pocovnicu, 2009).

### **3.3 Procedure for e-service model construction**

Procedure for the construction of an e-service model is presented using the relations of activities that can be presented as a logical step-by-step sequence in the business process model in the diagram below.

1. E-service. e may be initiated by the human – the system user – or by the system itself and may be based on the ‘life-events’, ‘business-events’, ‘business situations’ or a request for information. Some samples illustrate ‘life events’ – birth, marriage, moving, buying a new car (initiated by human), expired passport, Id-card, driver license, vehicle registration (initiated by human or machine service).
2. Selection of the type of service means the choice of a particular service from the available list of public services. One type of services could cover data access services from registers and information systems that can be used in any type of interaction.
3. User identification starts from authentication activities where the identity of the person accessing data or services is established. This involves verifying and confirming personal data provided by the user. The next step is authorization – the activity that allows access data or services that are conditioned by the individual’s access level and his/her role. It also determines the rights, privileges and obligations of the identified person, which depend on the accessing data or service.
4. Selecting the subject(s) of the service is optional (subject(s) means individual(s) or organization(s)). It means the choice of a particular person or organization for whom the service should be provided or who is directly related to the service (e.g., a co-owner of the vehicle). It is also applicable when the subject(s) of the service is not the user but other person(s) and may be needed in cases when the service is executed by an organization representative (e.g., by the staff of the authority that provides the



service) or by the agent that is authorized by the service initiator (e.g., by the owner of the vehicle).

5. Selecting the object(s) of the service means the choice of the particular object(s) from the list of objects available for a particular customer and for the type of service that was selected (e.g., a particular vehicle). The agent or the organization representative may represent many customers but access the objects of a particular customer only when they deliver the service to him or her.
6. Selecting the operation(s) for the service means the choice of a particular operation from the list of operations available for the selected object, the service initiator and for the type of service selected (the operation here means the subdivision of a particular type of service; the type of service may consist of one or more operations; operations cannot be subdivided). There should be a possibility to select one or more operations that can be logically executed together for a particular service (e.g., change of the owner's address and the vehicle plate number).
7. Gathering data means that all the data and information that are required for the service and are electronically accessed should be gathered in an automatic way. The other required data and information that cannot be accessed electronically or are not available should be entered manually. Depending on the specific data, it could be done in two ways: entered by the customer himself/herself (e.g., selection of the address for the deliverables of the service – vehicle number plates and registration license; input of the phone number, e-mail address for communication) or by an agent or the organizational representative according to the contents of the data sources – non-electronic or electronic documents provided by the customer or organization. In this case, the agent or the organizational representative has to approve electronically the reliability of the entered data based on the original documents that were presented.

8. Optionally, all the gathered data are to be presented for checking to the user(s) who is working with the system, and he/she should confirm them or refuse in case of wrong or unsatisfactory data.
9. If the data are confirmed, an electronic application for the service should be formed (application in our context means some kind of contract between the service consumer and the service provider). It is optional depending on the type of the service and is drawn up according to the selections and data gathered.
10. This document should be presented to the user(s) working with the system, and he/she should approve or refuse it if he/she changes his/her mind or for other reasons (e.g., the price for the service is too high).
11. If the application is approved and the specific character of the service requires, an electronic invoice of the payment for the service is to be drawn up. The e-invoice is to be formed in an automatic way according to the specific details of the service and the pricelist of the services provided by the organization.
12. The e-invoice should be presented to the user(s) working with the system, and he/she should confirm or refuse it in case of any reason. Confirmation means that the user agrees to pay the specified sum for the service.
13. If the e-invoice is approved, the system sends the request to perform the e-payment transaction to the bank or other financial intermediary specified by the user, or perform other activities that are related with e-payment.
14. When an e-payment is executed, it could be confirmed or cancelled by the bank or other financial intermediary that performs e-payments.

15. After the financial intermediary has confirmed the e-payment, the execution of the service has to be started. The automatic part of the execution may cover only two functions: the change of the status of the selected object(s) and/or subject(s), and/or data transfer(s) (e.g., change of vehicle registration status; transfer of data on a new owner to the vehicle register). Instructions for the manual execution of the service activities that cannot be executed in an automatic way should be compiled (e.g., an instruction to print the vehicle registration certificate and to deliver it to the customer).
16. If the instructions for the manual activities are compiled, they must be executed to finalize the service delivery.

The activities (or elements of the processes) in the presented procedure are arranged in a hard logical sequence because of certain empirical generalizations and taking into account the business process samples that were acquired in case studies and practical experience. However, there are possible exceptions that could be applied and examined separately (e.g., advance payment for the service).

According to the presented approach and the model for building the e-service systems, the key requirements for the design and development technique and tools should involve scalability, flexibility and reusability: it should be easy and simple to make changes that depend on particular changes in business processes and situations. Changes in such systems should be focused just on modifying, changing or adding components of the system without any intervention into its core or other elements (Ostasius and Petraviciute, 2010:135-139).

### **Self-Assessment Exercise**

Discuss the procedure for gathering data in the process of constructing e-service model

#### **4.0 CONCLUSION**

The proposed e-service model can be used to model services in the public sector, promoting one-stop e-government solutions, to create system architecture for e-service development, to use as a tool for the benchmarking of services while comparing different or particular types of services. It can help the authorities to understand the ways of automation of business processes and facilitate the development of their e-services (Ostasius and Petraviciute, 2010).

#### **5.0 SUMMARY**

In this unit we have looked at an e-service model for modeling complex governmental processes. The unit presents the detail procedure involved in constructing e-service for the public sector.

#### **6.0 TUTOR-MARKED ASSIGNMENT**

Discuss the procedure for constructing e-service model

#### **REFERENCES AND FURTHER READINGS**

Batagan, L. and Pocovnicu, A. (2009) E-Service Quality Management. Journal of Applied Quantitative Methods. Vol. 4, No. 3.

Ostasius, E. and Petraviciute, Z. ( 2010) Modelling E-service in the Public Sector. INFORMACIJOS MOKSLAI 2010. 53.

## **MODULE 4 TRENDS IN THE WORLD OF E-GOVERNMENT DEVELOPMENT (COMPARATIVE)**

**Unit 1: E-government development around the World**

**Unit 2: E-government in Africa**

**Unit 3: E-government in Europe**

**Unit 4: E-government in America**

**Unit 5: E-government in Asia**

**Unit 6: E-government in Oceania**

### **UNIT 1 E-GOVERNMENT DEVELOPMENT AROUND THE WORLD**

#### **TABLE OF CONTENT**

**1.0 Introduction**

**2.0 Objectives**

**3.0 Main Content**

**3.1 Indicators for Evaluating E-service Progress**

**4.0 Conclusion**

**5.0 Summary**

**6.0 Tutor-Marked Assignment (TMAs)**

**References and Further Reading**

#### **1.0 INTRODUCTION**

This unit focuses on the development and trends of e-government across the globe. Student will get to know more about the happening on e-government around the world. The first unit of this module presents a general overview of this development. Subsequent units will look at specific countries cases.

#### **2.0 OBJECTIVES**

At the end of this unit, you should be able to:

Discuss the trends in the world of e-government across the globe

### 3.0 MAIN CONTENT

#### 3.1 Indicators for Evaluating E-service Progress

Palvia and Sharma (2004) provide some of the indices developed by the United Nations' Division for Public Economics and Public Administration. This index is an indicator of the progress the UN member countries have made in implementing e-government services.

Parameters and factors used include web presence measures (indicating stages of government websites), telecommunication infrastructure measures which define the capacity of a country's ICTs (indicators are Internet hosts per 10,000 people, percentage of a nation's population online, and PCs, telephone lines, mobile phones, and televisions per 1000 people); and human capital measures (using the UNDP Human Development Index, the Information Access Index, and urban/rural population ratio as indicators).

The 2005 readiness index is a composite measurement of the capacity and willingness of countries to use e-government for ICT-led development. It is a composite index comprising the Web Measure Index, the Telecommunication Infrastructure Index and the Human Capital Index (The UN global E-Government Readiness Report 2005).

##### **The Web Measure Index**

Web Measure Index 2005 is based upon a five stage model of e-government framework. These five stages are;

- **Emerging Presence is Stage I** representing information which is limited and basic. The e-government online presence comprises a web page and/or an official website; links to ministries/departments of education, health, social welfare, labor and finance may/may not exist; links to regional/local government may/may not exist; some archived information such as the head of states' message or a document such as the constitution may be available on line; most information remains static with the fewest options for citizens.

- **Enhanced Presence is Stage II** in which the government provides greater public policy and governance sources of current and archived information, such as policies, laws and regulation, reports, newsletters, and downloadable databases. The user can search for a document, there is a help feature and a site map is provided. A larger selection of public policy documents exists, such as an e-government strategy, policy briefs on specific education or health issues. Though more sophisticated, the interaction is still primarily unidirectional with information flowing essentially from government to the citizen.
  
- **Interactive Presence is Stage III** in which the online services of the government enter the interactive mode with services to enhance convenience for the consumer such as downloadable forms for tax payment, and application for license renewal. Audio and video capability is provided for relevant public information. The government officials can be contacted via email, fax, telephone and mail. The site is updated with greater regularity to keep the information current and up to date for the public.
  
- **Transactional Presence is Stage IV** that allows two-way interaction between the citizen and his/her government. It includes options for paying taxes; applying for ID cards, birth certificates/passports, license renewals and other similar C2G interactions by allowing him/her to submit these online 24/7. The citizens are able to pay for relevant public services, such as motor vehicle violation, taxes, fees for postal services through their credit, bank or debit card. Providers of goods and services are able to bid online for public contracts via secure links.
  
- **Networked Presence is Stage V** representing the most sophisticated level in e-government. It is characterized by an integration of G2G, G2C and C2G services. The government encourages participatory deliberative decision-making and is willing and able to involve the society in a two-way open dialogue. Through interactive features such as the web comment form, and innovative online consultation mechanisms, the

government actively solicits citizens' views on public policy, law making, and democratic participatory decision making. Implicit is the integration of public sector agencies with full cooperation and understanding of the concept of collective decision-making, participatory democracy and citizen empowerment as a democratic right.

### **Telecommunications Infrastructure Index**

The Telecommunication Infrastructure Index is a composite weighted average index of six primary measures of a country's ICT infrastructure capacity. These are: PCs/1000 persons; Internet users/1000 persons; Telephone Lines/1000 persons; Online population; Mobile phones/1000 persons; and TV's/1000 persons.

### **Human Capital Index**

The data for the Human Capital Index relies on the UNDP 'education index' which is a composite of the adult literacy rate and the combined primary, secondary and tertiary gross enrollment ratio with two third weight given to adult literacy and one third to gross enrollment ratio.

### **E-Participation Index**

The E-Participation Index is used to assess the quality and usefulness of information and services provided by a country's government for the purpose of engaging its citizens in public policy issues. This index is indicative of both the capacity and the willingness of the country's government in encouraging the citizens in promoting deliberative and participatory decision-making and of the reach of its own socially inclusive governance program.

The Table below provides the indices for the top 50 countries with the United States of America (0.9062) being the world leader followed by Denmark (0.9058). Sweden (0.8983) has bypassed the United Kingdom (0.8777) to arrive at the 3rd global position. Among



developing countries, the Republic of Korea (0.8727) leads with Singapore (0.8503), Estonia (0.7347), Malta (0.7012) and Chile (0.6963) close behind.

**E-government Readiness Index 2005: Top 50 Countries**

Rank	Country	Index	Rank	Country	Index
1	United States	0.9062	26	Slovenia	0.6762
2	Denmark	0.9058	27	Hungary	0.6536
3	Sweden	0.8983	28	Luxembourg	0.6513
4	United Kingdom	0.8777	29	Czech Republic	0.6396
5	Republic of Korea	0.8727	30	Portugal	0.6084
6	Australia	0.8679	31	Mexico	0.6061
7	Singapore	0.8503	32	Latvia	0.6050
8	Canada	0.8425	33	Brazil	0.5981
9	Finland	0.8231	34	Argentina	0.5971
10	Norway	0.8228	35	Greece	0.5921
11	Germany	0.8050	36	Slovakia	0.5887
12	Netherlands	0.8021	37	Cyprus	0.5872
13	New Zealand	0.7987	38	Poland	0.5872
14	Japan	0.7801	39	Spain	0.5847
15	Iceland	0.7794	40	Lithuania	0.5786
16	Austria	0.7602	41	Philippines	0.5721
17	Switzerland	0.7548	42	United Arab Emirates	0.5718
18	Belgium	0.7381	43	Malaysia	0.5706
19	Estonia	0.7347	44	Romania	0.5704
20	Ireland	0.7251	45	Bulgaria	0.5605
21	Malta	0.7012	46	Thailand	0.5518
22	Chile	0.6963	47	Croatia	0.5480
23	France	0.6925	48	Ukraine	0.5456
24	Israel	0.6903	49	Uruguay	0.5387
25	Italy	0.6794	50	Russian Federation	0.5329

According to the Table below, the regions of North America (0.8744) and Europe (0.6012) are in the leadership position on the e-government readiness index. In the rest of the world category (after North America and Europe), the rankings in descending sequence were: South and Eastern Asia (0.4922); and South and Central America (0.4643), Western Asia (0.4384); the Caribbean (0.4282); South and Central Asia (0.3448); Oceania (0.2888) and finally Africa (0.2642). The World e-government Readiness Index was 0.4267 in 2005.

### Regional E-Government Readiness Rankings

Region Year:	2005	2004	2003
North America	0.8744	0.8751	0.8670
Europe	0.6012	0.5866	0.5580
South and Eastern Asia	0.4922	0.4603	0.4370
South and Central America	0.4643	0.4558	0.4420
Western Asia	0.4384	0.4093	0.4100
Caribbean	0.4282	0.4106	0.4010
South and Central Asia	0.3448	0.3213	0.2920
Oceania	0.2888	0.3006	0.3510
Africa	0.2642	0.2528	0.2460
World Average	0.4267	0.4130	0.4020

### World Internet Usage and Population Statistics

World Regions	Population (2007 Est.)	Population % of World	Internet Usage	% Population (Penetration)	Usage % of World	Usage Growth 2000-2007
Africa	933,448,292	14.2 %	33,421,800	3.6 %	2.9 %	640.3 %
Asia	3,712,527,624	56.5 %	409,421,115	11.0 %	36.0 %	258.2 %
Europe	809,624,686	12.3 %	319,092,225	39.4 %	28.2%	203.6 %
Middle East	193,452,727	2.9 %	19,424,700	10.0 %	1.7 %	491.4 %
North America	334,538,018	5.1 %	230,987,282	69.0 %	20.4%	113.7 %
LatinAmerica/Caribbean	556,606,627	8.5 %	102,304,809	18.4 %	9.0 %	466.2 %
Oceania / Australia	34,468,443	0.5 %	18,756,363	54.4 %	1.7 %	146.2 %
WORLD TOTAL	6,574,666,417	100.0 %	1,133,408,294	17.2 %	100.0 %	214.0 %

(Source: Miniwatts Marketing Group, 2007). [www.internetworldstats.com](http://www.internetworldstats.com)

### Internet Penetration Across Geographies

Continent	Internet penetration %
Asia	10.4%
Middle East	9.6%
North America	68.6%
South America	14.7%
Europe	36.4%
Africa	2.6%
Oceania	52.6%

Source: Adapted from Narayan (2007)

Asia and Africa's share of internet penetration is very low compared to other continents.

### World Population Distribution

Continent	Population as % of World Population
Asia	60.67%
Africa	13.82%
Europe	11.31%
North America	7.94%
South America	5.76%
Oceania	0.51%

Source: Adapted from Narayan (2007)

### Factors Influencing Service Dissemination

Service Parameter	Internet Based Connectivity	Mobile Based Connectivity
Infrastructure	Low	Medium to Good
Breadth and Depth	Very Low	High
Cost	High	Relatively Low
Social Issues	Computer literacy and acceptance	Mobile is a household gadgets

Source: Adapted from Narayan (2007)

### Self-Assessment Exercise

Discuss the five stages of Web Measure Index

## 4.0 CONCLUSION

There are variations across the globe concerning the e-readiness of various countries distributed geographically. The tables in this unit present the current pictures of the situation.

## 5.0 SUMMARY

In this unit we tried to examine the e-readiness of countries across the globe. The unit also present the main indexes used to evaluate the preparedness of countries towards government digital services.

## **6.0 TUTOR-MARKED ASSIGNMENT**

1. Examine the Human Capital Index and the E-participation Index
2. Discuss the factors influencing service dissemination as presented in one of the tables above.

## **REFERENCES AND FURTHER READING**

Narayan, G. (2007) Addressing the Digital Divide: E-governance and M-governance in a Hub and Spoke Model. The Electronic Journal on Information System in Developing Countries. [www.ejisd.org](http://www.ejisd.org).

## **UNIT 2 E-GOVERNMENT IN AFRICA**

### **TABLE OF CONTENT**

#### **1.0 Introduction**

#### **2.0 Objectives**

#### **3.0 Main Content**

##### **3.1 E-government in Africa**

##### **3.2 Challenges to E-government in Africa**

#### **4.0 Conclusion**

#### **5.0 Summary**

#### **6.0 Tutor-Marked Assignment (TMAs)**

#### **References and Further Reading**

### **1.0 INTRODUCTION**

In this unit, we examine e-government situation in Africa. The unit also discusses some of the challenges of e-governance in Africa.

### **2.0 OBJECTIVES**

At the end of this unit, you should be able to:

- Discuss e-government in Africa;
- Examine the challenges of e-government in Africa.

### **3.0 MAIN CONTENT**

#### **3.1 E-government in Africa**

E-Government has already arrived in most African countries, and the number of e-government projects is growing apace, albeit driven significantly by external stakeholders and an external agenda.

The key challenge for the e-government development of Africa remains the widespread lack of infrastructure and functional literacy. Despite recent expansion in mobile telephony, most countries in Africa remain at the tail end of the digital divide.

These challenges have translated into a lower than world average e-government development for all sub-regions. Southern Africa (0.3934) consistently outpaces all other sub-regions.

Though there has been some improvement in all sub-regions, except for Northern Africa and Middle Africa, it has been minimal, with the least e-ready sub-region being

### Top ranked countries in Africa

Rank	Country	E-gov. development		World e-gov. index development ranking	
		2012	2010	2012	2010
1	Seychelles	0.5192	0.4179	84	104
2	Mauritius	0.5066	0.4645	93	77
3	South Africa	0.4869	0.4306	101	97
4	Tunisia	0.4833	0.4826	103	66
5	Egypt	0.4611	0.4518	107	86
6	Cape Verde	0.4297	0.4054	118	108
7	Kenya	0.4212	0.3338	119	124
8	Morocco	0.4209	0.3287	120	126
9	Botswana	0.4186	0.3637	121	117
10	Namibia	0.3937	0.3314	123	125
Regional Average		0.2780	0.2733		
World Average		0.4882	0.4406		

United Nations E Government Survey 2012

The Table above shows that Seychelles (0.5192) climbed several points to number one in the region in 2012 followed by Mauritius (0.5066) and South Africa (0.4869). It is notable that all of the African leaders increased their e-government development index value in 2012 but lost in comparative performance around the world, except for Kenya and Morocco, which gained in the world rankings from 124 to 119 and from 126 to 120 respectively. Tunisia (0.4833) and

Egypt (0.4611) declined in rank substantially as did Cape Verde (0.4297) because their improvements did not keep pace with those of other countries (UN e-governance Survey, 2012).

### 3.2 Challenges to e-government in Africa

Most African countries are confronted with challenges in applying e-government due to the fact that; first, most African countries have undertaken only a limited number of e-government projects. Second, most African e-government projects fail in some way.

African governments have fewer e-government initiatives than industrialised countries; make less use of ICTs in their work than industrialised countries; and use older generations of technology than industrialised countries

The major explanation for this is financial. African governments have far less money in both absolute and per capita terms to spend on ICTs than Western governments. Both related and additional to this issue is the greater lack of strategic "e-readiness for e-government" in Africa (Heeks, 2002).

Six factors that are of main relevance to e-government in Africa are presented here. These can be posed as an inventory of "e-readiness for e-government" questions.

**Is the data systems infrastructure ready:** are the management systems, data standards, records and work processes in place to provide the quantity and quality of data to support the move to e-government? In many African countries, data quality and data security – for example – are very poor, and there are few mechanisms to address these issues.

**Is the legal infrastructure ready:** are the laws and regulations required to permit and to support the move to e-government in place? In most African countries, for example, digital signatures cannot be accepted.

**Is the institutional infrastructure ready:** e-government can only progress if the institutions exist to act as a focus for awareness and to act as a means for facilitation of e-government. In most African countries, there are no institutions to co-ordinate and lead and drive e-governance.

**Is the human infrastructure ready:** are the attitudes, knowledge and skills in place – especially within the public sector – that are required to initiate, implement and sustain e-government initiatives? In many African countries, key skills gaps relate to business analysis and system design, and to project management, contract management and vendor management.

**Is the technological infrastructure ready:** although there have been great strides forward, the fact remains that most African countries are a long way short of the computing and telecommunications infrastructure on which many Western e-government initiatives have been based.

**Is the leadership and strategic thinking ready:** a critical pre-condition in successful e-government is an e-champion or small group of e-champions: leaders with vision who put e-government onto the agenda, who set e-government within a broader reform agenda, and who make it happen. The limited number of senior officials who feel willing or able to champion ICTs in government in Africa acts as a most serious constraint to e-government diffusion (Heeks, 2002).

These six areas of e-readiness represent the strategic challenge to e-government in Africa.

### **Self-Assessment Exercise**

1. Discuss the situation of e-government in Africa.
2. Discuss the six factors that are of relevance to e-government in Africa.

## **4.0 CONCLUSION**

E-government in Africa is growing although there are variations in different countries.

African countries are also facing some challenges in the operation of e-government.



## **5.0 SUMMARY**

In this unit, we have considered the situation of e-government in Africa. The top ten countries in the continent were examined. We also discussed the factors that are of relevance to e-government in Africa.

## **6.0 TUTOR-MARKED ASSIGNMENT**

Examine the nature of e-government in Africa.

## **REFERENCES AND FURTHER READINGS**

Heeks, R. (2005) eGovernment in Africa: Promise and Practice. iGovernment Working Paper Series. Paper No. 13. Manchester. Institute for Development Policy Management.

United Nations E-Governance Survey 2012.

## **UNIT 3 E-GOVERNMENT IN EUROPE**

### **TABLE OF CONTENT**

#### **1.0 Introduction**

#### **2.0 Objectives**

#### **3.0 Main Content**

#### **3.1 E-government in Europe**

#### **4.0 Conclusion**

#### **5.0 Summary**

#### **6.0 Tutor-Marked Assignment (TMAs)**

#### **References and Further Reading**

### **1.0 INTRODUCTION**

This unit examines e-government development and progress in Europe. The government is building an e-government infrastructure encompassing citizen access to government processes. This is what is discussed in this unit.

### **2.0 OBJECTIVES**

At the end of this unit, you should be able to:

Discuss e-government development in Europe.

### **3.0 MAIN CONTENT**

#### **3.1 E-government in Europe**

The European region has the highest level of e-government development, which is around 50 per cent higher than that of the world as a whole.

Europe as a region has been in the vanguard of information technology and setting the pace for others to follow. Building on the existing strength of high levels of human capital and infrastructure, the transformative role of ICT has been recognized and adopted to further streamline e-government services. Moving beyond improving public sector efficiency, Europe is now looking to adapt innovative technologies to human development and economic sustainability in the future.

With a common e-government framework, EU countries are encouraged to deploy advanced

technologies, institute better governance and provide expanded services with concomitant pursuit of greater transparency, efficiency and inclusion. Notwithstanding, differences remain between regions and within them. Key European countries spend more than double the EU average amount per capita on ICT; others, around half of it. The Netherlands (0.9125) made substantial gains, advancing to the top position in Europe and 2nd in world rankings, followed by the United Kingdom (0.8960) in 3rd place and Denmark (0.8889), which also advanced and occupies the 4th position this year. Within the aforementioned common e-government framework, all of the top countries of Europe offered more or less the same level of user centric services to their citizens resulting in marginal assessment difference among them. For example, Germany (0.8079), the 10th leading country in Europe as a whole, achieved about 89 per cent of the e-government development level of the regional leader, the Netherlands (UN E-Government Survey 2012).

Of the countries of the region of Europe which are global leaders, several of them offered examples of best practice. In the Netherlands, efficiency and citizen inclusion are the objectives of the e-government strategy. Integration of a back-office management system has been undertaken with a belief that citizens should provide information once.

The government is building an e-government infrastructure encompassing citizen access to government processes including electronic authentication, uniform identification numbers for both citizens and businesses and electronic personal identification. As part of its broader ICT strategy the focus of e-government in the Netherlands was on improving efficiency of services concomitant with reduction of administrative cost and burden.

Based on extensive technological infrastructure, the recently concluded National Implementation Programme (NUP) for Better Services and e-Government laid out agreements among the national government, provinces, and municipalities to improve service delivery. Its high levels of broadband connectivity ensured further enhancements in eservices undertaken during the last few years (UN E-Governance Survey, 2012).

## Top 10 in Europe

Rank	Country	E-gov. development		World e-gov. development ranking	
		2012	2010	2012	2010
1	Netherlands	0.9125	0.8097	2	5
2	United Kingdom	0.8960	0.8147	3	4
3	Denmark	0.8889	0.7872	4	7
4	France	0.8635	0.7510	6	10
5	Sweden	0.8599	0.7474	7	12
6	Norway	0.8593	0.8020	8	6
7	Finland	0.8505	0.6967	9	19
8	Liechtenstein	0.8264	0.6694	14	23
9	Switzerland	0.8134	0.7136	15	18
10	Germany	0.8079	0.7309	17	15
Regional Average		0.7188	0.6227		
World Average		0.4882	0.4066		

United Nations E-Government Survey 2012

### Self-Assessment Exercise

Why is there marginal assessment difference in the top countries of the Europe?

## 4.0 CONCLUSION

As we noticed earlier, Europe as a region has been in the vanguard of information technology and setting the pace for others to follow. Building on the existing strength of high levels of human capital and infrastructure, the transformative role of ICT has been recognized and adopted to further streamline e-government services.

## 5.0 SUMMARY

In this unit, we have examined e-government in Europe. In this unit, we observed that with a common e-government framework, EU countries are encouraged to deploy advanced

technologies, institute better governance and provide expanded services with concomitant pursuit of greater transparency, efficiency and inclusion. But in spite of this, differences still remain between regions and within them.

## **6.0 TUTOR-MARKED ASSIGNMENT**

1. Discuss e-government development and progress made in Europe.

## **REFERENCES AND FURTHER READINGS**

United Nations E-Government Survey, 2012.

## **UNIT 4 E-GOVERNMENT IN AMERICAS**

### **TABLE OF CONTENT**

#### **1.0 Introduction**

#### **2.0 Objectives**

#### **3.0 Main Content**

#### **3.1 E-government in America**

#### **4.0 Conclusion**

#### **5.0 Summary**

#### **6.0 Tutor-Marked Assignment (TMAs)**

#### **References and Further Reading**

### **1.0 INTRODUCTION**

In this unit, we examine e-government in America. Both the United States and Canada have consistently had e-government development levels far above the world average from 2003 to 2012 in the Americas. This unit looks at the details.

### **2.0 OBJECTIVES**

At the end of this unit, you should be able to:

Discuss e-government development in America

### **3.0 MAIN CONTENT**

#### **3.1 E-government in the Americas**

E-government strategies in the Americas are geared towards user centric solutions, which serve to synergize governance processes and systems across multiple public administration domains.

As noted in figure below the sub-region of Northern America (0.8559), encompassing only the United States and Canada, is the world leader with values far higher than the world average and all other sub-regions. In 2012, all sub-regions collectively improved performance in the Americas, including the Caribbean (0.5133) and South America (0.5507). Barbados (0.6566) has been and remains the sub-regional leader among the Caribbean countries in 2012 followed by Antigua and Barbuda (0.6345) and the Bahamas (0.5793).

The national site of Barbados offered a user friendly approach of “channels” such as the Government Channel, Citizens & Residents Channel, Businesses Channel, etc., making it easier for the user to find relevant information. Moving towards transactional offerings, it allowed for calculation of land taxes.

Improvements in online offerings along with investments in telecommunications and human capital allowed Antigua and Barbuda to advance to a world ranking of 49th in 2012. Similarly, in Dominica and in Grenada, substantial investments in access infrastructure, especially broadband, contributed to an advance in world rankings. All countries of the Central America sub-region increased their offerings in 2012.

Since the United Nations Survey started tracking e-government development in 2003 both United States and Canada have been among the top world leaders with integrated portals and increasingly inclusive citizen services spread across theme, functionally and now by life cycle and events. For example, the United States e-government portal (<http://www.usa.gov>) comes closest to a pure integrated portal with access to interlinked searchable information from the United States Government, state governments, and local governments all in one place. Substantial back office integration has gone into the user interface, which offers a simple convenient and easy-to-use facility for everything from government departments and agencies to verifying a social security number, getting an employer identification number, multiple online participation efforts and much more. Early recognition of the use of ICT for rolling out citizen centric services has contributed to the United States’ top rankings in the last decade. As the figures indicate, both the United States and Canada have consistently had e-government development levels far above the world average from 2003 to 2012 (UN E-Governance Survey 2012).

## Top ranked Countries in the Americas

Rank	Country	E-gov. development		World e-gov. development ranking	
		2012	2010	2012	2010
1	United States	0.8687	0.8510	5	2
2	Canada	0.8430	0.8448	11	3
3	Chile	0.6769	0.6014	39	34
4	Colombia	0.6572	0.6125	43	31
5	Barbados	0.6566	0.5714	44	40
6	Antigua and Barbuda	0.6345	0.5154	49	55
7	Uruguay	0.6315	0.5848	50	36
8	Mexico	0.6249	0.5150	55	56
9	Argentina	0.6228	0.5467	56	48
10	Brazil	0.6167	0.5006	59	61
Regional Average		0.5403	0.4790		
World Average		0.4882	0.4406		

United Nations E Government Survey 2012

### Self-Assessment Exercise

Discuss the nature of e-government development in America.

### 4.0 CONCLUSION

As noted earlier in this unit, E-government strategies in the Americas are geared towards user centric solutions, which serve to synergize governance processes and systems across multiple public administration domains. This has led to the high position that some of the countries of this region occupy in e-government operations compared to some countries from some other regions.



## **5.0 SUMMARY**

In this unit, we have discussed e-government development in America. The unit examined some countries performances in e-government operation in the region of America.

## **6.0 TUTOR-MARKED ASSIGNMENT**

Examine the nature of e-government development in America

## **REFERENCES AND FURTHER READING**

United Nations E-Government Survey, 2012.

## **UNIT 5 E-GOVERNMENT IN ASIA**

### **TABLE OF CONTENT**

#### **1.0 Introduction**

#### **2.0 Objectives**

#### **3.0 Main Content**

#### **3.1 E-government in Asia**

#### **4.0 Conclusion**

#### **5.0 Summary**

#### **6.0 Tutor-Marked Assignment (TMAs)**

#### **References and Further Reading**

### **1.0 INTRODUCTION**

Like in the last three units we are examining e-government in Asia in this unit. The development and progress made by countries of this region are discussed in this unit.

### **2.0 OBJECTIVES**

At the end of this unit, you should be able to:

Discuss the development and progress in e-government operations in countries of the Asia.

### **3.0 MAIN CONTENT**

#### **E-government in the Asia**

Asia as a whole continued to expand e-government services further. Investments were made horizontally to expand infrastructure, including support for broadband and mobile access, while at the same time governments reached out to provide greater online services and improve e-governance.

The Republic of Korea (0.9283), the world leader in e-government, is also the top performer in Asia with around double the average world e-government offerings. The 2nd slot is taken this year by Singapore (0.8474) followed by Israel (0.8100) and then Japan (0.8019). The performance of the United Arab Emirates (0.7344) is especially notable as it advanced 21 positions to the ranking this year of 28th globally and 5th in Asia. The rapid progress of the United Arab Emirates is a best practice case highlighting how effective e-government can help support development. With double the population and three quarters of the GDP per

capita, the United Arab Emirates has achieved around the same level of online services as those offered in Norway, a global leader at the 8th position.

Commensurate with global progress, all countries of Central Asia improved their service offerings, pulling up the sub-regional average by around 17 per cent.

Kazakhstan was the sub-regional leader, improving its global ranking by around eight positions in 2012. Kazakhstan in recent years has made efforts to modernize the public sector, including technology based reform of administrative governance systems.

A parallel effort has been a focus on the use of ICT for provision of services and inclusion. As in other developing countries the acceleration of informatization is aimed at increasing the efficiency of the government and exploiting synergies towards a sustainable model of development

### E-government Leaders in Asia

Rank	Country	E-gov. development		World e-gov. development ranking	
		2012	2010	2012	2010
1	Republic of Korea	0.9283	0.8785	1	1
2	Singapore	0.8474	0.7476	10	11
3	Israel	0.8100	0.6552	16	26
4	Japan	0.8019	0.7152	18	17
5	United Arab Emirates	0.7344	0.5349	28	49
6	Bahrain	0.6946	0.7363	36	13
7	Kazakhstan	0.6844	0.5578	38	46
8	Malaysia	0.6703	0.6101	40	32
9	Saudi Arabia	0.6658	0.5142	41	58
10	Cyprus	0.6508	0.5705	45	42
Regional Average		0.4992	0.4424		
World Average		0.4882	0.4406		

United Nations E Government Survey 2012

**Self-Assessment Exercise**

Discuss how the ten top countries in Asia have fared in e-government.

**4.0 CONCLUSION**

As we have seen earlier in this unit, all countries of Central Asia improved their service offerings, pulling up the sub-regional average by around 17 per cent. The countries of the region continue to make progress in their e-government offerings especially the Republic of Korea and Singapore.

**5.0 SUMMARY**

In this unit, we discussed the development of the Asia. The unit observed progress that has been made by some countries in their e-government offerings.

**6.0 TUTOR-MARKED ASSIGNMENT**

Examine the progress made in e-government offerings in some of the countries of Asia.

**REFERENCES AND FURTHER READING**

United Nations E-Government Survey, 2012.

## **UNIT 6 E-GOVERNMENT IN OCEANIA**

### **TABLE OF CONTENT**

#### **1.0 Introduction**

#### **2.0 Objectives**

#### **3.0 Main Content**

#### **3.1 E-government in Oceania**

#### **4.0 Conclusion**

#### **5.0 Summary**

#### **6.0 Tutor-Marked Assignment (TMAs)**

#### **References and Further Reading**

### **1.0 INTRODUCTION**

In this unit, we examine e-government in the Oceania. Australia follow by New Zealand are on the top of the ranking in this region. The unit provides the detail.

### **2.0 OBJECTIVES**

At the end of this unit, you should be able to discuss e-government in the Oceania.

### **3.0 MAIN CONTENT**

#### **3.1 E-government in Oceania**

Two of the world leaders – Australia and New Zealand – outpace others in the region. With many countries in the range of 113–177 in global rankings, the region as a whole scored around 13 per cent less than the world average.

Australia continues to be the leader in the Oceania region. The national portal (<http://australia.gov.au>) acts as a one-stop-shop that connects citizens to the information and services of around 900 government websites and state and territory resources. Information can be quickly and easily accessed through the ‘People’ and ‘Topics’ sections, which categorically filter specific content while the ‘Services’ section allows citizens to perform many functions such as making payments for taxes, driver license renewals, vehicle and business registrations, lodging online forms and making online inquiries. The integrated

portal of the Government of New Zealand provides a one-stop shop portal for information, images and resources from all New Zealand government agencies and government funded sites.

### E-government in Oceania

Rank	Country	E-gov. development		World e-gov. development ranking	
		2012	2010	2012	2010
1	Australia	0.8390	0.7863	12	8
2	New Zealand	0.8381	0.7311	13	14
3	Fiji	0.4672	0.3925	105	113
4	Tonga	0.4405	0.3697	111	116
5	Palau	0.4359	0.4189	113	103
6	Samoa	0.4358	0.3742	114	115
7	Micronesia	0.3812	N/A	127	N/A
8	Tuvalu	0.3539	N/A	134	N/A
9	Vanuatu	0.3512	0.2521	135	155
10	Nauru	0.3242	N/A	141	N/A
11	Marshal Islands	0.3129	N/A	146	N/A
12	Kiribati	0.2998	N/A	149	N/A
13	Solomon Islands	0.2416	0.2445	168	156
14	Papua New Guinea	0.2147	0.2043	177	171
Sub Regional Average		0.4240	0.4193		
World Average		0.4882	0.4406		

United Nations E Government Survey 2012

### Self-Assessment Exercise

The national portal in Australia serves as one-stop shop, what functions does the ‘services’ section perform?

#### **4.0 CONCLUSION**

Australia and New Zealand continue to be the leaders in e-government offerings in the Oceania followed by Fiji and Tonga. The region compared to other regions we discussed in previous unit is still grappling with practice of e-government. It is shown that the region still score less than the world average ranking.

#### **5.0 SUMMARY**

In this unit we have examined e-government offerings in the region of Oceania.

#### **6.0 TUTOR-MARKED ASSIGNMENT**

Discuss e-government performance in the Oceania using Australia as your case study.

#### **REFERENCES AND FURTHER READING**

United Nations E-Government Survey, 2012.

## **MODULE FIVE- CHALLENGES OF E-GOVERNANCE**

**Unit 1: Governance Networks**

**Unit 2: Challenges of E-governance in Developing Countries (focus on Africa)**

### **UNIT 1 GOVERNANCE NETWORKS**

#### **TABLE OF CONTENT**

- 1.0 Introduction**
- 2.0 Objectives**
- 3.0 Main Content**
  - 3.1 Governance Network**
  - 3.2 Reasons why a network might be activated**
- 4.0 Conclusion**
- 5.0 Summary**
- 6.0 Tutor-Marked Assignment (TMAs)**
- References and Further Reading**

#### **1.0 INTRODUCTION**

The structure of government has continued to change. Rather than simply understanding the bureaucratic structure, we need to also understand the concept of governance networks as structures that incorporate multiple partners in the delivery of public services (Holzer and Schwester, 2011). Initiatives to tackle unemployment, to improve health, to reduce crime and to build communities are being taken across old boundaries. Action is planned and executed in neighbourhoods and regions, in city boards and community development trusts as well as in town halls and civic offices. Networks and partnerships are as much part of the organization map as single government agencies. Learning is taking place very fast, as managers, politicians and citizens begin to make sense of a more complex world (Goss 2001). In this unit, student will learn a great deal about the concept of ‘governance networks’.



## **2.0 OBJECTIVES**

At the end of this unit, you should be able to:

1. Discuss the concept of Governance Network
2. Identify and discuss types of government networks.

## **3.0 MAIN CONTENT**

### **3.1 GOVERNANCE NETWORK**

Centre for Democratic Network Governance defines ‘governance network’ as 1) A horizontal articulation of independent, but operationally autonomous actors; 2) who interact through negotiations; 3) transpiring within a regulative, normative, cognitive and imaginary framework; 4) that to a certain extent is self-regulating; and 5) which contribute to the production of public purpose within a particular area.

Governance network as a structure operates via horizontal relationships rather than a vertical, hierarchical chain of command of traditional bureaucratic structure of Max Weber.

Governance networks no longer use the traditional command-and-control relationship exemplified in bureaucratic systems. Network actors cooperate because they trust that the other actors will also play their part and fulfill their responsibilities.

Networks are formed based upon interdependent relationship in which members are highly committed to the goals at hand. In order to reach network goals, all partners must fulfill their duties. Unlike traditional hierarchical or market relationships, networks are based upon ideals of ‘complementary strengths’ and they resolve conflicts through relations of ‘reciprocity’ (Lowndes and Skelcher cited in Holzer and Schwester, 2011:451).

### **3.2 Reasons why a network might be activated**

Goldsmith and Eggers in (Holzer and Schwester, 2011) provide a framework for understanding different types of network that may be activated by government.

## FIVE EXAMPLES OF GOVERNMENT-ACTIVATED NETWORKS

Network type	Definition	Example/use
Service Contract	Government's use of a contract to activate a network	Mental health, welfare, defense
Supply Chain	Deliver complex products to government	Department of Defence, Department of Transportation, Space shuttle, helicopter
Ad-Hoc	Activated as a response network to a specific situation-typically an emergency	Emergency network for natural disaster or an infectious disease outbreak
Channel Partnership	Companies conduct transactions on behalf of government agency	Car dealer handle registration of new cars; sporting good store sell fishing licenses
Information Dissemination	A partnership activated to disseminate information	Recycling information is distributed by nonprofit organizations

According to Goldsmith and Eggers, the job of a network designer and activator is to see how all the pieces of the network should work together, identify possible partners, bring all the relevant stakeholders to the table, and determine what resources will be used to keep the network together.

### Self-Assessment Exercise

What is governance network?

## 4.0 CONCLUSION

We have observed in this unit that the shift in public administration tilts towards network governance. The cooperative arrangements of networks may serve to enhance a civility that is necessary for effective governance. Networks provide opportunities for citizen participation, more effective regulatory control, and the expression of public-sector values within the marketplace (Holzer and Schwester, 2011). This in a way may enhance effective performance of governmental functions especially in the areas of service delivery to the citizens.

## **5.0 SUMMARY**

What we have done in this unit is to look at the concept of governance network. This network is seen as a response to the demand necessitated by the changes in the structure of government. The traditional bureaucratic structure is being replaced with network structures which emphasize partnerships, networks, alliances in public and private organizations alike.

## **6.0 TUTOR-MARKED ASSIGNMENT**

Discuss the five examples of government activated Network.

## **REFERENCES AND FURTHER READING**

Goss, S. (2001) Making Local Governance Work. Networks, Relations and the Management of Change. Basingstoke. Palgrave Macmillan.

Holzer, M. and Schweser, R. W. (2011) Public Administration: An Introduction. New York. M.E. Sharpe, Inc.

## **UNIT 2 CHALLENGES OF E – GOVERNANCE IN DEVELOPING COUNTRIES (Focus on Africa)**

### **TABLE OF CONTENT**

- 1.0 Introduction**
- 2.0 Objectives**
- 3.0 Main Content**
  - 3.1E-government Readiness**
  - 3.2 African e-governance - Challenges**
  - 3.3 practical Support for African e-governance**
- 4.0 Conclusion**
- 5.0 Summary**
- 6.0 Tutor-Marked Assignment (TMAs)**
- References and Further Reading**

### **1.0 INTRODUCTION**

We have examined in the earlier units in this module, the concepts of ‘e-governance’, ‘e-government’, ‘e-democracy’, ‘e-participation’ and the role of information communication and technology as an enabling tool not only to improve government offerings but also to improve the process of policy-making by increasing citizens’ participation through online engagements. In achieving all these, the developing countries are confronted with challenges. This unit discusses some of these challenges.

### **2.0 OBJECTIVES**

At the end of this unit, you should be able to:

### **3.0 MAIN CONTENT**

#### **3.1 E-government Readiness**

According to Basu (2004), because every society has different needs and priorities, there is no one model for e-government and no universal standard for e-government readiness. Each society’s and government’s readiness for e-government would depend upon which objectives and specific sectors it chooses as priorities, as well as the resources available at a given point in time (which might depend on budgets, donors, etc). The necessary pre-conditions for e government depend upon a society’s most important needs. For example, the level of

infrastructure, legal framework and human capital needed for e-government vary with the objectives being pursued. Some of these factors posed a challenge to e-government development in some developing countries.

Assessing e-government readiness requires examination of government itself institutional frameworks, human resources (including ICT managers, procurement officers, and others), existing budgetary resources, inter-department communication flows, etc.

#### **Factors impeding an enabling e-government environment in developing countries**

<b>Core Factors</b>	<b>Symptoms</b>	<b>Consequences</b>
Institutional Weakness	Insufficient planning Unclear objectives	Inadequately designed system Cost over-runs
Human Resources	Shortage of qualified personnel Lack of professional training	Insufficient supports Isolation from sources of technology
Funding Arrangements	Under-estimated project costs Lack of recurring expenditure	Unfinished projects Higher maintenance costs
Local Environment	Lack of vendor representation Lack of back-up systems/parts	Lack of qualified technical supports Implementation problems
Technology and Information Changes	Limited hardware/software Inappropriate software	Systems incompatibility Over-reliance on customer application
Legal Inadequacy	Complex legislative procedure	Lack of legal framework (Basu, 2004: 116).

### **3.2 African e-governance – Challenges.**

Coleman has observed that not all African e-governance projects have been success stories. African e-governance faces two barriers: the lack of ICT infrastructure and mass connectivity to the internet, and the existence of post-colonial administrative cultures dominated by

under-resourced and unaccountable bureaucracies. These barriers indicate the particular needs of African states for modernised systems of governance, aided by the latest technologies.

A key lesson from countries that have attempted to introduce e-governance is the importance of honestly evaluating projects and strategies, considering why they were started; how, and at what cost, they were implemented; and what impacts they achieved. An effective strategy for African e-governance should avoid **three** key pitfalls:

- i) The adoption of technologies without developing human skills and capacities to manage, integrate and sustain them;
- ii) The centralised use of technologies by national government departments, without devolving the benefits of technology to intermediary institutions, such as local government, parliament, parties, civil-society organisations and the independent media;
- iii) A failure to link better governance to broader and more inclusive democracy which gives voice to those who cannot afford technologies, but have needs and ideas to express.

### **3.3 Providing practical support for African e-governance**

African e-governance strategy should be based upon three key principles:

It should be African-owned, combining traditional methods of accountability with modern techniques of e-governance.

It should be developed in partnership with private sector, which should be involved in providing skill training and community-level capacity building, as well as hardware and software.

It should be evaluated regularly in terms of its contribution to more transparent, accountable, inclusive and efficient governance (Coleman, undated).

### **Self-Assessment Exercise**

Discuss the three major pitfalls that must be avoided by the African e-governance.

## **4.0 CONCLUSION**

Challenges facing African e-governance have been identified. The major ones include; the lack of ICT infrastructure and mass connectivity to the internet, and the existence of post-colonial administrative cultures dominated by under-resourced and unaccountable bureaucracies. However, it is recognized that given practical support to African e-governance will address some of these challenges.

## **5.0 SUMMARY**

In this unit, we have examined some of the practical challenges that African e-governance is facing. The unit discusses the main pitfall to be avoided by African e-governance and also provide the support that is available for e-governance in Africa.

## **6.0 TUTOR-MARKED ASSIGNMENT**

1. Discuss the main challenges confronting African e-governance.
2. What are the three key principles upon which African e-governance must be based?

## **REFERENCES AND FURTHER READING**

Basu, S. (2004) E-Government and Developing Countries: An Overview. *International Review of Law Computers& Technology*, Volume 18, No. 1, pages 109–132,

Coleman, (undated) African e-Governance- Opportunities and Challenges. Oxford Internet Institute.