

# **Singapore's ICT Journey - The Past 30 years and the Next 5 years**

Presentation  
**The World Bank**

**30 September 2009**



# Singapore



ICT Industry : **\$58.1 Billion**  
(US\$ 40.0 Billion)  
annual growth **12.4%**



ICT Professionals **140,000**  
annual growth **6.5%**



Households with access to computer : **80%**  
Households with Internet Access : **76%**



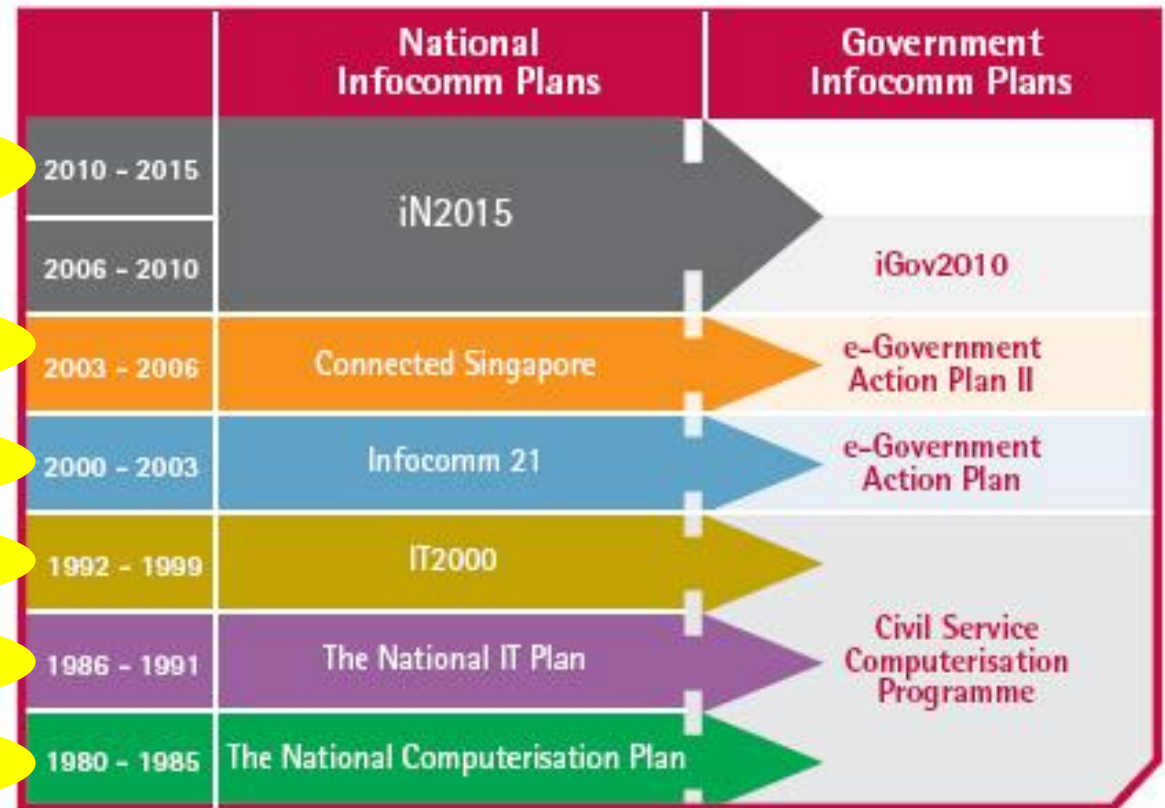
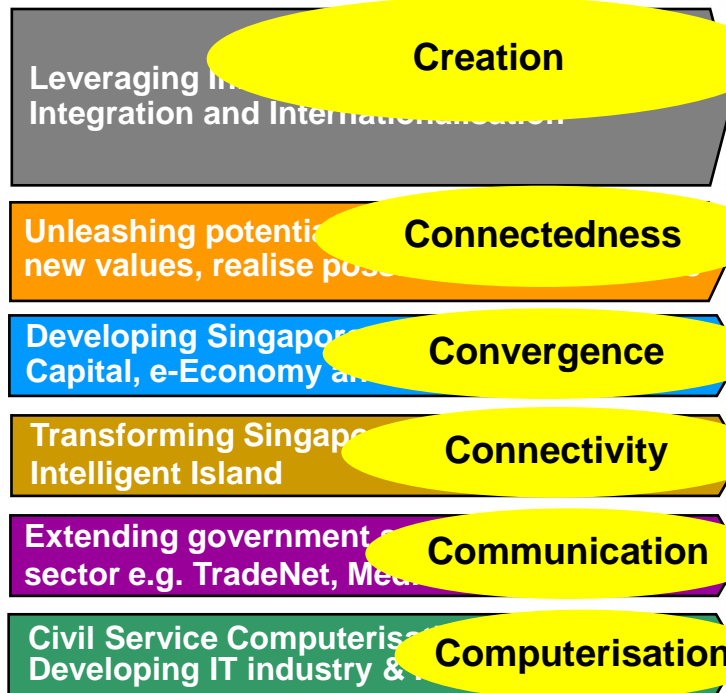
Ease of doing business\* : **No.1**  
(183 economies) **4<sup>th</sup> consecutive years**

\* Source : The World Bank



# Singapore's 30 years ICT Journey

## Story of C's



# Infocomm Development Authority of Singapore



- Statutory Board, Singapore Government.
- Formed 1 Dec 1999 from merger of the National Computer Board (NCB) and Telecommunication Authority of Singapore (TAS), as a result of a growing convergence of information technology and telephony.
- cultivate a vibrant and competitive infocomm industry to sustain long-term GDP growth and global economic competitiveness of Singapore

## **Infocomm Industry Champion**

- environment
- ecosystem
- workforce

## **Infocomm Master- Planner and Developer**

- key enabler
- national infrastructure
- leading edge

## **The Government CIO**

- plan, develop and manage WOG IT
- oversee standards
- enforce security

# IDA International, a wholly owned subsidiary of IDA Singapore



**“executing agency for  
all collaborations on  
public service ICT  
between Singapore  
and countries around  
the world”**

## OUR MISSION

IDA International helps public agencies deliver **socio-economic outcomes** enabled through public service infocomm.

## OUR ROLE

1. We help foreign governments plan, design and implement impactful programmes in **eGovernment, infocomm manpower development and economic sector development**.
2. We help our foreign government counterparts **better understand and benefit from Singapore's experience** and to implement their programmes successfully
3. We bring unique and proven infocomm expertise, experience and know-how to **accelerate the implementation** of public service ICT programmes for governments around the world.

## OUR PARTNERS

**Developing countries** (Asia, Africa, Middle East, Latin America)



# Infocomm Development Framework



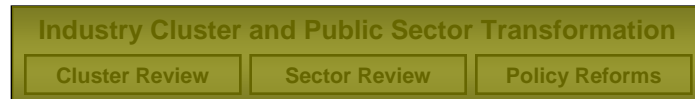
## Outcomes

Leadership & Strategy

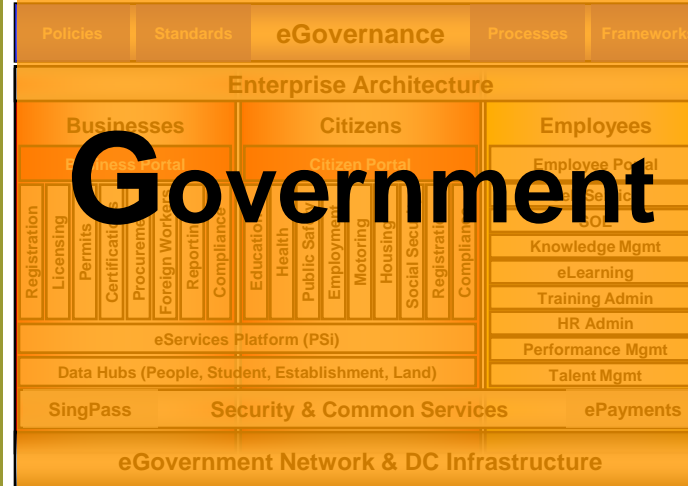
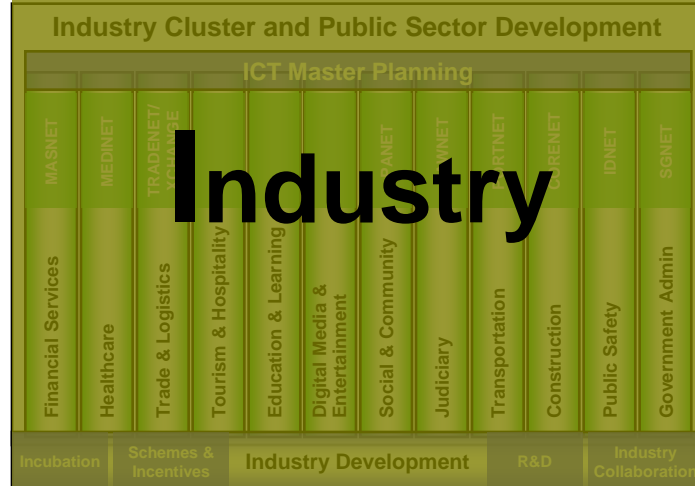
Policy & Regulatory



GCIO & MCIO, Industry Development Functions



Industry



Public Service Infocomm Programme Concept & Planning

Programme Management & Delivery

## Human Capacity



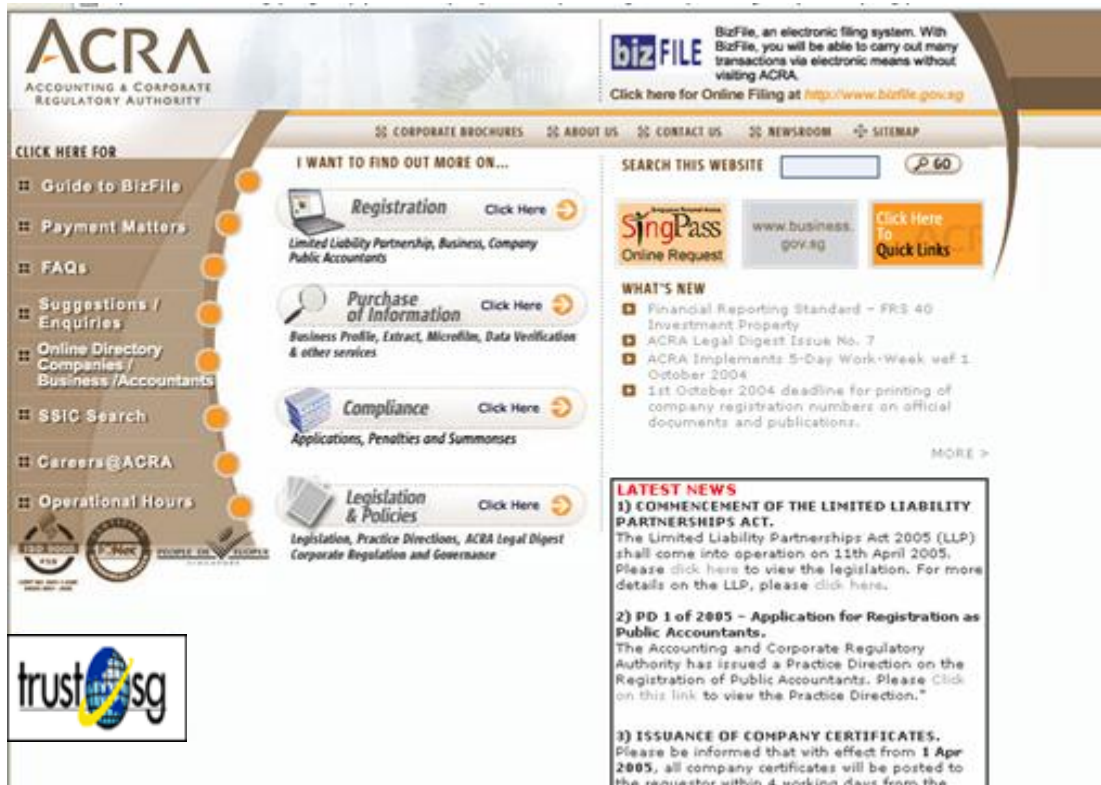
Infrastructure



Infrastructure Development

# E-Filing Business Registration

## BizFile



- ❖ Electronic filing and registration of new businesses
- ❖ Deployed by Accounting and Corporate Regulatory Authority of Singapore
- ❖ Allows members of the public to file online all legally prescribed business & company forms for the purposes of registration & statutory disclosure requirements
- ❖ Accolades:
  - CIO 100 Honors 2004 and 2005
  - Intelligent Enterprise Asia Award 2004



# Government to Business : Business Licensing



A multiple award winner, the **Online Business Licensing Service** (OBLS) allows businesses to submit one or multiple licence applications to the relevant government agencies

Business Needs	Previously or Manually	Now Through e-Services
Incorporating a new Company	S\$1200 to \$35000 (depending on company size)	S\$300 (flat fee) Time required: 2 hours
Submitting building plans	Manual dispatching of documents to 12 agencies	Savings of \$450 by submitting online
Obtaining an entertainment license	Time required: 8 weeks	Time required: 2 weeks
Trade Clearance	At least 3 working days to clear	<ul style="list-style-type: none"> <li>• &lt;15 minutes</li> <li>• 25% Productivity Increase</li> <li>• 50% Cost reduction</li> </ul>



The Computerworld  
Honors Program  
Laureate 2007  
'Government'



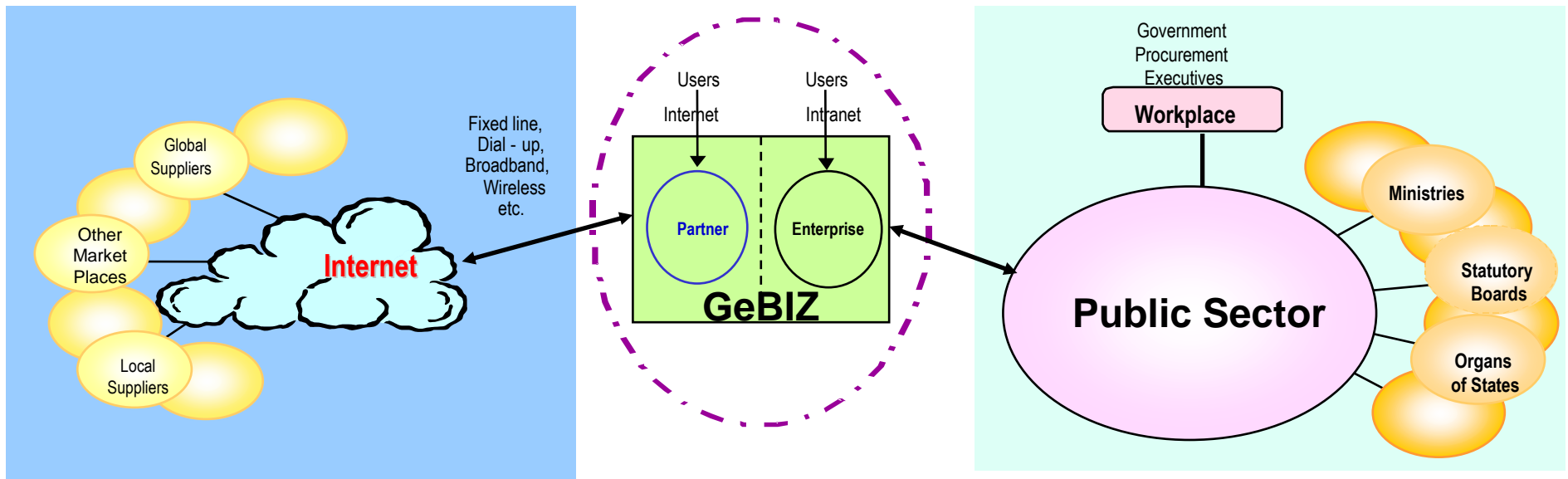
UN Public  
Service Award  
2005



# Government to Business : Government Electronic Business (GeBiz)



- Started in 2000, a one-stop e-procurement portal used by the Singapore Government to conduct trade with suppliers
- Over 120 government agencies and 10,000 government buyers in Singapore
- Handles transactions worth more than S\$20 billion annually. **5% to 25% savings.**
- Reduces paper work, submit e-bids and receive e-orders anytime and anywhere
- Improves efficiency for government agencies and suppliers
- WTO-GPA compliant : Transparency, Open And Fair Competition, Value for Money



# Education : EdVantage

- 535,000 students in 358 schools
- 113,000 students in 3 universities, 5 polytechnics, Institute of Technical Education (ITE)
- 26,000 teachers in schools, 7,500 academic staff in PSEIs

## iEXPERIENCE

**Learner Portfolio** :: Learners' profile and portfolio of learning journey

**Assessment** :: Holistic assessment of students starting with formative school-based assessment

**Collaboration in Learning** :: Applications for increased interaction



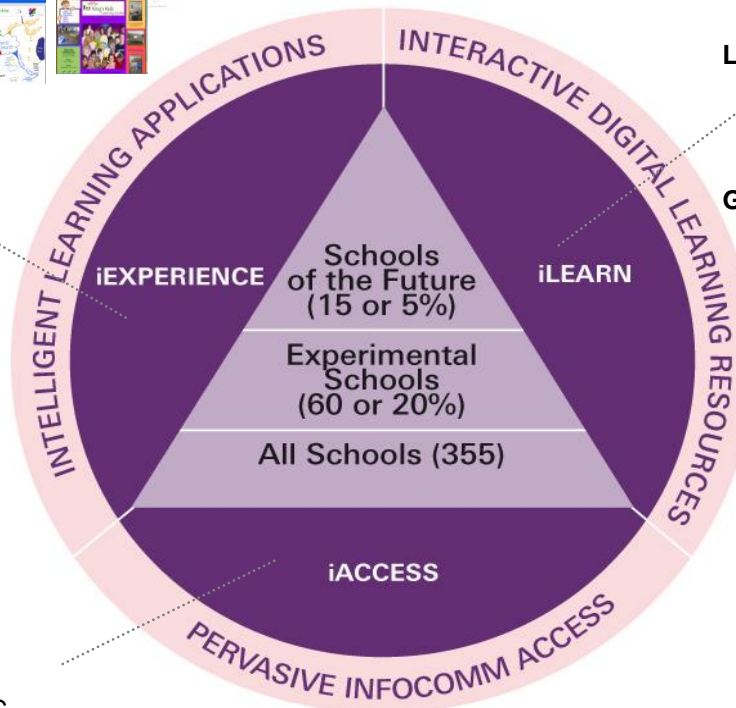
## iACCESS

**One to One Computing** :: Personal learning devices

**Wireless Campus** :: Schools to be wireless

**Learner On The Move** :: Wireless@SG

**Learning @ Home** :: High-speed broadband at home



## iLEARN

**Interactive Textbooks** :: Use of interactive textbooks in curriculum

**Learning Digital Exchange** :: Vibrant sharing of school-created digital learning resources, and access to premium learning content

**Games for Learning** :: New ways of learning through games and simulations



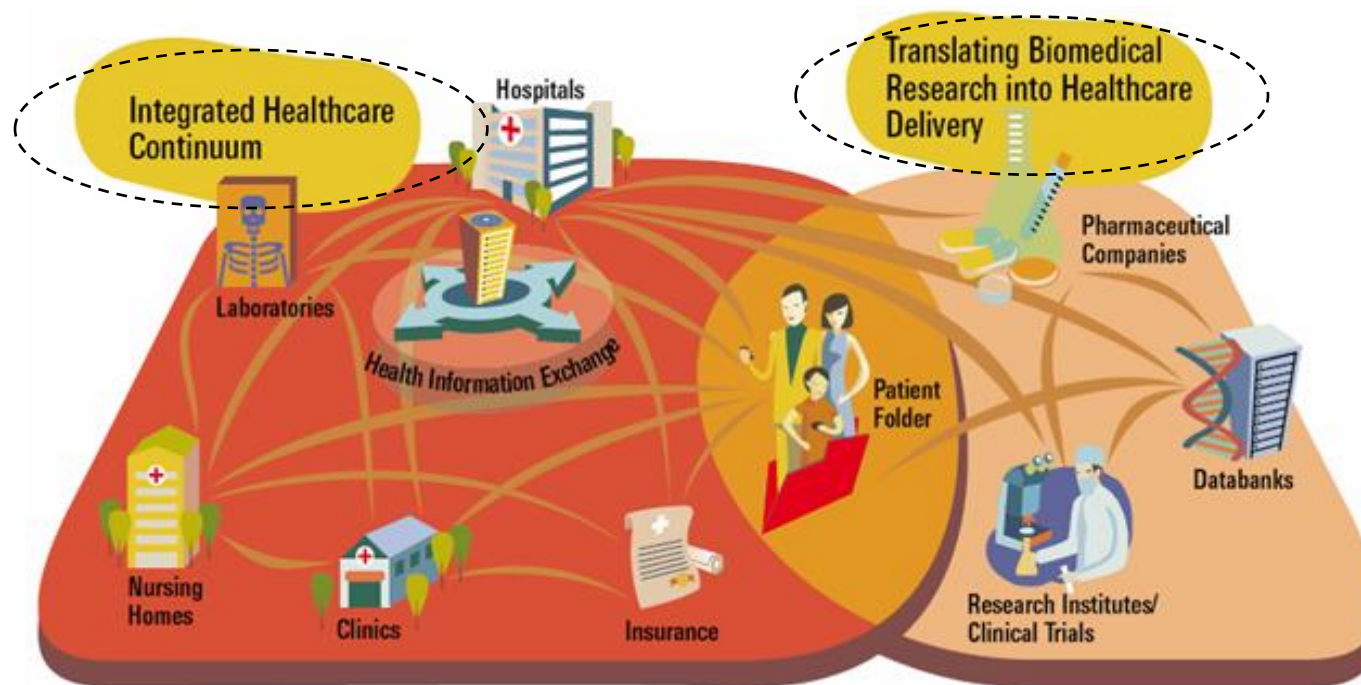
# FutureSchools@Singapore

- **Capacity to leverage**
    - state-of-the art technologies
    - innovative school designs
  - **to enable**
    - innovative curriculum, pedagogies and assessment programmes for engaged learning
    - efficient administrative practices
  - **through**
    - strategic collaboration with industry partners and Institutes of Higher Learning (local & foreign)
- **First phase involves 5 schools – 2 Primary, 3 Secondary**
  - **Each FutureSchool draws up its own programme according to the needs of its students**
  - **A Call-for-Collaboration facilitates the selection of solutions from industry consortia**



# Healthcare

Goal	To accelerate sectoral transformation through an infocomm-enabled, personalized healthcare delivery system to achieve high quality clinical care, service excellence, cost-effectiveness and strong clinical research		
Desired Outcomes	1. Well-integrated quality healthcare 2. Cost-effective healthcare services	3. Greater ability of public to manage their health 4. Strong clinical and health services research	



## Tax Office, Singapore ...1990s



# Overview of IRIN



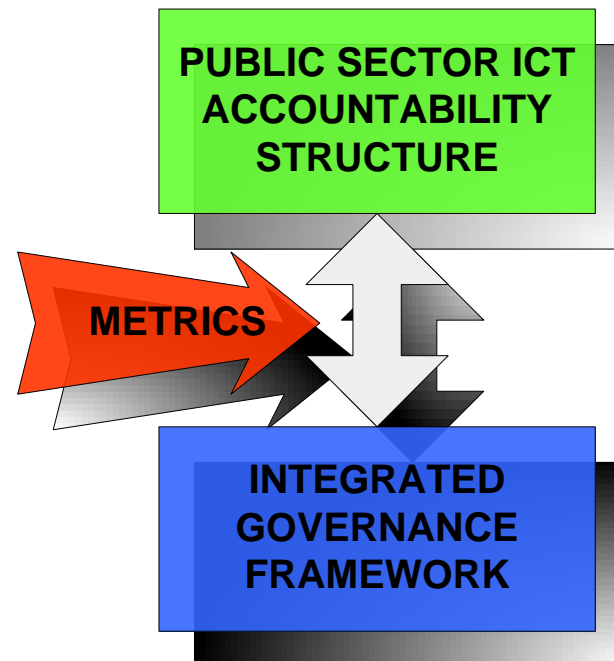
INLAND REVENUE  
AUTHORITY  
OF SINGAPORE



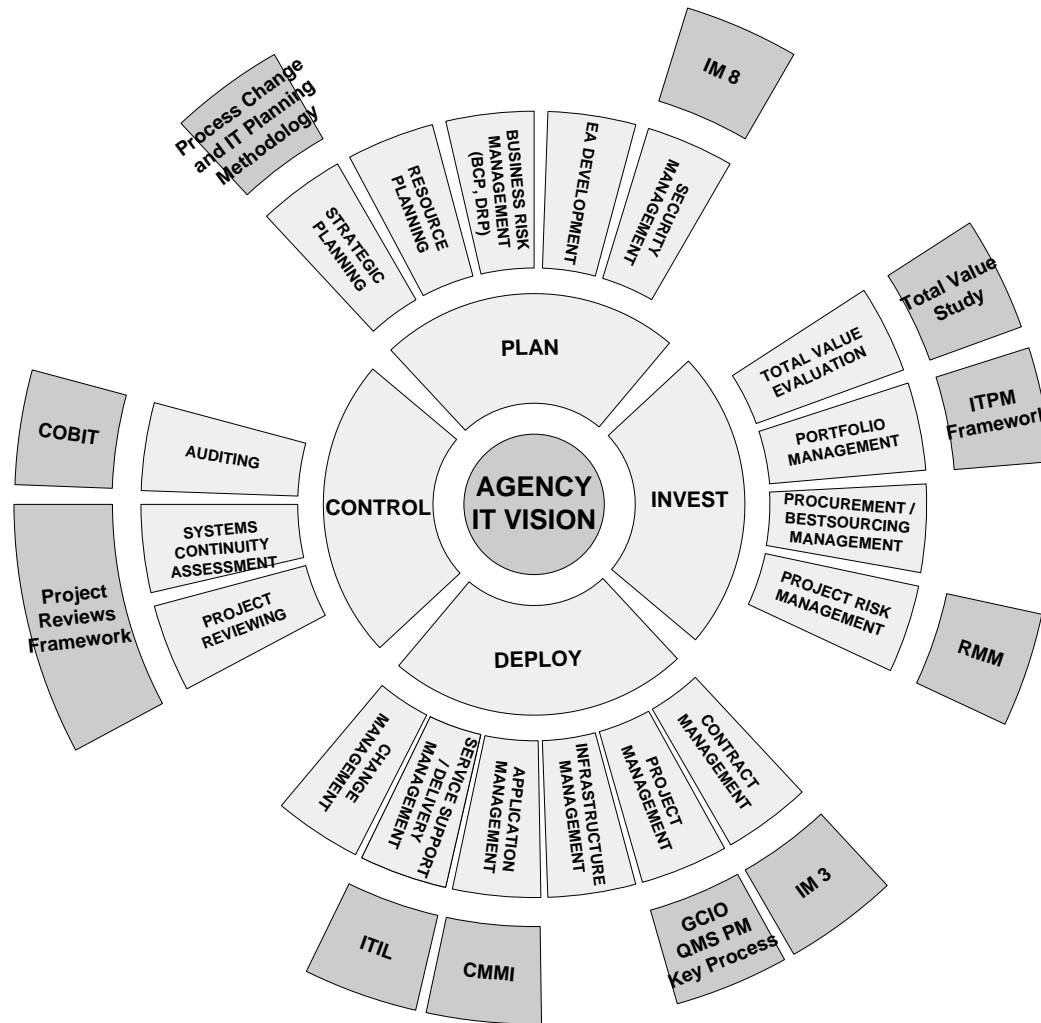
# ICT Policies & Governance in the Public Sector

- ❑ **ICT Governance specifies the decision rights and accountability framework to encourage desirable behaviour in the use of ICT**
- ❑ **ICT Governance comprises three components:**

- **Accountability structure**
- **ICT policies and processes**
- **Performance metrics**



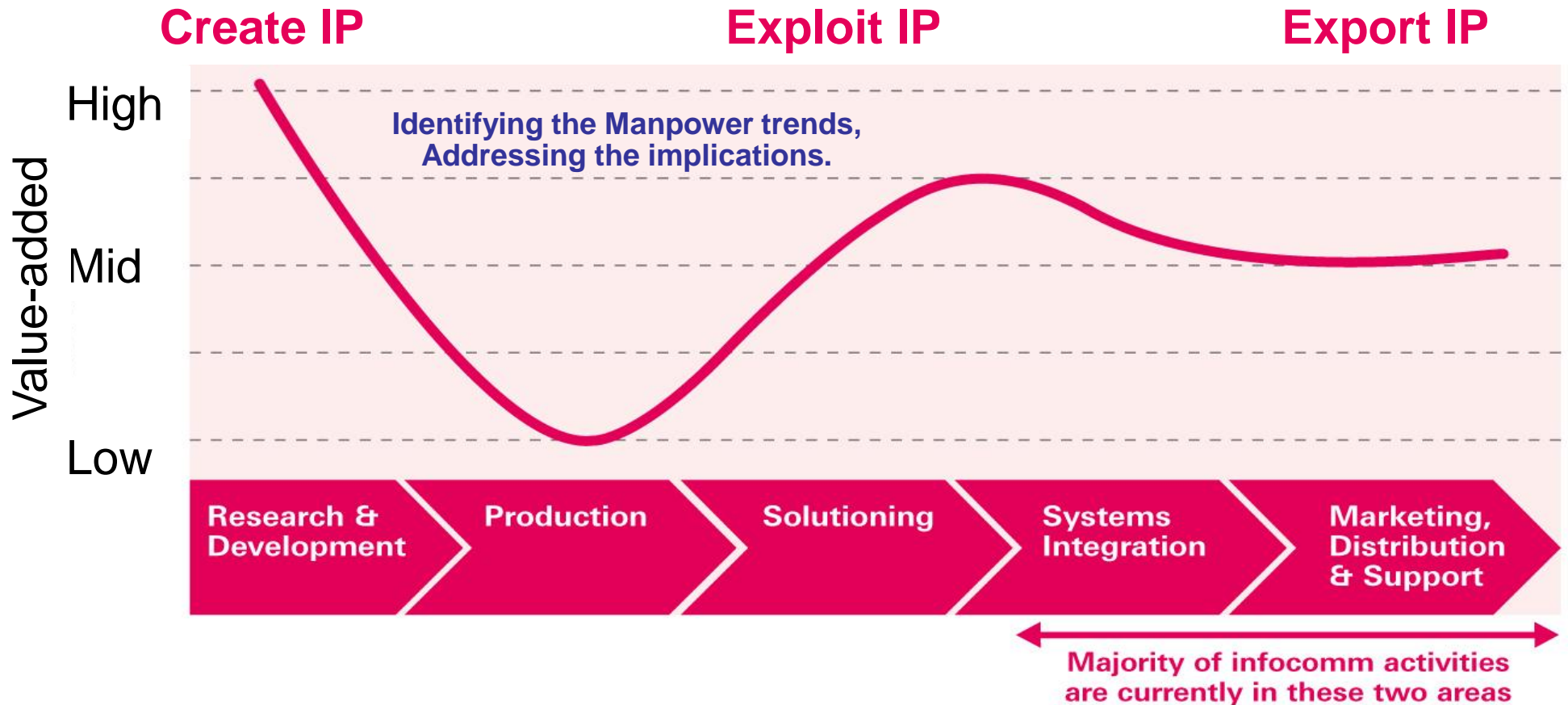
# An Integrated ICT Government Framework



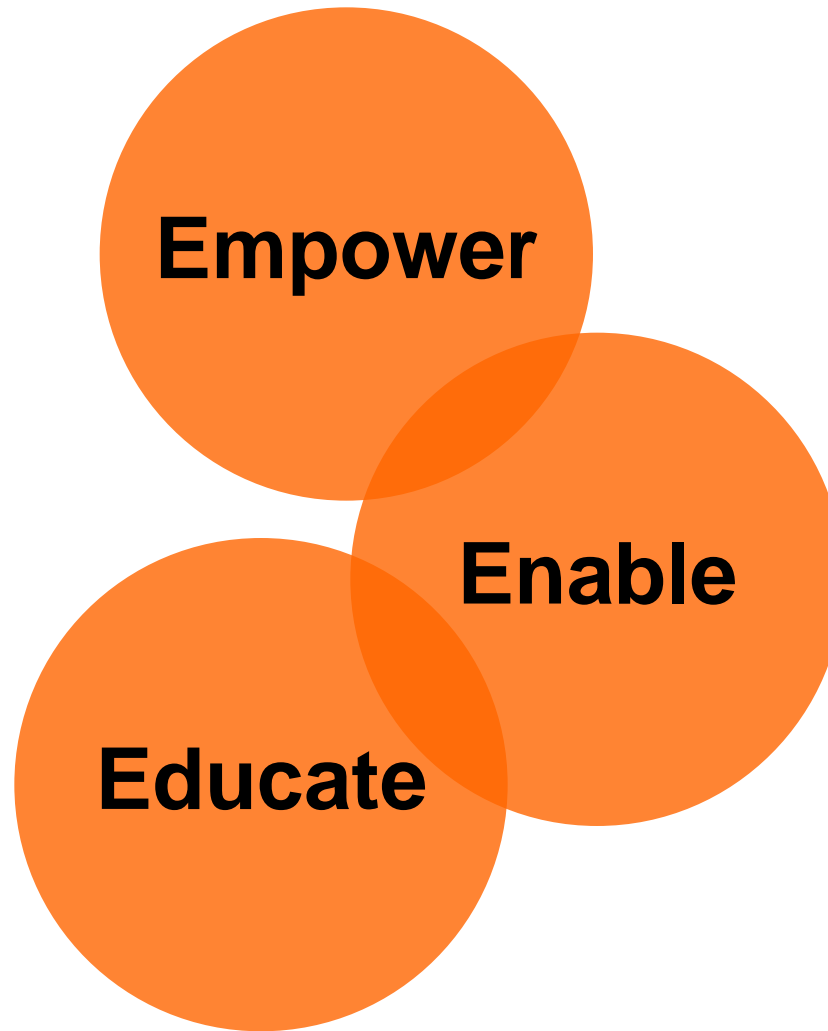
## Lifecycle Approach:

- **Plan, Invest, Deploy and Control**
- **Processes that an agency should consider for each stage.**
- **Identifies the policies, methodologies and tools that best serve the agency in addressing the processes.**

# Human Capital Development



# Moving forward



# Thank You.

## Questions & Answers

For more information, please contact

Yeong Wee Tan

Deputy Director

IDA International

E: [yeong\\_wee\\_tan@ida.gov.sg](mailto:yeong_wee_tan@ida.gov.sg)

M: +65 93388160 T: +65 6211 3899