Module 9:
e-Government Applications

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CLASSIFYING E-GOVERNMENT APPLICATIONS

STATE-OF-THE-ART TECHNOLOGIES FOR E-GOVERNMENT

E-GOVERNMENT APPLICATIONS IN EUROPE
Types of e-Government Applications

Security
- Collaborative technologies (e.g., groupware, workflows)
- e-mail
- Instant messaging
- Web casting

Delivery/presentation
- Workstations
- Mobiles
- Call Centers
- Other Devices

Networks and Infrastructures

Portals

Web services
- ERPs
- Transaction Processing Systems
- Knowledge Information Systems
- Management Information Systems
- Decision Support Systems
- Document Management Systems
- Other Applications (e.g., GIS)

Portlets

Content
- Databases
- Unstructured Content

Business Logic

Retrieval
State-of-the-Art Technologies and their Business Impact to eGov
Main Business Requirements

- Interoperability amongst Information Systems
- Macro-process automatic execution
- Querying the Web
- The Human-Machine Interface
- High Development and Maintenance Costs
- Accessibility
Main Business Requirements

- Interoperability amongst Information Systems

  Seamless exchange of data amongst different Information Systems

  - Metadata Standards
  - XML schemas
  - Common Vocabulary
  - Commonly agreed Taxonomies
  - Enterprise Architecture
Main Business Requirements

- Macro-process automatic execution

Seamless execution of processes that cut the boundaries of a single organization

Far more demanding than simple data interchange as we need collaborative workflows

As for interoperability plus
- Web Services and Service Oriented Architecture
- Automatic Workflow Execution
- Business Process Management
Main Business Requirements

- Querying the Web

The Web was built for humans not for machines

How many sites Google returns when you search for “administrative reform Eastern European Countries”

- ✓ Ontologies
- ✓ Domain Models
- ✓ Semantic Web
- ✓ Semantic Web Services
- ✓ Intelligent Agents
Main Business Requirements

Semantic Web

- Expressing meaning
- Access to knowledge representations
- Ontologies
- Intelligent Agents
Ontologies

Ontologies are the backbone technology for the Semantic Web and - more generally – for the management of formalised knowledge within the technical context of distributed systems.
Main Business Requirements

The Human-Machine Interface

Substantial progress during the last three decades
(from MS DOS to Windows)

- Graphical Users Interface (GUIs)
- Computer Assistance Software Engineering Tools (CASE Tools)
- Natural Language Processing (NPL)
Main Business Requirements

- **High Development and Maintenance Costs**

  The Application Service Provider model (ASP)

  Reusability and Scalability

  Open Standards and Open Source

  The Net is the Computer
Main Business Requirements

- Accessibility
  - Mobile phones
  - Television
  - Public Centers
  - Satellite Networking
Applications

**e-Archive**
- Job-Room
- e-Libraries
- digitised historical archives
- land & properties information

**e-Democracy**
- Internet voting
- 16plus is to reach out to young voters
- a virtual forum for the democratic and political process
- complaint management
- people's participation in public decision-making process

**e-Business**
- Business Services Centre
- Business Register

**e-Citizens**
- eHealth services
- social security administration
- population records
- reporting of a crime
- VAT declaration
- on-line skills evaluation system for farmers
- change of Address Notification

**Administration Portals**
- talking Webpages for disabled
- public Web for computer illiterate
- a web-bus to help people start with computer

**e-Accessibility**
Capacity Building programme for Diplomats:
Strengthening Capacity
on e-Government and ICT Policy

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Thank you for your Attention...

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