DIGITAL GOVERNMENT PRINCIPLES, PRACTICE AND RESEARCH

MODULE 1: INTRODUCTION TO DIGITAL GOVERNMENT

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AIM

- To define the concept of Electronic Governance
- To explain the benefits of Electronic Governance (EGOV)
- To present some legislative, financial, technological and social challenges facing EGOV
- To provide an overview of front-office EGOV implementation issues
- To provide an overview of back-office EGOV implementation issues

OVERVIEW

1	CONCEPT	What is EGOV?
2	BENEFITS	What are the benefits of EGOV?
3	CHALLENGES	What challenges exist to realize the benefits of EGOV?
4	IMPLEMENTATION	How should EGOV be implemented in the front-office?
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WHAT IS EGOV?

CONCEPT – DEFINITIONS

1	Internet service delivery and government online
2	Any kind of front- or back-office use of ICT by government
3	ICT-enabled transformation of government (e-government)
4	ICT-enabled transformation of government and its interactions with citizens (e-governance)

Administrative System

Political System

3

1

2, 3

4

Civil Society
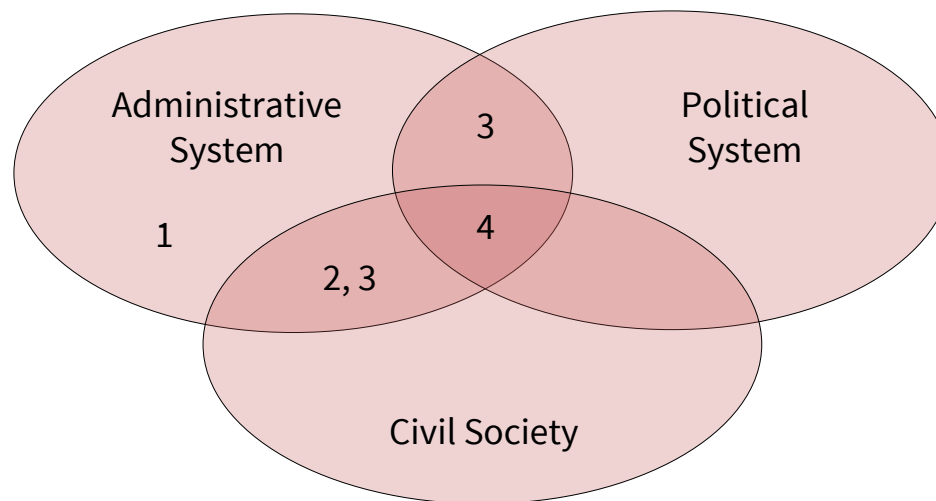
CONCEPT – DISCIPLINES

DEFINITIONS		DISCIPLINES					
		INFORMATICS	POLITICAL SCIENCE	PSYCHOLOGY	ECONOMICS	MANAGEMENT	SOCIOLOGY
1	Internet service delivery and government online	X		X	X		
2	Front- and back-office use of ICT by government	X			X	X	
3	ICT-enabled transformation of government	X	X			X	
4	ICT-enabled transformation of government and its interactions with citizens	X	X			X	X

CONCEPT – AIM

e-Government is not an aim in itself.

It is a tool to enable:

1	better policy outcomes
2	higher quality of services
3	more efficient use of public funds
4	more efficient government processes
5	greater engagement with citizens and businesses
6	etc.

e-Government is more about government than about "e"!

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WHAT ARE THE BENEFITS OF EGOV?

BENEFITS

The main reasons to embrace EGOV:

1	EGOV improves efficiency
2	EGOV improves service quality
3	EGOV helps achieve policy outcomes
4	EGOV contributes to achieving economic objectives
5	EGOV can be the major contributor to public administration reform
6	EGOV builds trust between citizens and government

Until now, the main drivers for EGOV have been efficiency gains and effective delivery of policy outcomes.

Recently, the focus has shifted to: improving services, increasing accountability, facilitating engagement.

BENEFIT 1 – EFFICIENCY

Cost reduction is the major driver for ICT use by governments:

1	Replacing paper-based application processes with Internet applications – cut down costs of data re-entry and checking
2	Improved booking arrangements – more efficient use of scarce resources: skilled staff and facilities
3	Greater sharing of data within government – eliminate costs of multiple collections, data reconciliation and checking

Greater efficiencies are generated from ICT projects that involve transformation of business processes.

BENEFIT 2 — SERVICE QUALITY

One way to enhance service quality is providing citizens and businesses with a coherent interface with government which reflects their needs rather than the structure of the government (customer focus).

EGOV initiatives to improve service quality through customer focus:

1	On-line portals focused on particular topics, bringing together relevant information and services
2	Targeting of on-line information to specific groups so that relevant information can be found easily
3	Pushing customized information to specific groups as soon as it becomes available
4	Allowing identified users to carry out routine transactions with government as on-line services

BENEFIT 3 – POLICY OUTCOMES

e-Government can help achieve better outcomes in major policy areas, such as:

1	Taxation - improved collection of taxes through increased sharing of information
2	Health - reduced demand for health services through better use of information and resources
3	Finances - reduced unemployment payments through matching of the unemployed and vacancies
4	Culture - promoting the use of native languages and awareness of indigenous people

A common theme is utilizing the networking potential of Internet to share data among stakeholders.

BENEFIT 4 – ECONOMIC OBJECTIVES

Through reduced corruption, greater openness and increased trust in government, EGOV directly contributes to economic policy objectives.

Specific measures:

1	Administrative simplification to improve business productivity
2	Online support to small and medium-size businesses to improve productivity
2	Reduced government calls on public funds through more effective programs and operations
3	Direct consumption of ICT goods and services by government

BENEFIT 5 — ADMINISTRATIVE REFORM

EGOV is an enabler of the public administration reform:

1	simplifies administrative processes
2	makes such processes more transparent
3	helps to deliver services in more efficient ways
4	enables seamless government

Public administration reform is also necessary for EGOV in order to modernize government structures and processes to meet EGOV requirements.

BENEFIT 6 – BUILDING TRUST

ICT is an enabler to build trust by engaging citizens:

1	Consultation and feedback by service users – web logs, questionnaires and feedback contacts
2	Citizen engagement in policy making – consultation and participation to address community needs
3	Helping individual and community voice be heard in the policy debate

CONSIDER HOW YOUR UNIVERSITY IS INTRODUCING ICT.

WHAT ARE THE EXPECTED BENEFITS?

PROVIDE EXAMPLES.

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WHAT CHALLENGES EXIST TO REALIZE THE BENEFITS OF EGOV?

CHALLENGES

EGOV implementation faces a number of challenges:

1	Legislative – EGOV processes must have the same standing as paper-based processes
2	Financial – funding arrangements should account for agencies working together on EGOV projects
3	Technology change – adoption of standards, software integration and middleware technologies
4	Digital divide – large differences in the level of access and therefore ability to benefit from EGOV

CHALLENGE 1 – LEGISLATIVE

Governments must ensure that a proper legal framework exists before EGOV can take up:

1	Recognition of electronic processes and services as equivalent with paper-based processes and services; legal recognition of digital signatures!
2	Clarification of requirements on the agencies implementing EGOV; what they can and cannot do
3	Accountability rules designed to ensure responsible use of public resources by clearly identifying who does what
4	Legislations designed to protect privacy and security of data, to balance openness and protection

CHALLENGE 2 – FINANCIAL

Barriers to e-government funding:

1	EGOV is unlikely to win out in competition with other objectives e.g. health, education, security
2	It is difficult to measure costs and potential benefits of EGOV, so to develop funding cases
3	If not treated as capital investment, EGOV has to compete with other recurrent funding proposals
4	Governments are reluctant to commit expenditure beyond budgeting horizons, and yet many EGOV projects are of multi-annual nature

Measures: classifying major EGOV projects as capital investment, seeking approval by central coordination offices, forming public-private partnerships, etc.

Technology-related barriers to e-government:

1	Legacy systems – too important and expensive to be replaced.
	Measures: middleware, web services, data exchange relying on XML.

2	Lack of compatible infrastructure and shared standards for agencies to use.
	Measures: common technical standards, common technical infrastructure, whole-of-government approach to lower technical barriers to collaboration

3	Too rapid technological changes, etc.
	Measures: public-private partnerships, technology neutrality in legislation, involvement of all stakeholders in regulation, international cooperation, etc.

EGOV can indirectly improve services to citizens with no Internet access, through back-office improvements, however:

1 | Advantages of on-line services cannot be replicated off-line, so people without Internet access will be unable to benefit.

2 | The groups in society with lower level of access are already disengaged - the target of government intervention. Such groups have higher level of interaction with government:

- o establishing identity

- o entitlement for assistance

- o complex medical or social intervention

3 | Many governments pursue policies to reduce digital divide.

WHAT LEGISLATIVE, FINANCIAL AND TECHNOLOGICAL CHALLENGES IS YOUR UNIVERSITY ENCOUNTERING WHILE INTRODUCING ICT?

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HOW SHOULD EGOV BE IMPLEMENTED IN THE FRONT-OFFICE?

ONLINE SERVICE MATURITY

Front-office is this part of government which is directly interacting with citizens, businesses and other members of the public.

Front-office determines the maturity of on-line services:

1	Information stage
2	Interaction stage
3	Transactions stage
4	Data Sharing stage

STAGE 1 — INFORMATION

A website which publishes information and services.

Information is static.

Challenges for implementing agencies:

1	Digitize available information and make it accessible online.
2	No process re-engineering needed.

STAGE 2 – INTERACTION

Stage 1 plus access to government databases:

| 1 | browsing, exploring and interacting with data |
| 2 | performing electronic searches and calculations based on the user's criteria |

Challenges for implementing agencies:

1	How will citizens use the information?
2	What are the rules for making certain information public?
3	What is the target audience for specific information?
4	How to make information easier to find?
5	What tools can be used to enrich user's experience?

STAGE 3 – TRANSACTIONS

Stages 1 and 2 plus citizens entering secure information and engaging in transactions with agencies.

Requires real-time responsiveness by agencies to the service demands by citizens and businesses.

Challenges for implementing agencies:

1	Establish online service standards
2	Ensure security and privacy protection
3	Prepare back-office processes for on-line delivery
4	Rethink relations with agencies for seamless service delivery

STAGE 4 – DATA SHARING

Stages 1, 2 and 3 + agencies' ability to share with other agencies personal information, when approved by law and wi
the users consent.

Data-sharing has many benefits:

1	simplify procedures
2	create savings in administrations
3	reduce reporting burden for citizens and businesses

However:

1	Sharing of data among agencies must be limited because of privacy protection legislation
2	All data-matching must be legally approved or explicitly permitted to prevent unauthorized or illegal combination of data

SERVICE QUALITY

Successful services are built on an understanding of the user needs.

There is a growing empirical evidence on what works:

1	Effective services need not be complex.
2	Simple information services may meet the user needs.
3	Moving to transaction services may not necessarily add value.
4	Seamless services are more effective than delivering separate services to the same user group.
5	Services should be offered through various channels, on-line delivery being one of the options.

CONSIDER WHAT ELECTRONIC PUBLIC SERVICES
ARE PROVIDED BY YOUR UNIVERSITY.

AT WHICH MATURITY LEVELS ARE THESE SERVICES PROVIDED?

PROVIDE EXAMPLES.

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HOW SHOULD EGOV BE IMPLEMENTED IN THE BACK-OFFICE?

BACK OFFICE

Back-office refers to internal operations of a government agency that support its core processes and are not accessible or visible to the general public.

Back-office implementation issues:

1	Organizational Change
2	Leadership
3	Central Coordination
4	Inter-agency Collaboration
5	EGOV Skills
6	Private-public Partnership

BACK OFFICE 1 — ORGANIZATIONAL CHANGE

The introduction of ICT into government requires process changes in order to make the most of EGOV.

What kind of organizational changes are taking place?

o Small-scale ICT activity — development of a website as an additional information channel — may not require complex supporting changes.

o Far reaching organizational change will be required when:

1	The website begins to offer deeper, more complex services.
2	Agencies are asked to work together to deliver services according to the needs of citizens and not their structure.
3	New work styles - tele-working, virtual teams - emerge.

BACK OFFICE 2 — LEADERSHIP

Sustained leadership is essential:

1	to motivate people
2	to create incentives for action
3	to motivate and break down barriers to change
4	to put the right administrative mechanisms for e-government

Stage	Type
Early — obtain views on what needs to change	Political — establish the vision, define priorities
Middle — create personnel commitment	Ministerial — get resources, ensure cooperation
Late — sustain momentum	Middle-level — translate vision to action

Leadership is not about centralization of competencies. The key is to create local leaders: team leaders, project leaders, coordination leaders, …

BACK OFFICE 3 – COORDINATION

Central coordination is a feature of most EGOV strategies.

This may take different forms:

1	Formal unit located within public administration
2	Formal units linked to broader Information Society
3	Coordination committee of agencies, companies, etc.
4	A committee of agency heads and CIOs

and different roles:

1	developing EGOV strategies	4	linking EGOV to broader public reform
2	monitoring progress towards goals	5	Linking EGOV to broader information society
3	promoting benefits to the public	6	reasserting strategies in view of experience

BACK OFFICE 4 – COLLABORATION

Development of seamless services requires greater collaboration between agencies: authentication, shared processing, data exchange. Collaboration is needed in both aspects:

- o | Front-office – better service to the customers
- o | Back-office – efficiency and interoperability in government

Types of collaboration:

1	Technical – arrangements for reconciling back-office systems with an integrated customer interface
2	Implementation of integration models for online services - delivery policies and standards, implementation methods and schedules and others
3	Negotiating seamless online service content - service quality, presentation of material, dealing with complaints and appeals and others
4	Agreeing on service delivery policies for all channels, coordinating policies for particular groups

e-Government increases the importance of ICT skills required by public administration workforces.

Public managers must be able to:

o | lead, and not be led by the IT departments
o | integrate ICT strategy with organizational goals
o | match government processes with technical solutions

To this end, they need to:

1	have basic IT skills	5	manage the agency's information strategy
2	understand how ICT works	6	deal with the impact of EGOV on the agency
3	understand limitations of ICT	7	see how EGOV applications can build new services
4	understand how ICT can be used	8	see how EGOV applications can open new channels

BACK OFFICE 6 – PARTNERSHIPS

Private-public partnership includes all arrangements where governments contractually engage with a non-government entity to provide goods/services.

Evolution of private-public relations:

o | acquisition of ICT products

o | services for the use of ICT in government

o | direct provision to end-users of government services

o | access to advance technologies (public key infrastructure) for complex transactional services

All partnerships are covered by some form of contractual arrangement of varying level of detail and complexity, covering: outputs, costs, expectations, dispute resolution mechanisms, etc.

While governments use businesses to deliver services, the responsibility rests with the government.

WHAT INTERNAL TRANSFORMATIONS DOES YOUR UNIVERSITY REQUIRE TO GET THE MOST FROM ICT?

PROVIDE EXAMPLES.

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WHAT WAS COVERED BY THIS MODULE?

SUMMARY

1	CONCEPT	EGOV is about ICT-enabled transformation of government organizations and their interaction with citizens, businesses and each other
2	BENEFITS	EGOV improves efficiency and quality of services, helps achieve policy outcomes and build trust, contributes to economic and reform objectives
3	CHALLENGES	EGOV implementation faces legal, financial, technological (legacy systems) and social (digital divide) challenges.
4	FRONT-OFFICE	EGOV front-office implementation includes quality and maturity of public services including information, interaction, transaction and data sharing
5	BACK-OFFICE	EGOV back-office implementation includes the issues of organizational change, leadership, coordination, collaboration, skills and partnerships.

QUESTIONS

1 | What are the most important EGOV benefits in your country?

2 | What are the most daunting EGOV challenges in your country?

3 | What are the most pressing EGOV front-office implementation issues in your country?

4 | What are the most pressing EGOV back-office implementation issues in your country?

SOURCES

1 | e-Government Imperative, Organization for Economic Cooperation and Development, 2003

2 | Grönlund, Åke and Horan, Thomas A. (2005) "Introducing e-Gov: History, Definitions, and Issues," Communications of the Association for Information Systems: Vol. 15, Article 39.

THANK YOU FOR ATTENTION.

QUESTIONS?

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