“ELECTRONIC GOVERNMENT IN MALAYSIA”

By

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Agenda

- Introduction
- E-Government Overview
- Project Description and Implementation Status
- Key Challenges and Lessons Learned
- The Malaysian Public Sector Strategic ICT Framework
- Moving Forward
Introduction

- The implementation of ICT in Government agencies has been ongoing since the 1960’s
- Various ICT systems have been implemented at tremendous costs
- Total expenditure of ICT project under the 8th Malaysia Plan (2000-2005) is about RM5.2 billion
- Growth of ICT implementation has continuously been given top priority by the Government of Malaysia
E-Government

How it all begun...
Vision 2020

- Brainchild of Malaysia’s former Prime Minister, Tun Dr Mahathir Mohamad.

- An optimistic and realistic national agenda that sets out specific goals and objectives for long term development of the nation.

- To build a fully developed, matured, balanced society and knowledge-rich Malaysia by 2020.
15x50 km garden corridor south of Kuala Lumpur.

Special bill of guarantees, cyber laws, policies and practices tailored to enable residents to achieve the full promise of multimedia.

World-class physical infrastructure and next-generation 2.5-10 Gigabit multimedia network
8 MSC “Flagship” Applications

- Smart Schools
- Multipurpose Card
- Telehealth
- E-Business
- Borderless Marketing Centre
- Electronic Government
- R&D Cluster
- Technopreneur Development
- Worldwide Manufacturing Web
- Worldwide E-Government
Our Focus: E-Government Flagship
Scope of E-Government

- 28 Federal Ministries
- 219 Federal Departments / Federal Statutory Bodies
- 346 State Departments / State Statutory Bodies
- 142 Local Government Authorities

About 900,000 employees

Businesses

Citizens
Vision for E-Government

“To transform administrative process and service delivery through the use of Information Communication Technology and multimedia”

Government to Citizens/ Businesses
- easy access, single window
- enhanced quality of services
- multi-channel service delivery

Intra Agency
- process improvements
- people development

Inter Agency
- smooth information flow
- enhanced capability for analysis
- enhanced use of multimedia

STANDARDS

SECURITY

LEGISLATION

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What We Went Through....
Conceptualization to Realization

EVALUATION STAGES

<table>
<thead>
<tr>
<th>Stage 1</th>
<th>Compliance Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 2</td>
<td>Detailed Evaluation for Multi-track Negotiations</td>
</tr>
<tr>
<td>Stage 3</td>
<td>Successful Responding Organisation Evaluation</td>
</tr>
</tbody>
</table>

- Public-Private Sector
- Collaboration
- E-Government Blueprint
- Concept Request for Proposals
- E-Government Pilot Projects
List of Possible Projects

Citizen-to-Government Project List

- Electronic driver’s license issuance and renewal
- Integrated passport and visa processing
- Electronic tax payment and processing
- Smart traffic fine payment
- Electronic road tax and vehicle registration
- Electronic EPF/SOCSO management
- Easy employment licensing/permitting
- Electronic IC renewal
- Electronic quit rent processing and payment
- Smart commercial vehicle licensing/permitting
- Electronic pension processing
- Integrated low cost housing management
- On-line consumer information
- On-line health information
- Electronic public complains information
- Electronic school/higher education registration
- Electronic polling/survey

Business-to-Government Project List

- On-line registration of company & business
- Electronic trade licenses/permits
- Electronic procurement and tendering
- On-line foreign trade information
- On-line entrepreneurial programs
- Electronic registration of society
- Information on demographics
- Information on agriculture
- Electronic GIS, land information & land zoning
- On-line environmental requirements information
- On-line rural programs information
- On-line information on tariffs & shipping schedule
- Electronic sponsorship information
- Operation permits
- On-line economic policies/info on projects status
Identify and Prioritise Potential Pilot Projects

- Potential pilots
- High Potential pilots
- Future pilots
- Potential pilots

Prioritization verified against independent market research and internal government surveys

FEASIBILITY

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The E-Government Model

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Current E-Government Projects

- E-Services
- E-Procurement
- Generic Office Environment
- Project Monitoring System (SPP II)
- Human Resource Management
- Electronic Labour Exchange
- E-Syariah
- E-Courts
- E-Land
E-Services

Road Transport Dept
Police
Utility Bill Payment
City Hall
Other Government Services (MOE, MOH etc.)

Homes/ Business Premises

Web
TV
PC
Fax

Public Places (kiosks)

Approved Site

Service Providers
Gateway Provider
Payment Consortium
Government Multipurpose Card
Financial Network

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E-Services

Enables citizens and businesses to conduct transactions through a one-stop service window

BENEFITS

- Provides choice of multiple delivery channels
- Accessibility and convenience offered by extended hours, 24 hours, 7 days a week
- Multiple services via a single window of access
- Enhanced efficiency and effectiveness of Government services
E-Procurement

BUYING AND SELLING VIA THE NET

Suppliers publish Catalogues on EP

Supplier Registration/Central Contract

Suppliers receive orders from Government

Government Users browse catalogues & place orders online

Government publishes Request For Tender on EP for new supplies

Direct Purchase, Quotation, Tendering

Government awards contract to Suppliers

Suppliers submit quotations

Electronic Procurement

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E-Procurement

Allows the Government to conduct procurement activities electronically via desktops and on-line Suppliers’ Registration

**BENEFITS**

- Faster turn-around time in processing procurement transactions
- Enables government to become a “smart buyer”
- On-line submission of Supplier’s registration any day, anytime
- Cost saving to the Government & Suppliers
An electronic office environment to enhance productivity through better information management, communications and collaboration

- Check electronic mail, meeting schedule, and filtered news
- Accessing documents online
- Assigning tasks electronically
Generic Office Environment

Provides fully integrated, distributed & scalable paperless environment via open system platform

BENEFITS

- Enables transparency & timely decision making
- Ensures right information gets to the right people at the right time
- Enables effective collaboration across agencies
Human Resource Management Information System

A system providing full HRM functionality for the Government to develop and manage its human capital.

- Resourcing
- Personnel record management
- Career management
- Development
- Performance management
- Rem, benefits & reward management
- Separation
- Competency assessment
- Employee communications & behavioural management
- Strategy formulation and review
Human Resource Management Information System

Provides a single interface for Government employees to perform human resource functions

BENEFITS

✓ Facilitates effective HR management
✓ Enables horizontal integration & streamlined human resource functions
An on-line end-to-end project monitoring system creating a collaborative environment for better management of development projects

- Consistent and timely information from centralised databases
- Information can be retrieved by agencies at any time
- Capability to conduct social impact analysis and simulation & forecasting in Phase 2 of the project
- Graphical and multimedia features and functions
- Flexibility to produce reports according to requirements
- Standardisation of project codes for consistency
- Sending of real time online information electronically

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Project Monitoring System (SPP II)

Provides a mechanism for monitoring the implementation of development projects across agencies

BENEFITS

✓ Timely and accurate project development status
✓ Paperless monitoring system
Electronic Labour Exchange (ELX)

A one-stop centre for labour market information and systematic matching of job seekers to job vacancies

- **Job Counseling & Complaint Services**
  - Job Counseling Advice
  - Registration of Job seeker
  - Registration of Vacancy
  - Details of Job Candidates
  - Notification of Placements

- **Registration Counter Services**
  - Registration of Prospective Employers
  - Update registration of prospective employers and job vacancies
  - Update registration of job seekers/applicants
  - Distribute job seeker/application and vacancy information

- **Job Matching & Interview Services**
  - Job Matching
  - Distribute job matching

- **LMD**
  - Consolidation of prospective employment statistics from regional

- **JCS Processing Engine**
  - Update registration of prospective employers and job vacancies
  - Distribute job seeker/application and vacancy information
  - Perform job matching
  - Distribute job matching

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Electronic Labour Exchange (ELX)

- Electronic Labour Exchange contains three primary applications
  - Job Clearing System
    - Free service to match vacancies to job seekers
  - Labour Market Database
    - Central repository of data for MOHR and its agencies
  - Office Productivity System
    - Office productivity tools and applications

- ELX went live on 30th May 2002 and was fully rolled out to the Ministry of Human Resource and all state and district offices of Manpower Department and Labour Department totalling 119 sites.
Electronic Labour Exchange (ELX)

To improve the mobilisation of the nation’s human resources and to provide one-stop centre for labour market information

BENEFITS

- Systematic matching of job seekers to job vacancies
- Accurate real time labour market data
- Enhanced Job Counseling Services
Commencement Date: 18 April 2002.
Target Locations: 102 sites.
Implementation timeline: 3 years (2002-2005).
Officially launched by the Prime Minister on February 7, 2003

Objectives:
- To improve the quality of services of Syariah Courts.
- To improve the effectiveness of JKSM in coordinating and monitoring their respective agencies.
- To improve the productivity and efficiency of Syariah Courts management nationwide.
- To uphold the Islamic values with the usage of ICT.
E-Syariah

Provides efficient and quality management of Syariah Court

BENEFITS

✓ Speed up the judicial process under syariah law
✓ Facilitate the registration and management of Syarie Lawyers
✓ Information centre for Syariah Court community and public
E-Courts and E-Land

**E-Courts**

Objective: To improve productivity and efficiency in the justice system through ICT

**E-Land**

Objective: To increase the efficiency and effectiveness of land administration.
Challenges...
Issues and Challenges

- Reengineering and Streamlining of Current Processes
- Managing Diverse Technologies and Obsolescence
- Integration and Interoperability of E-Government, Other Flagship Applications and Legacy Systems
- Information Privacy and Security
Issues and Challenges

✓ Education, Training and Accessibility
✓ Change Management
✓ Human Resource Implications
✓ Funding
Lessons Learned...
Lessons Learned

- Start small, deliver value
- Delivering technology is just a small portion of the BIG picture and it is the easy part
- Critical Success Factors and state of readiness are very critical
- Rome wasn’t built in a day…expect slow progress
- Change management is vital…provide mindset change programme
Lessons Learned

- Lay the basic building blocks first
- Strong project management team
- Strong human resource development programme
- Develop a continuous marketing and promotion campaign
- Choice of contract model (outright purchase, BOT, BOO)
The Malaysian Public Sector
Strategic ICT framework
Framework To Achieve Vision

ICT Framework

- Governing Structure
- Shared ICT Infrastructure
- Single Gateway
- Multiple Delivery Channels
- Government-Wide Common Systems
- Standards and Guidelines
- Policies and Legislation
- ICT Skills and Knowledge Personnel
Framework To Achieve Vision

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Governing Structure

Administrative Mechanisms and implementation structure

ICM (chaired by PM)

FCC (co-chaired by MDC/Chief Secretary to the Govt.)

EGSC (chaired by the Chief Secretary to the Govt.)

EG Project Steering Committee (chaired by the Head of Lead Agency)

MAMPU (as Secretariat)

IAP

GITIC (chaired by the Chief Secretary to the Govt.)

CIO (appointed at each Govt. Agency)
CIO Establishment

- To date, 180 CIOs have been appointed.
- Number of CIOs by type of agency:
  - Ministry: 25
  - State Governments: 13
  - Federal Departments: 79
  - Federal Statutory Bodies: 63
Governing Structure

Governing Structure Under GITIC

Government IT and Internet Committee (GITIC)

IT Implementation Committee (JTPIT)

IT Technical Committee (JTIT)

IT Training & Education Committee (JLPIT)

ICT Consultative Committee
Governing Structure Under Electronic Government

EG Steering Committee
Chairman: Chief Secretary to the Government

EG Management Team
Chairman: DG of MAMPU

EG Project Steering Committee
(Chairman: Head of Dept. of Lead Agency)

Project Manager

Project Implementation Team
Project Support Team
Framework To Achieve Vision

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Shared ICT Infrastructure

Shared Infrastructure Initiatives ....

- Centrally Managed Service
- Effective Sharing of Resources
- Consistent Quality of Service (SLA)
- Comprehensive Security Services

PUTRAJAYA CAMPUS NETWORK

HELP DESK

WIDE AREA NETWORK

EG*NET

COINS

PADU*NET

SHARED DATA CENTRE

ENTERPRISE SYSTEM MANAGEMENT

SECURITY SERVICES

DIGITAL CERTIFICATE

G-CERT & PRISMA

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As of February 2005, EG*Net was deployed to 5,144 Government sites nationwide.
Putrajaya Campus Network (PCN)

- 78 agencies
- 25,038 users
- 2,600 network switches
- Targeted 99.5% service availability
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Single Gateway

Public Service Portal (PSP)

900 websites across Federal, State and Local Authorities, Malaysian Civil Service Link (MCSL)

myGovernment Portal:

- Citizen-Centric & Business Community Portal
- Single access to multiple communities
- 1966 forms and 218 online services
Framework To Achieve Vision

ICT Framework

Governing Structure

Shared ICT Infrastructure

Single Gateway

Multiple Delivery Channels

Government-Wide Common Systems

Standards and Guidelines

Policies and Legislation

ICT Skills and Knowledge Personnel
Multiple Delivery Channels

- Web
- Telephony/IVR
- Kiosks
- SMS
- Face-To-Face

**e.g. E-Services**

**JPJ Electronic Test Taking**
- Before – Once a week, 50 candidates per week
- After – 8 Sessions per day, average 560 candidates a week.

**Enquiry and Payment of Traffic Summons**
- Before – Inquiry via POLISinfoline & SMS, payment office hours at counters
- After – Inquiry & payment online via the Internet, 24 X 7

**e.g. PBT**
Payment by credit card & through banks

**e.g. JUPEM**
Sale of maps via pre-paid mode
## Framework To Achieve Vision

### ICT Framework

1. **Governing Structure**
2. **Shared ICT Infrastructure**
3. **Single Gateway**
4. **Multiple Delivery Channels**
5. **Government-Wide Common Systems**
6. **Standards and Guidelines**
7. **Policies and Legislation**
8. **ICT Skills and Knowledge Personnel**
Government-Wide Common Systems

E-Government

Completed & Rolled-Out
- SPPII
- GOE
- E-SPKB
- E-Syariah
- E-Procurement

In Progress
- HRMIS
- E-Courts
- E-Land
- GFMAS

Impact
Transform the administrative processes

Multimedia Super Corridor (MSC)

Impact
Provide amenities improving citizens’ quality of life

Smart Schools
MyKad
Telehealth

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Numerous agency-specific applications enhancing back-end operations, improving public-facing service delivery...

**Impact**

Shorter processing time

**Impact**

Improved agencies’ operational functions

**Front-end systems...**

- Land Application and Monitoring System (LAMS)
- Traffic Compound Online Payment System (COPS)
- Sistem Kawalan Imigresen
- Sistem Pasport dan Dokumen Perjalanan

**Back-end systems...**

- Standard Accounting System for Govt Agencies (SAGA)
- Agency Link Up System (ALIS)
- Sistem Informasi Rekod Penduduk Negara (SIREN)
- Sistem Kutipan Hasil
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Evolution of standards and guidelines

EGIT Policy & Standards
EG Implementation Blueprint
PCN Policy
EG*Net Guideline
EG Security Policy

MyMIS
MyGIF
Establishing a Call Centre
Channel Framework
MyGIF for OSS (MyGIFOSS)
Public Sector Data Dictionary
ISP Guidelines
Portal Guidelines

In Progress
IT Instructions
Electronic Document Management Policy
Government-Wide Licensing
Inventory & Maintenance Guideline
IT Outsourcing Guideline

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MAMPU
### Policies & Legislation

<table>
<thead>
<tr>
<th>Completed</th>
<th>In Progress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital Signature Act 1997</td>
<td>Electronic Government Activities Act (EGAA)</td>
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<tr>
<td>Copyright (Amendment) Act 1997</td>
<td>Electronic Transactions Act (ETA)</td>
</tr>
<tr>
<td>Computer Crimes Act 1997</td>
<td>Personal Data Protection Act</td>
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<tr>
<td>Telemedicine Act 1997</td>
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<td>Communications &amp; Multimedia Act 1998</td>
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Efforts towards ICT human capital development ... 

- **ICT Manpower Study** – to identify the ICT human resource requirements in the Public Sector

- **ICT Skills and Competency Assessment** – to develop competency model to support Human Resource Management Information System (HRMIS)

- **Setting up of INTAN Management and Technology Centre (IMATEC)** – to enhance the training of ICT skilled and knowledge workers as well as ICT professionals in the Public Sector
Moving Forward

Cross Agency Collaboration

- Smart Partnerships – e.g. E-PBT
- Cross-agency applications – e.g. E-Social Service
- Public Sector Knowledge Bank

Enhancing Systems

- Replacement of Mature Systems
- Strengthening of Back-Office
- Single Point of Access

Performance Measurement

- KPIs – process and output
- Measuring outcomes and cost-effectiveness
- EG Post-Imp. Review
- Benchmarking – service maturity level, trends, best practices, comparative analysis

Infrastructure

- Comprehensive Maintenance
- Long-Term Concession
- Payment Gateway
- Disaster Recovery
- Open Source Software

Human Capital Development

- Competency, Skills and Knowledge Development
- E-Learning Centre
- ICT Manpower Planning
- E-Enabling Culture & Change Management

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“E-Government is well advanced and has become an integral component of a much broader service delivery agenda in Malaysia”
THANK YOU