"ELECTRONIC GOVERNMENT IN MALAYSIA"

By

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Perdana Putra
Photographed by Wong Suk Harn

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 on going 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.**
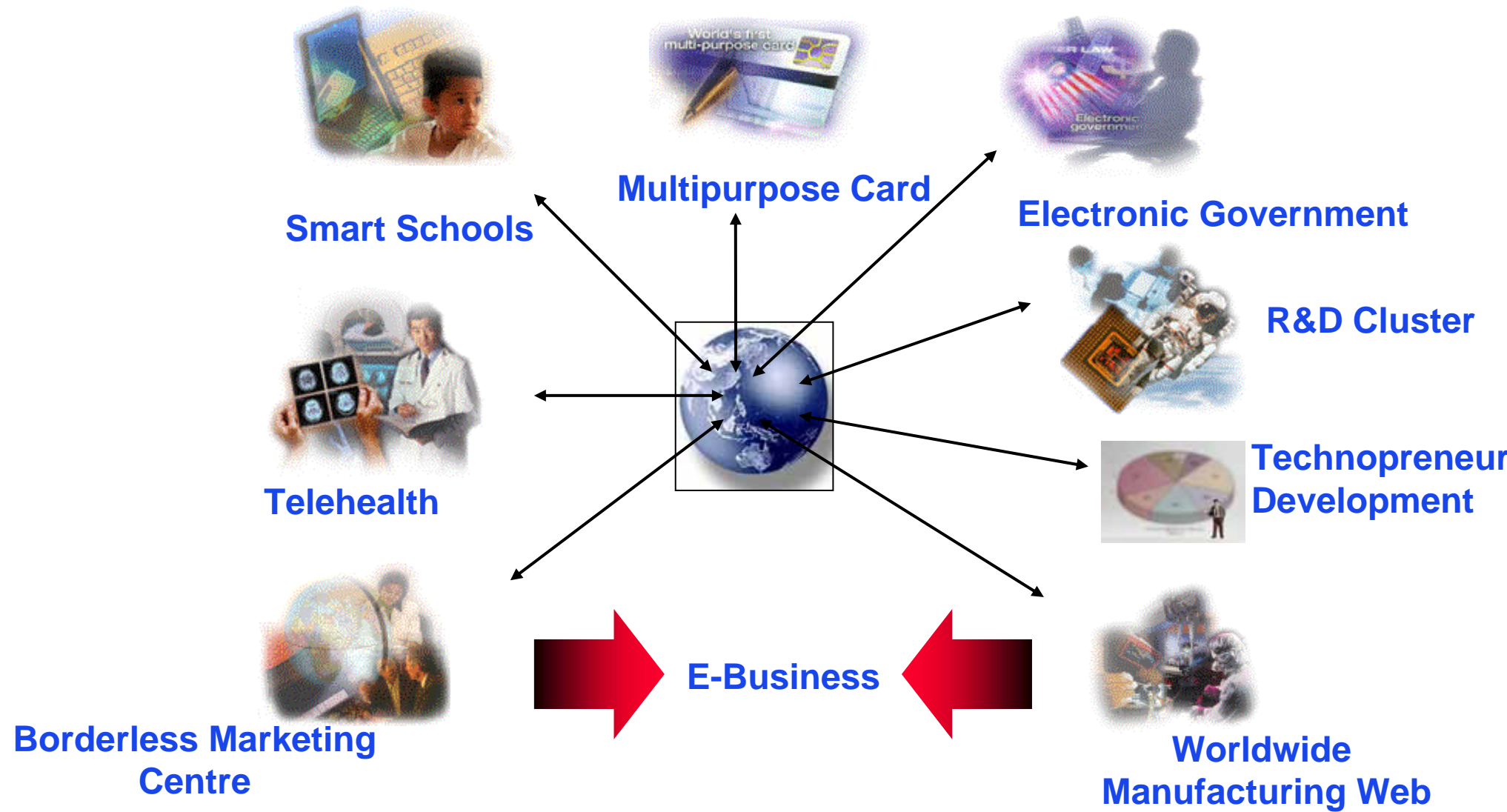
The Multimedia Super Corridor - MSC

- **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

Electronic Government

R&D Cluster

Telehealth

Technopreneur Development

E-Business

Borderless Marketing Centre

Worldwide Manufacturing Web

Our Focus: E-Government Flagship

Scope of E-Government

- **28 Federal Ministries**
- **219 Federal Departments / Federal Statutory Bodies**

Government

About 900,000 employees

- **346 State Departments / State Statutory Bodies**
- **142 Local Government Authorities**

Businesses

Citizens

Vision for E-Government

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

STANDARDS

SECURITY

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

LEGISLATION

What We Went Through….

Conceptualization to Realization

- **Public-Private Sector**

- **Collaboration**

- **E-Government Blueprint**

- **Concept Request for Proposals**

EVALUATION STAGES	
Stage 1	**Compliance Evaluation**
Stage 2	**Detailed Evaluation for Multi-track Negotiations**
Stage 3	**Successful Responding Organisation Evaluation**

- **E-Government Pilot Projects**

List of Possible Projects

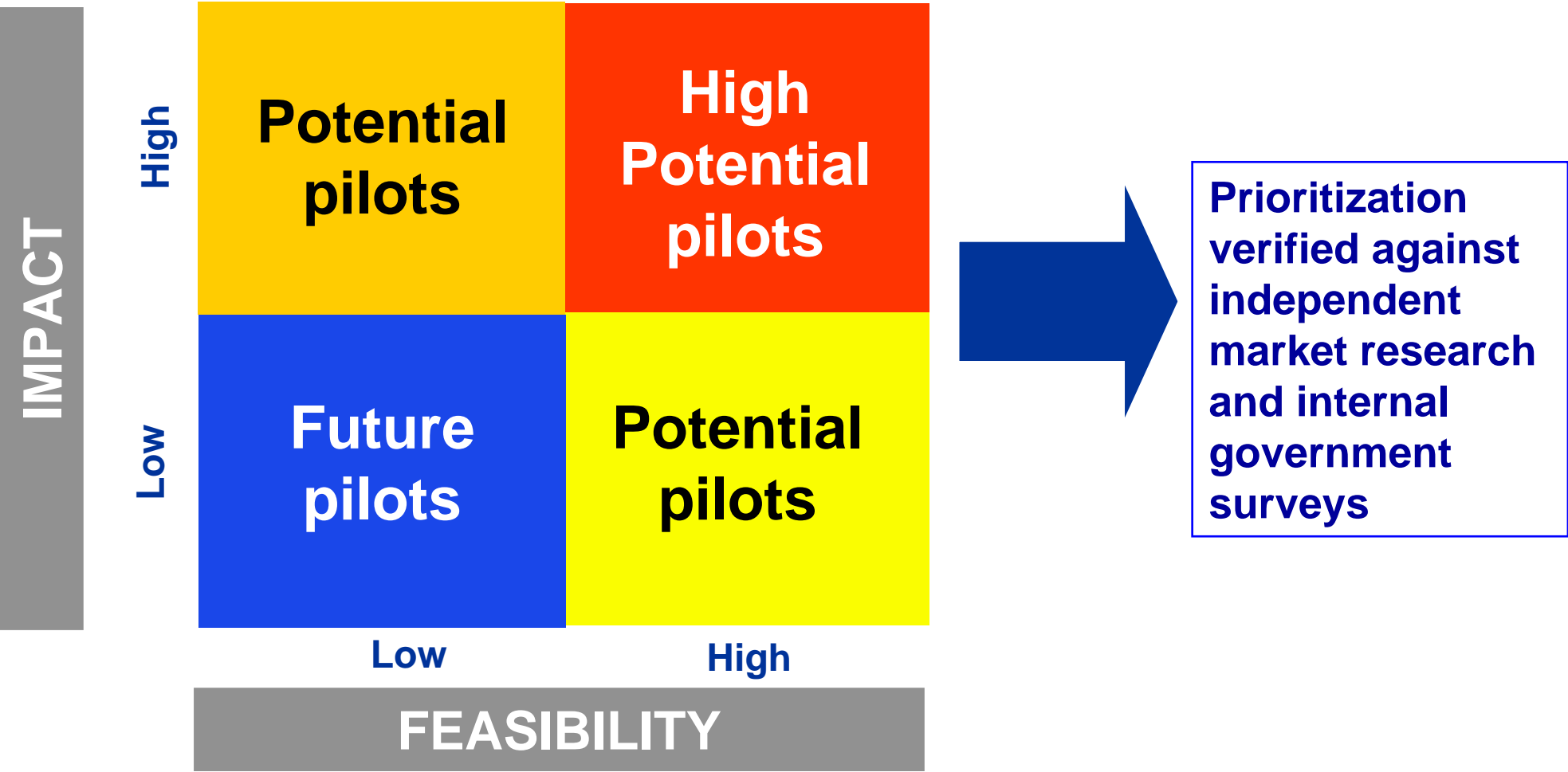## Citizen-to-Government Project List

- **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**
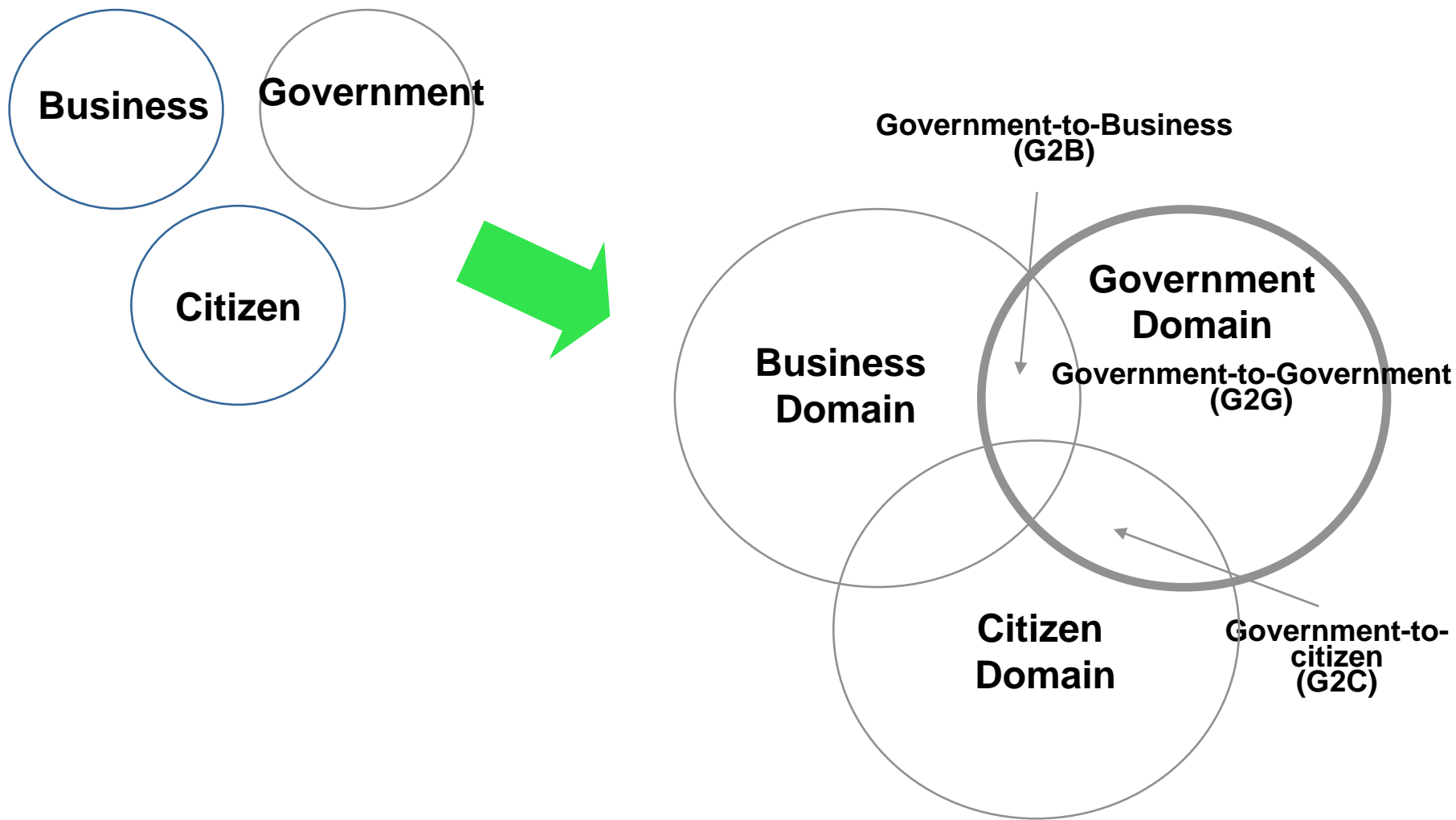- **Operation permits**
- **On-line economic policies/info on projects status**
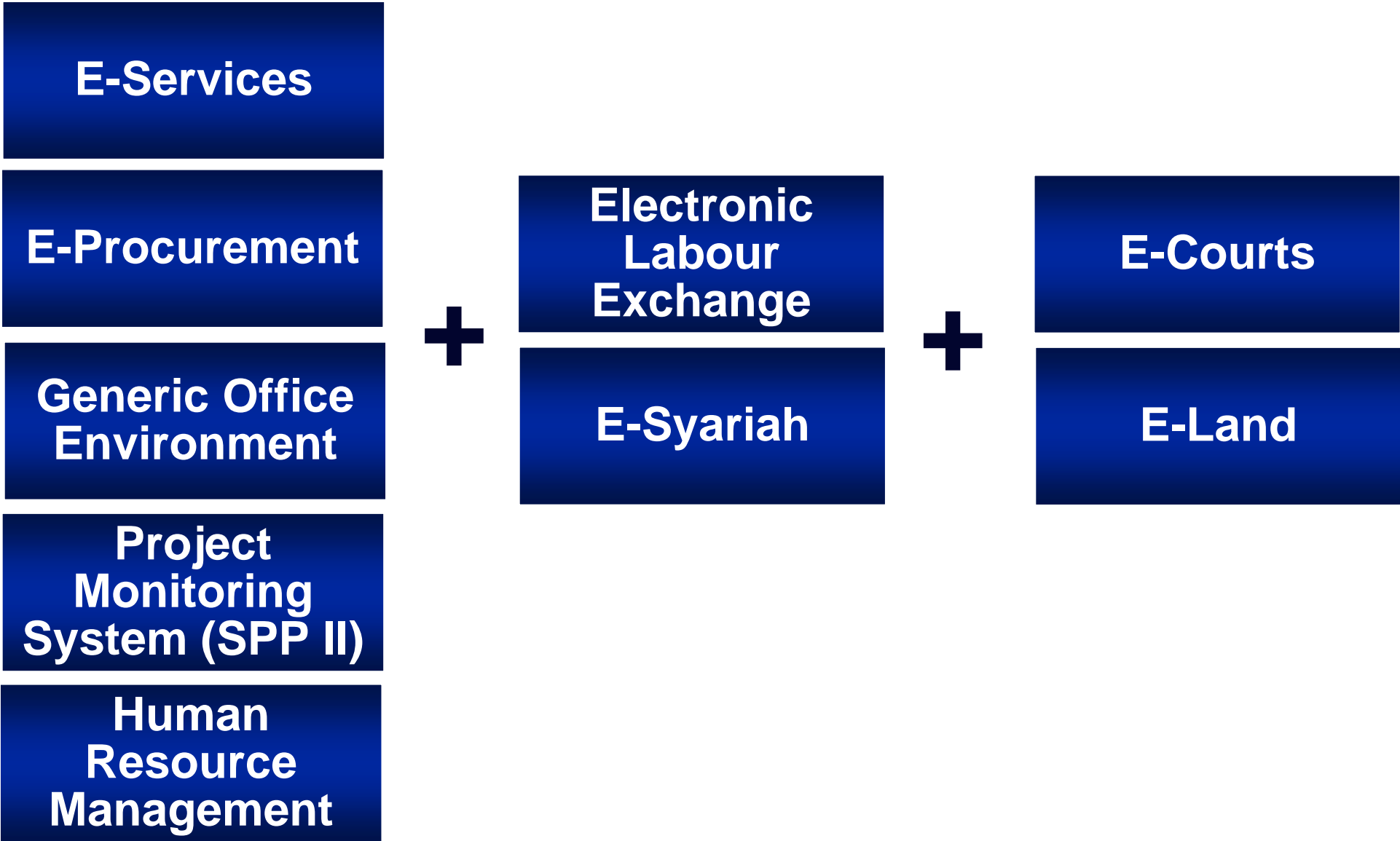
Identify and Prioritise Potential Pilot Projects

The E-Government Model

Business

Government

Citizen

Government-to-Business
(G2B)

Government
Domain

Business
Domain

Government-to-Government
(G2G)

Citizen
Domain

Government-to-
citizen
(G2C)

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
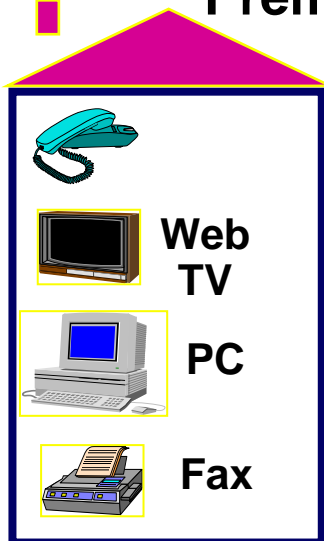
Public Places (kiosks)

Approved Site

Service Providers

Gateway Provider

Payment Consortium

Government Multipurpose Card
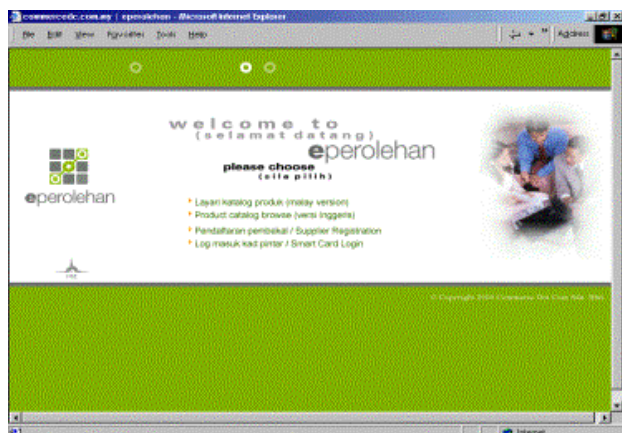
Financial Network

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**

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

Electronic Procurement

Direct Purchase, Quotation, Tendering

Government awards contract to Suppliers

Suppliers submit quotations

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**

Generic Office Environment

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
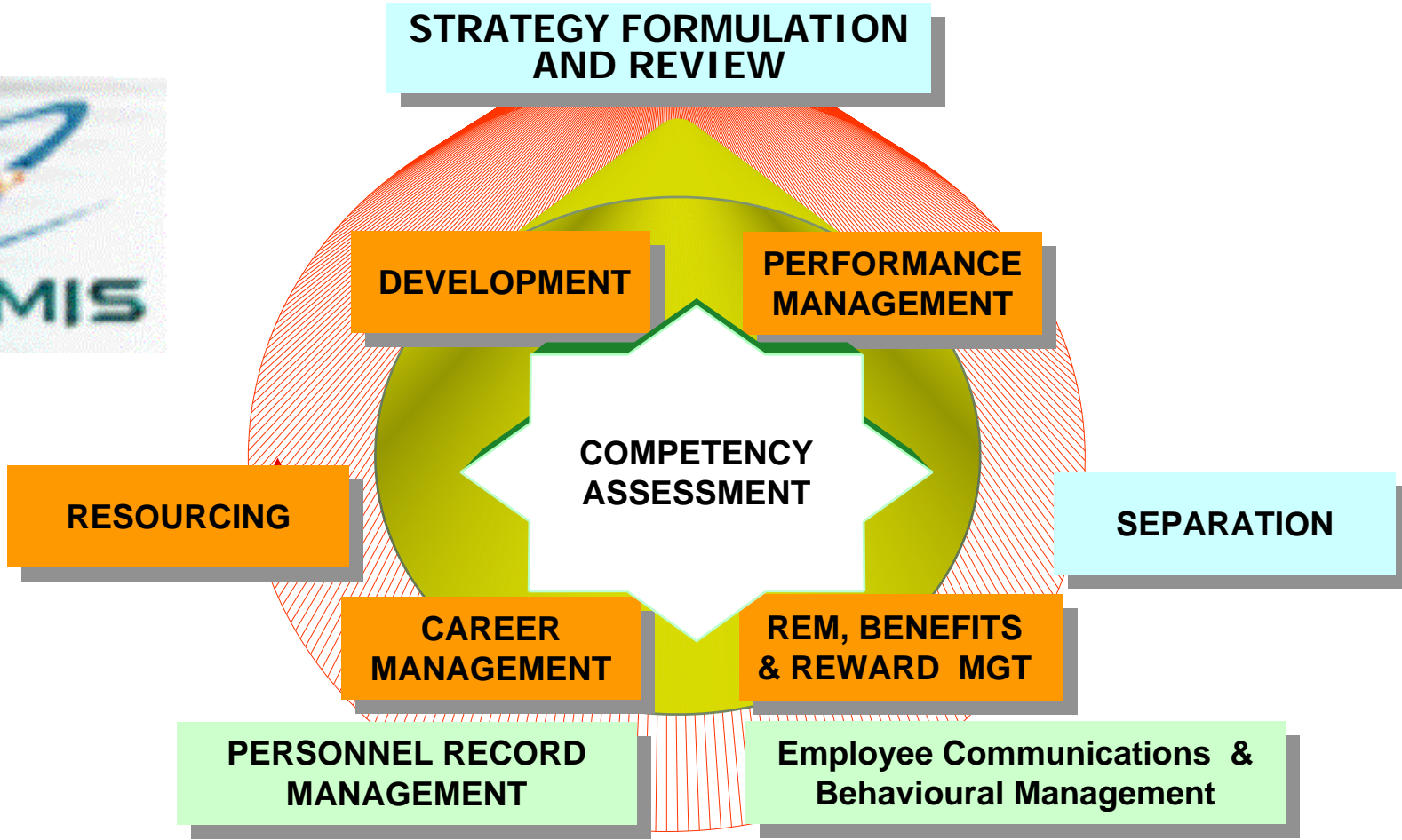
BENEFITS

- ✓ **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

STRATEGY FORMULATION AND REVIEW

DEVELOPMENT

PERFORMANCE MANAGEMENT

COMPETENCY ASSESSMENT

RESOURCING

SEPARATION

CAREER MANAGEMENT

REM, BENEFITS & REWARD MGT

PERSONNEL RECORD MANAGEMENT

Employee Communications & Behavioural Management

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**

Project Monitoring System (SPP II)

An on-line end-to-end project monitoring system creating a collaborative environment for better management of development projects
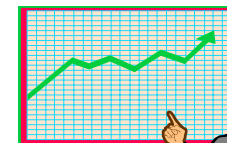
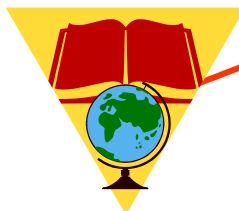**Consistent and timely information from centralised databases**

Information can be retrieved by agencies at any time

Capability to conduct social impact analysis and simulation & forecasting in Phase 2 of the project

PMS II

Project Monitoring System II

Graphical and multimedia features and functions

Flexibility to produce reports according to requirements

Standardisation of project codes for consistency

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Sending of real time online information electronically
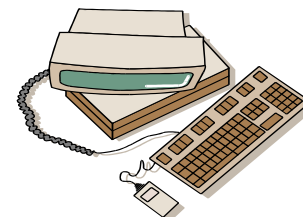
Provides a mechanism for monitoring the implementation of development projects across agencies

BENEFITS

- ✓ **Timely and accurate project development status**

- ✓ **Paperless monitoring system**

Electronic Labour Exchange (ELX)

JOB SEEKERS

Job Counseling Advice →

Registration of Job seeker ↔

JOB COUNSELING & COMPLAINT SERVICES

PROSPECTIVE EMPLOYERS
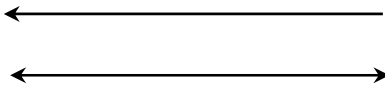
Registration of Vacancy ↔
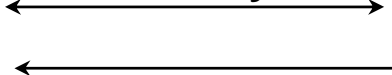
Details of Job Candidates ←

REGISTRATION COUNTER SERVICES

PLACEMENTS

Notification of Placements →
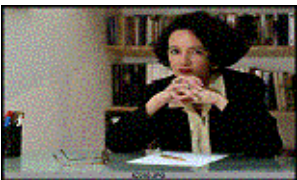
JOB MATCHING & INTERVIEW SERVICES

LMD

• **Consolidation of prospective employment statistics from regional**

Data ↑

JCS Processing Engine

• **Update registration of prospective employers and job vacancies**
• **Update registration of job seekers / applicants**
• **Distribute job seeker / application and vacancy information**
• **Perform job matching**
• **Distribute job matching**

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

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
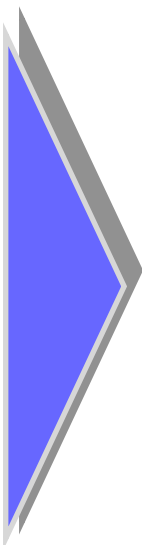
E-Courts

Objective	To improve productivity and efficiency in the justice system through ICT
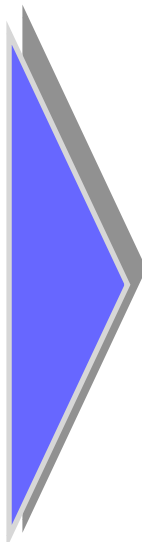
E-Land

Objective	To increase the efficiency and effectiveness of land administration.

Challenges…

- ✓ **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**

✓ **Education, Training and Accessibility**

✓ **Change Management**

✓ **Human Resource Implications**

✓ **Funding**
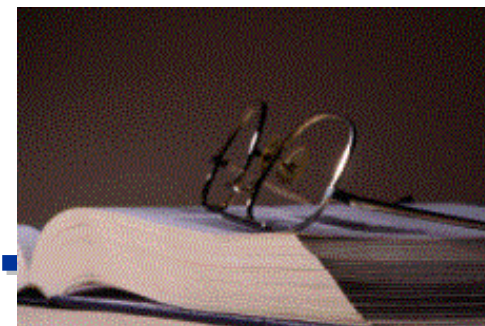
Lessons Learned...

- **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**

- **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

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

Governing Structure

Administrative Mechanisms and implementation struture

```
ICM                                    IAP
(chaired by
PM)

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

                    (Flagship Steering           GITIC
EGSC                 Committees)                  (chaired by the Chief
(chaired by the                                   Secretary to the
Chief Secretary to                                Govt.)
the Govt.)
                         MAMPU
                         (as Secretariate)

EG Project                                        CIO
Steering Committee                                (appointed at each
(chaired by the Head of                           Govt. Agency)
Lead 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 Under GITIC

```
                    ┌─────────────────────┐
                    │   Government  IT     │
                    │   and Internet       │
                    │   Committee          │
                    │   (GITIC)            │
                    └─────────────────────┘
                              │
                    ┌─────────────────────┐
                    │   IT Implementation  │
                    │   Committee          │
                    │   (JTPIT)            │
                    └─────────────────────┘
                              │
        ┌─────────────────────┼─────────────────────┐
┌──────────────┐    ┌──────────────────────┐    ┌──────────────┐
│ IT Technical │    │ IT Training &        │    │ ICT          │
│ Committee    │    │ Education            │    │ Consultative │
│ (JTIT)       │    │ Committee (JLPIT)    │    │ Committee    │
└──────────────┘    └──────────────────────┘    └──────────────┘
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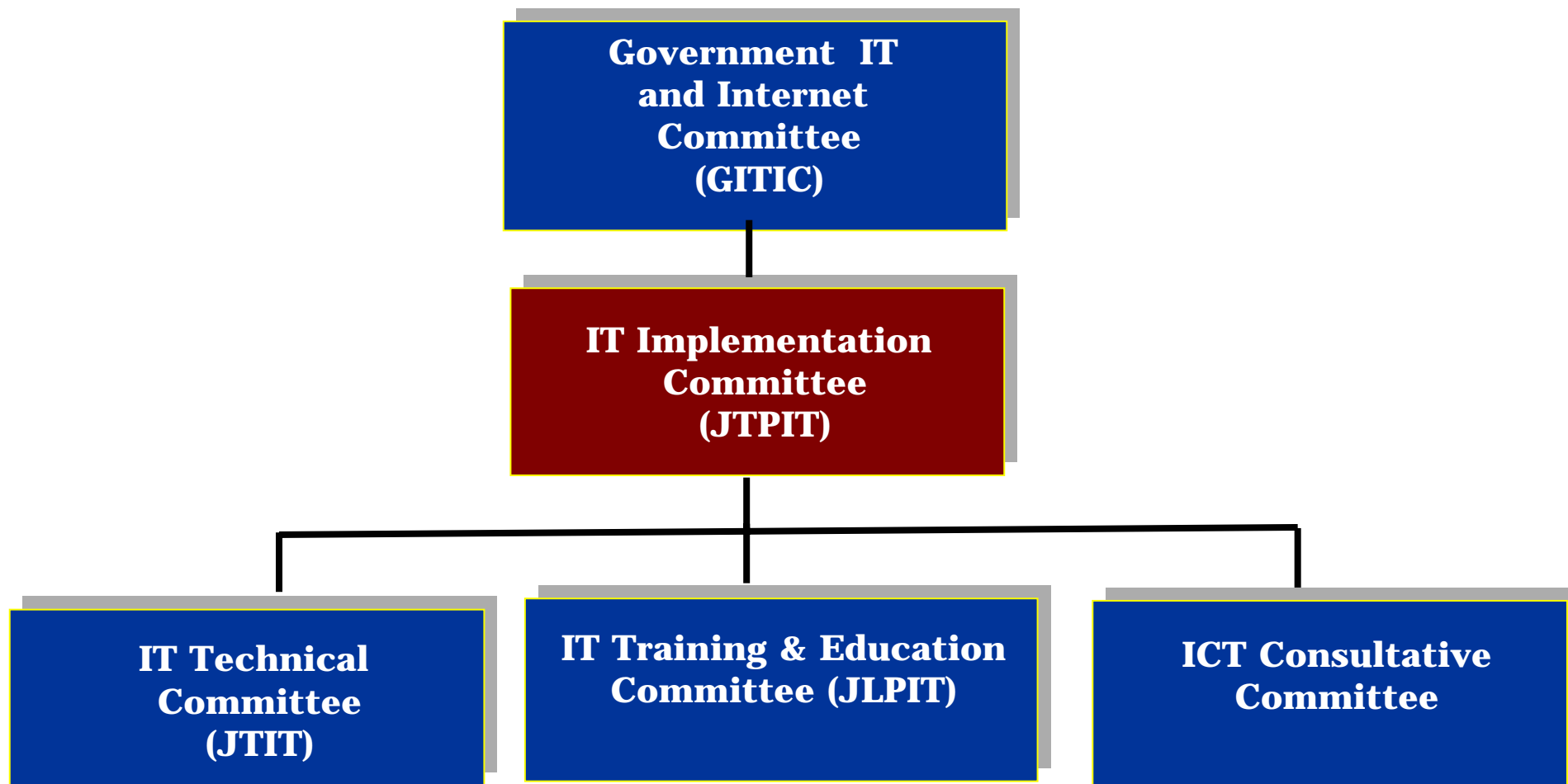
Governing Structure

Governing Structure Under Electronic Government
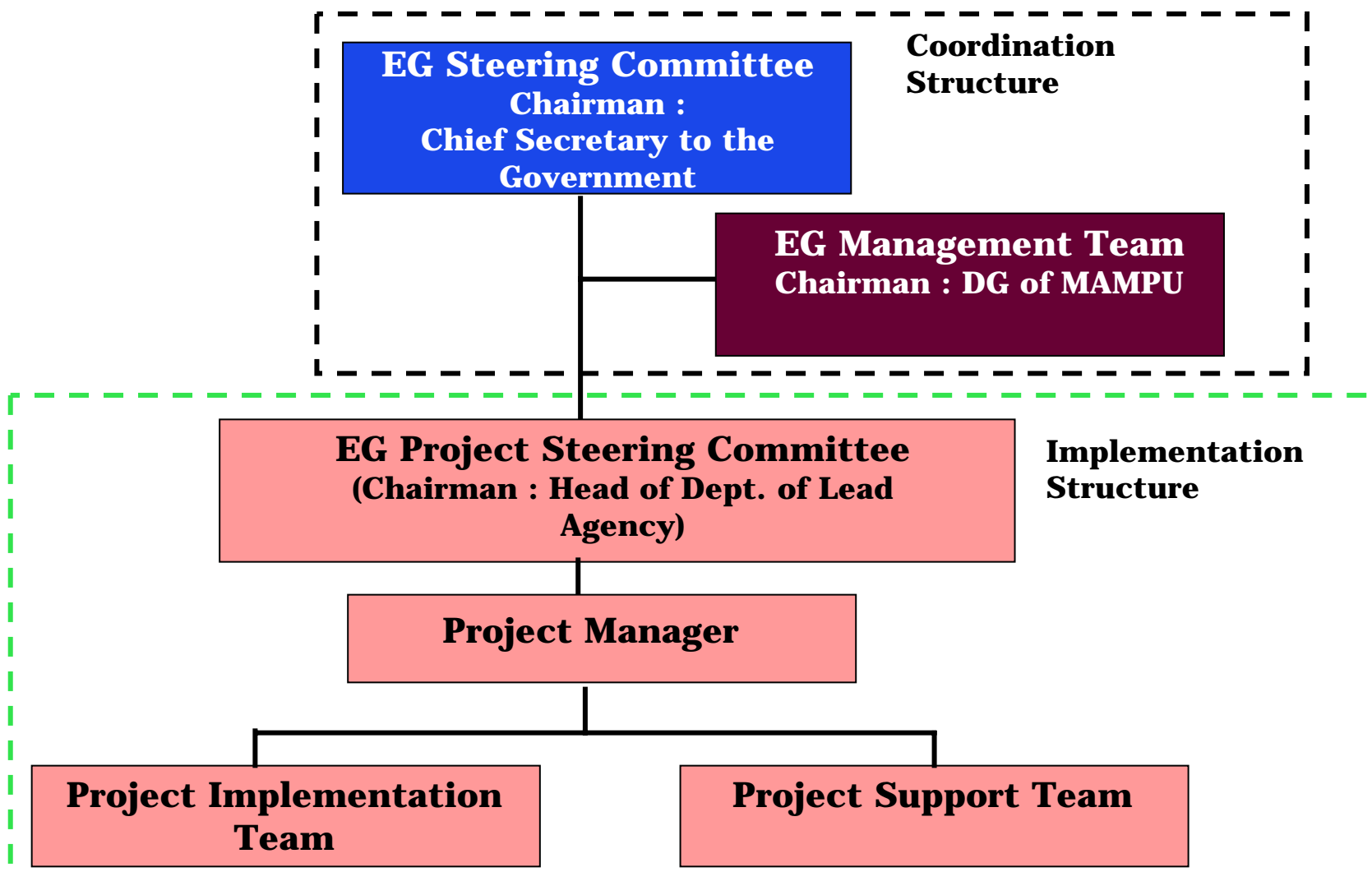
Coordination Structure

- **EG Steering Committee**
Chairman :
Chief Secretary to the
Government

- **EG Management Team**
Chairman : DG of MAMPU

Implementation Structure

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

- **Project Manager**

- **Project Implementation Team**
- **Project Support Team**

Framework To Achieve Vision

ICT Framework

Governing Structure

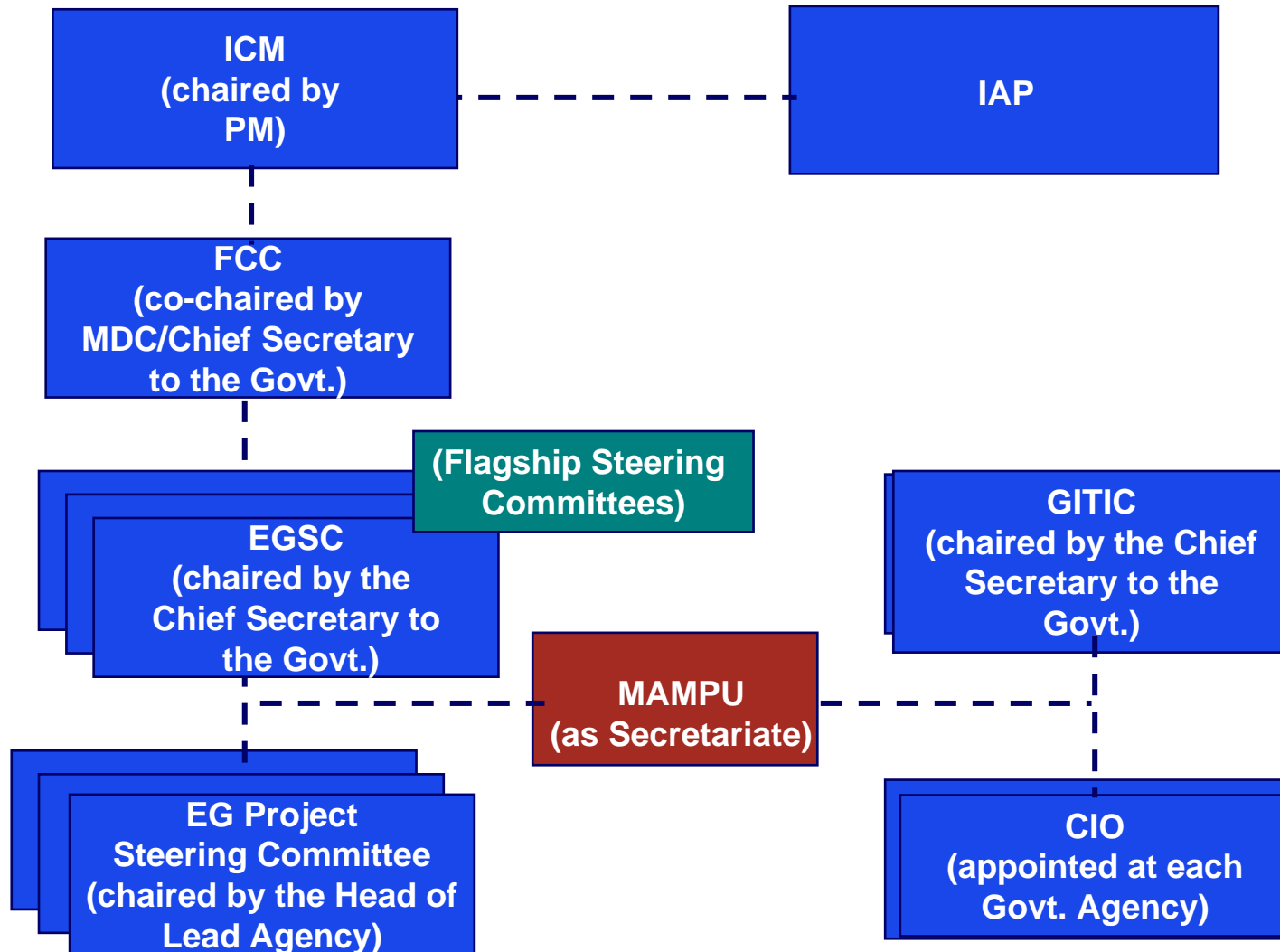Shared ICT Infrastructure

Single Gateway

Multiple Delivery Channels

Government-Wide Common Systems

Standards and Guidelines

Policies and Legislation

ICT Skills and Knowledge Personnel

Shared ICT Infrastructure

Shared Infrastructure Initiatives ….

PUTRAJAYA CAMPUS NETWORK

HELP DESK

SHARED DATA CENTRE

ENTERPRISE SYSTEM MANAGEMENT

SHARED ICT INFRASTRUCTURE

WIDE AREA NETWORK

SECURITY SERVICES

EG*NET

COINS

PADU*NET

DIGITAL CERTIFICATE

G-CERT & PRISMA

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

Shared ICT Infrastructure

Wide Area Network

Procurement Service Provider

Procurement Service Provider Gateway

Internet

Internet Gateway

Internet Gateway

Putrajaya Campus Network

EG*Net Nationwide Network

EG Applications (E-Services, eP, GOE, HRMIS, SPPII, ELX, E-Syariah, E-Land, E-Courts)

Government Sites

Government Sites

Government Sites

Government Sites

Gateway Provider Gateway

Financial Institutions

Service Providers

Gateway Provider

Putrajaya Campus Network (PCN)

Putrajaya Campus Network

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

Framework To Achieve Vision

ICT Framework

Governing Structure

Shared ICT Infrastructure

Single Gateway

Multiple Delivery Channels

Government-Wide Common Systems
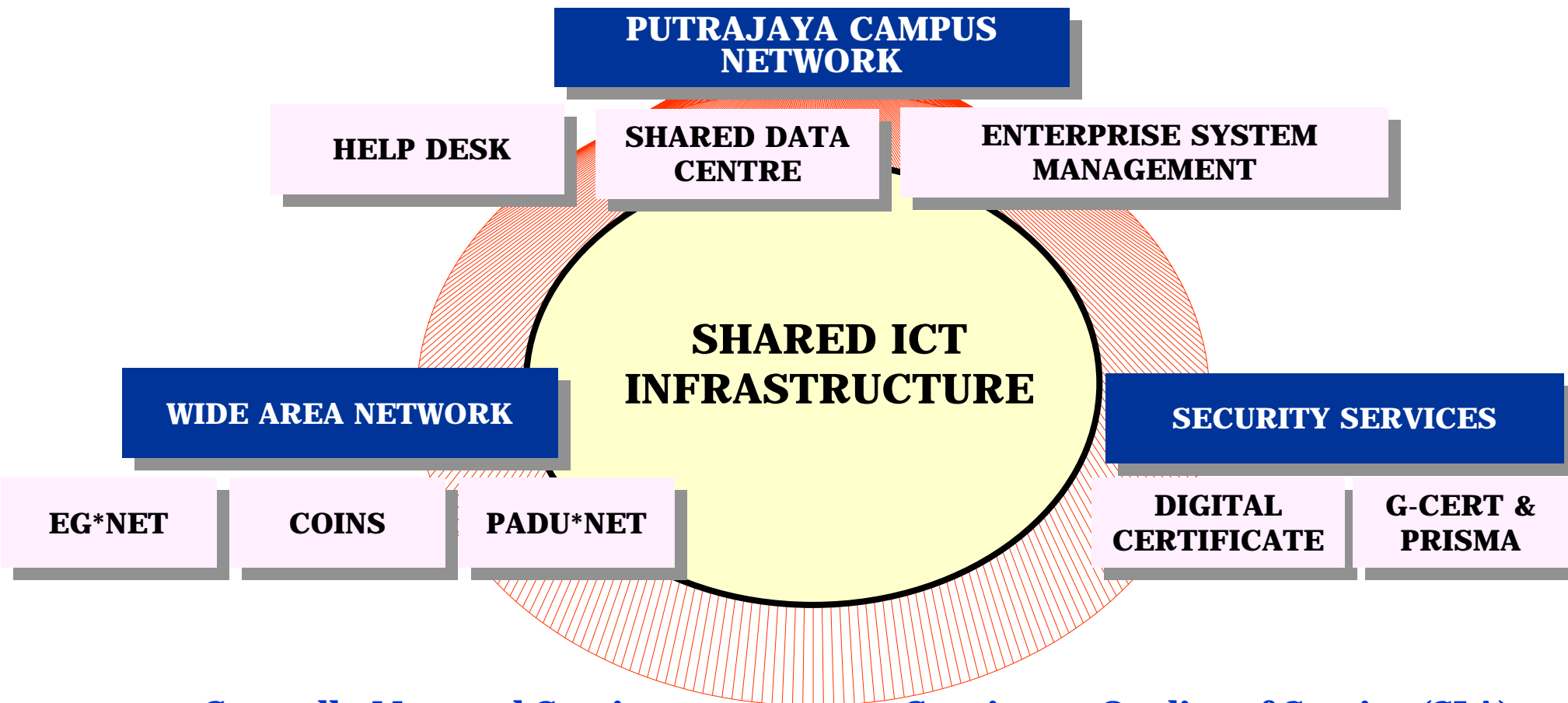
Standards and Guidelines

Policies and Legislation

ICT Skills and Knowledge Personnel

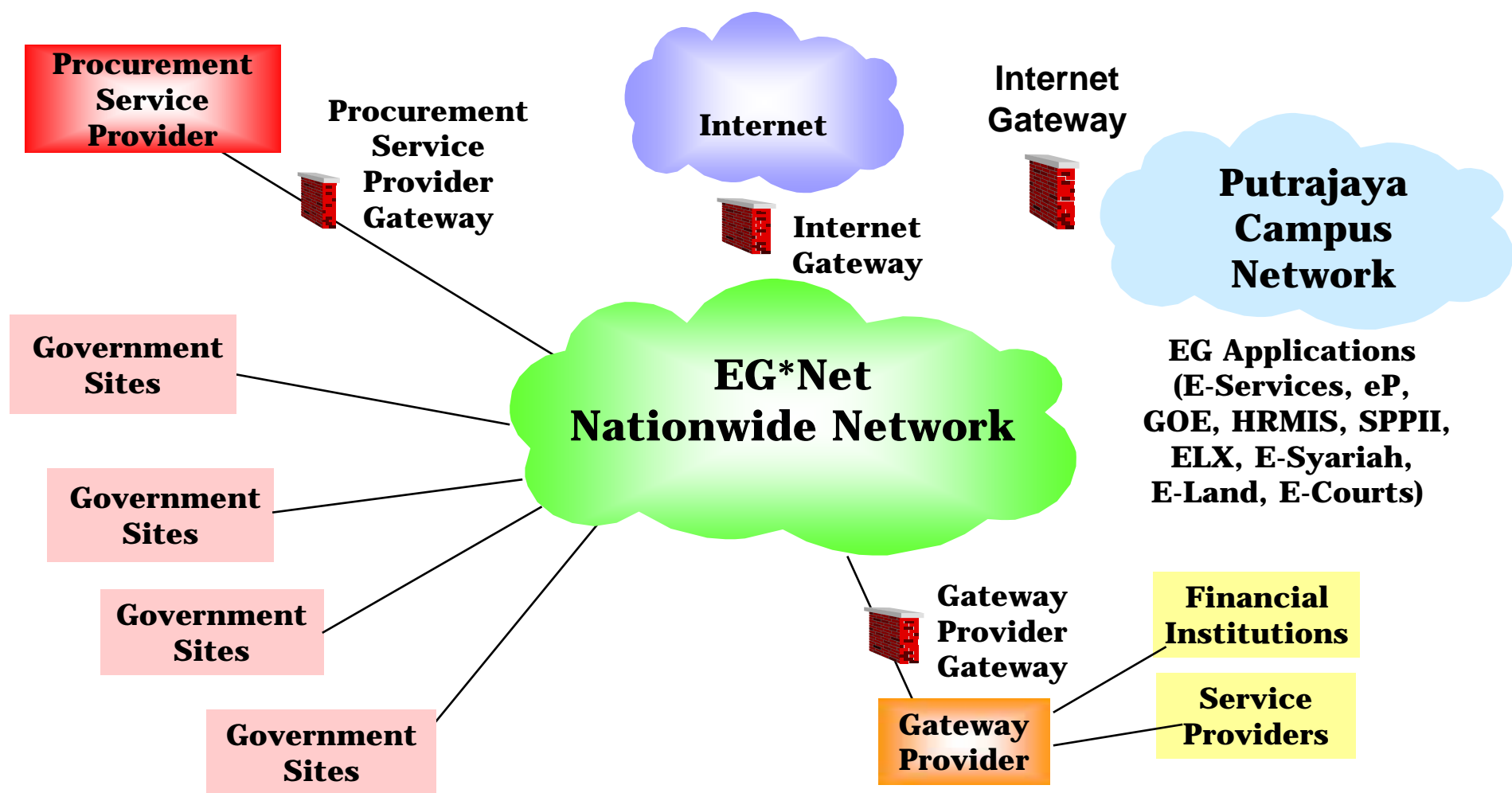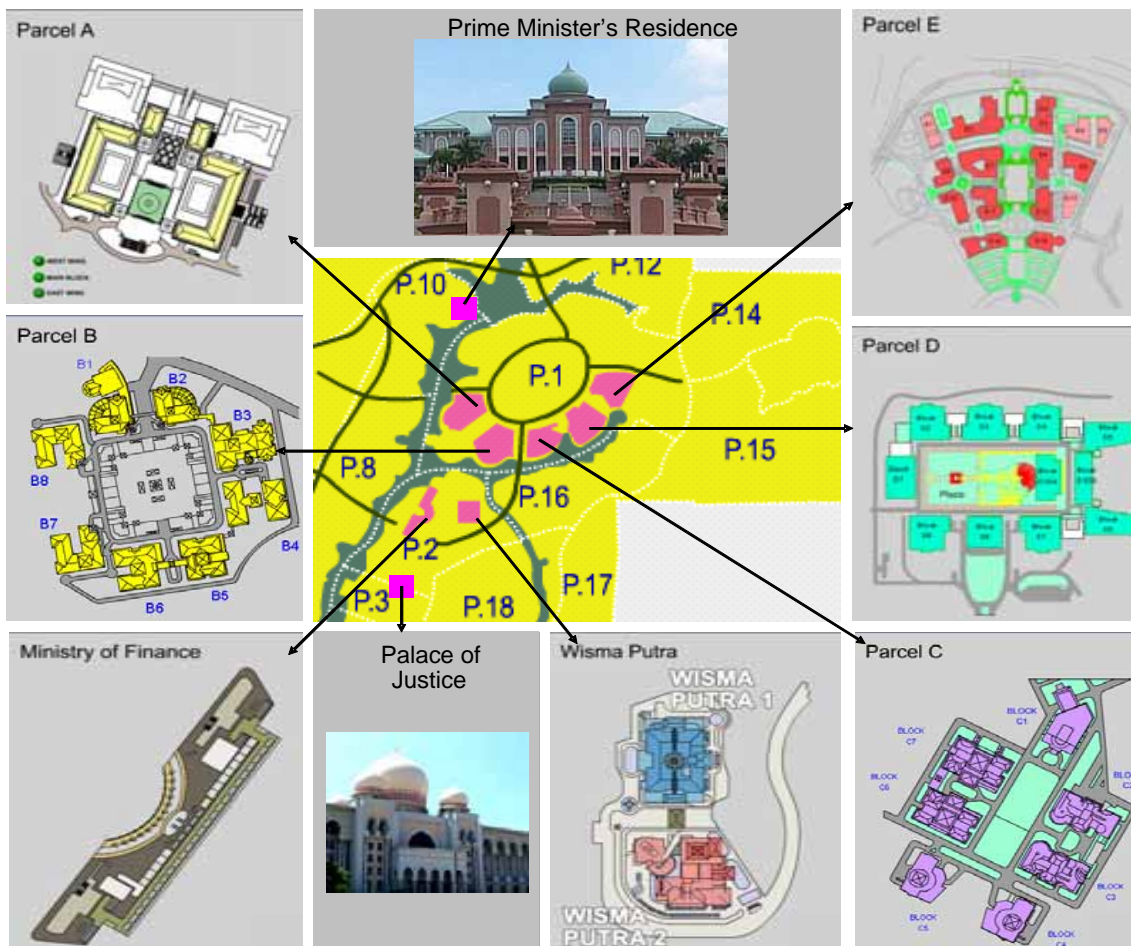# Public Service Portal (PSP)

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**

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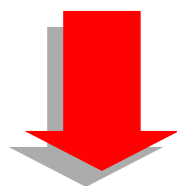
ICT Skills and Knowledge Personnel

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

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ICT Skills and Knowledge Personnel

Government-Wide Common Systems

E-Government

Impact

Transform the administrative processes

Multimedia Super Corridor (MSC)

Impact

Provide amenities improving citizens' quality of life

Completed & Rolled-Out

- SPPII
- GOE
- E-SPKB
- E-Syariah
- E-Procurement

In Progress

- HRMIS
- E-Courts
- E-Land
- GFMAS

MSC Systems

- Smart Schools
- MyKad
- Telehealth

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

Other Systems

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 Informasi Kenderaan dan Pemandu (SIKAP)

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

Framework To Achieve Vision

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Policies and Legislation

ICT Skills and Knowledge Personnel

Standards & 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

Evolution of standards and guidelines

ICT Framework

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Policies and Legislation

ICT Skills and Knowledge Personnel

Policies & Legislation

Completed

Digital Signature Act 1997

Copyright (Amendment) Act 1997

Computer Crimes Act 1997

Telemedicine Act 1997

Communications & Multimedia Act 1998

In Progress

Electronic Government Activities Act (EGAA)

Electronic Transactions Act (ETA)

Personal Data Protection Act

ICT Framework

Governing Structure

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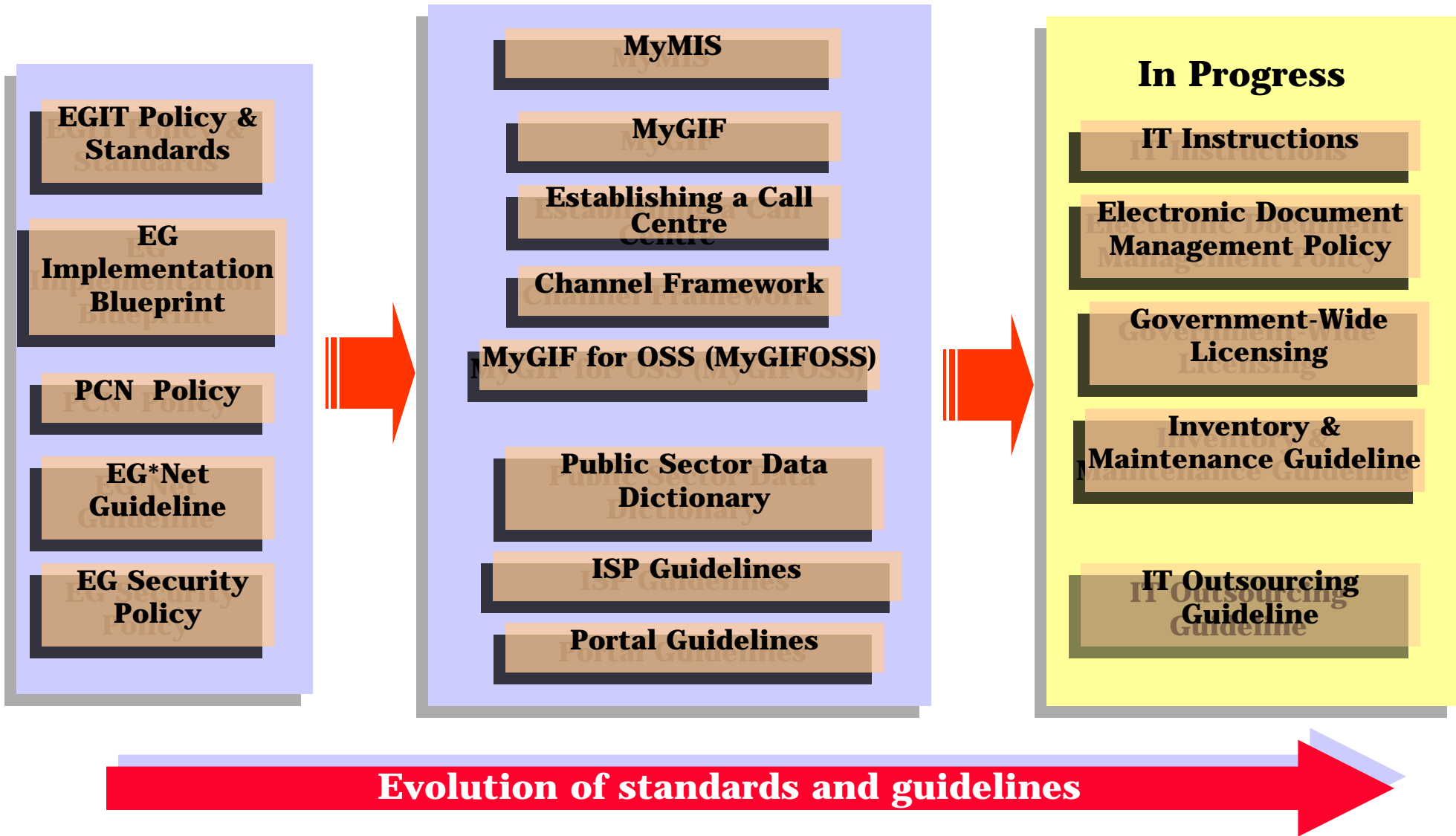
Multiple Delivery Channels

Government-Wide Common Systems

Standards and Guidelines

Policies and Legislation

ICT Skills and Knowledge Personnel

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

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

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

Enhancing Systems

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

Performance Measurement

Cross Agency Collaboration

Infrastructure

Human Capital Development

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

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

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

THANK YOU