

Singapore eGovernment Journey & Collaboration Overseas

Tan Lark Yang
15 January 2013

Agenda



- Introduction
- Singapore eGovernment Journey
 - iN2015: Intelligent Nation 2015
 - Transforming Government Services
- eGovernment Collaboration Overseas

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Singapore Today



1. Land Area	: 714 sq km
2. Population	: 5.18 million (3.79m residents)
3. GDP	: S\$326.8 billion (US\$260.8 billion)
4. GDP Per Capita	: S\$63,050 (US\$50,309)
5. Literacy Rate	: 96.1%
6. Labour Force	: 66.1% of population (aged ≥ 15)
7. Government Agencies	: 16 Ministries & 65 Statutory Boards
8. Public Sector Officers	: \approx 127,000

Sources :

- 1-6: Singapore Department of Statistics, (<http://www.singstat.gov.sg>). Last accessed on 14 May 2012
- 7: Singapore Government Directory, (<http://www.sgdi.gov.sg>). Last accessed on 20 March 2012
- 8: Public Services Division (<http://www.psd.gov.sg/PublicService/SingaporePublicService/>), Last accessed on 20 March 2012.

Phases of Economic Development

1960s-70s

*Independence &
Early Industrialisation*

1980s-90s

*Economic Restructuring (1980s)
Newly-Industrialised Economy*

2000s

*Globalised and
Diversified Economy*

Factor
Driven
Economy

Labour
Intensive

Investment
Driven
Economy

Capital
Intensive

Innovation
Driven
Economy

Knowledge
Intensive

Singapore's Economic and Manpower Strategies (1980s)

Restructure economy into higher value-added, high technology and more capital-intensive industries → **Use of Information Technology**

Singapore's Performance in Global Rankings

- **Easiest place to do business**

World Bank Ease of Doing Business, 7 years, 2007 – 2013

- **Best eGovernment**

Waseda University eGovernment Global Ranking, 4 years, 2009 - 2012

- **City with the best investment potential**

BERI Report, 2011

- **2nd most network ready country**

WEF Global Information Technology Report 2012

- **2nd most competitive country**

WEF Global Competitiveness Index, 2011

- **3rd most competitive IT Industry**

Economist Intelligence Unit, 2011

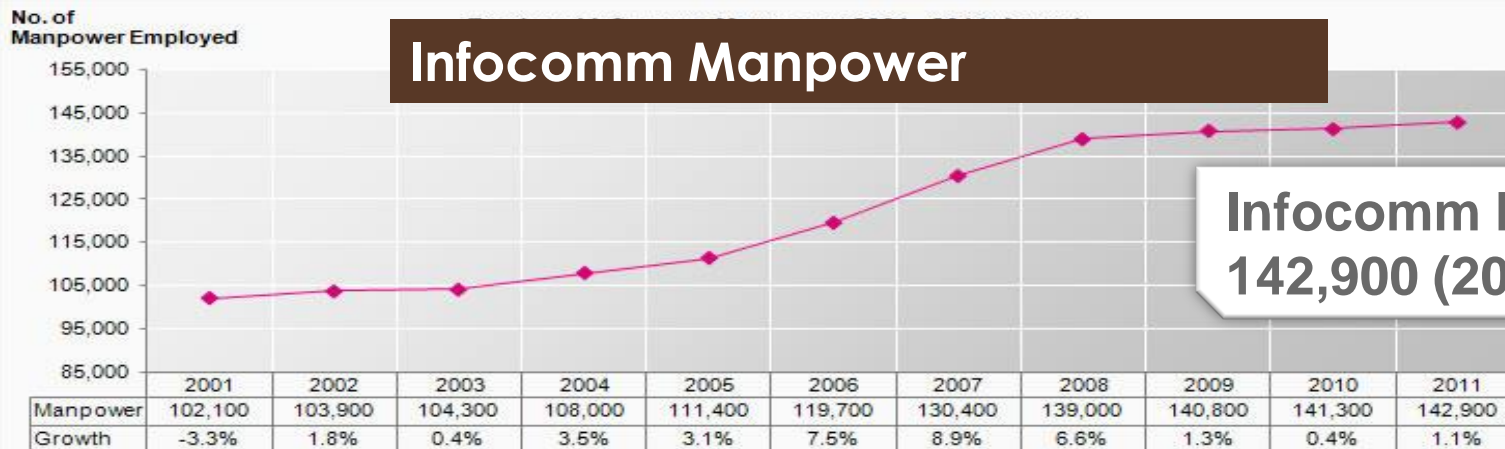
Overview of Singapore ICT Landscape

ICT Industry Revenue



Source: IDA's Annual Survey on Infocomm Industry.

Infocomm Manpower



Source: IDA's Annual Survey on Infocomm Manpower

Overview of Singapore ICT Landscape

Household Broadband Access



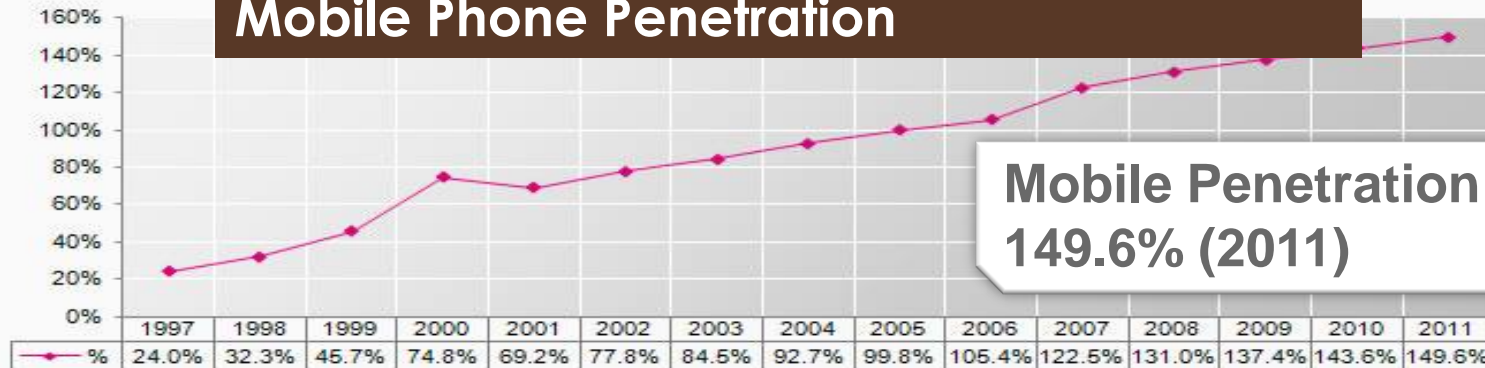
Base: Resident households in Singapore.

Source: IDA's Annual Surveys on Infocomm Usage in Households and by Individuals.

Mobile Phone Penetration

Penetration Rate

Mobile Phone Penetration



Source: IDA POI.

Note: "MobilePhone Penetration" is computed using the total number of mobile subscriptions divided by the total population.

IDA's Role in Driving e-Government

*Effective partnership with MOF,
close cooperation with agencies.*



Infocomm Development Authority (IDA) of Singapore

- IDA was formed on 01 Dec 1999 through merger of National Computer Board (NCB) and Telecommunications Authority of Singapore (TAS)
- Statutory boards under Ministry of Communications and Information (MCI)



IDA key roles in Singapore



- Developing a vibrant infocomm ecosystem
- Strategising and implementing e-Government
- Enabling business innovation and transformation
- Empowering society to leverage infocomm to enrich lives

Developing a vibrant infocomm ecosystem

- Build a vibrant infocomm ecosystem by attracting multinational corporations and innovative foreign companies to Singapore to complement local infocomm enterprises and start-up companies.
- Seeks opportunities to grow the infocomm industry by facilitating the entry of Singapore infocomm companies into the global marketplace
- In terms of infocomm manpower, IDA works with the industry and educational institutions to prepare the current and future workforce for an economy and society enabled by infocomm. This involves grooming globally competitive infocomm professionals, developing infocomm competencies in key economic sectors, and nurturing infocomm talent from schools to join the industry.
- As the telecommunications regulator, IDA puts in place policies and regulatory frameworks to ensure free and fair competition in the telecoms market in Singapore so that consumers of infocomm products and services benefit from greater choices.

Strategising and implementing e-Government

- As the Chief Information Officer for the Singapore Government, IDA is responsible for masterplanning, project-managing and implementing various infocomm systems and capabilities for the Government. It oversees IT standards, policies, guidelines and procedures for the Government, and manages the infocomm security of critical infocomm infrastructure.
- IDA also works with other public agencies to increase the reach and richness of e-Government services. Connecting the industry's innovative solutions to the Government's needs, about 1,600 public sector services are available online today. To make these services even more accessible, IDA is working closely with agencies to make them available on mobile platforms for users to transact with the Government while on the move.

Enabling business innovation and transformation

- IDA promotes the adoption of infocomm technology as a key enabler to enhance Singapore's economic competitiveness. It works with both public and private organisations to spearhead the strategic use of infocomm in the various sectors such as education, healthcare, manufacturing, logistics, tourism, transport, entertainment and finance.

Empowering society to leverage infocomm to enrich lives

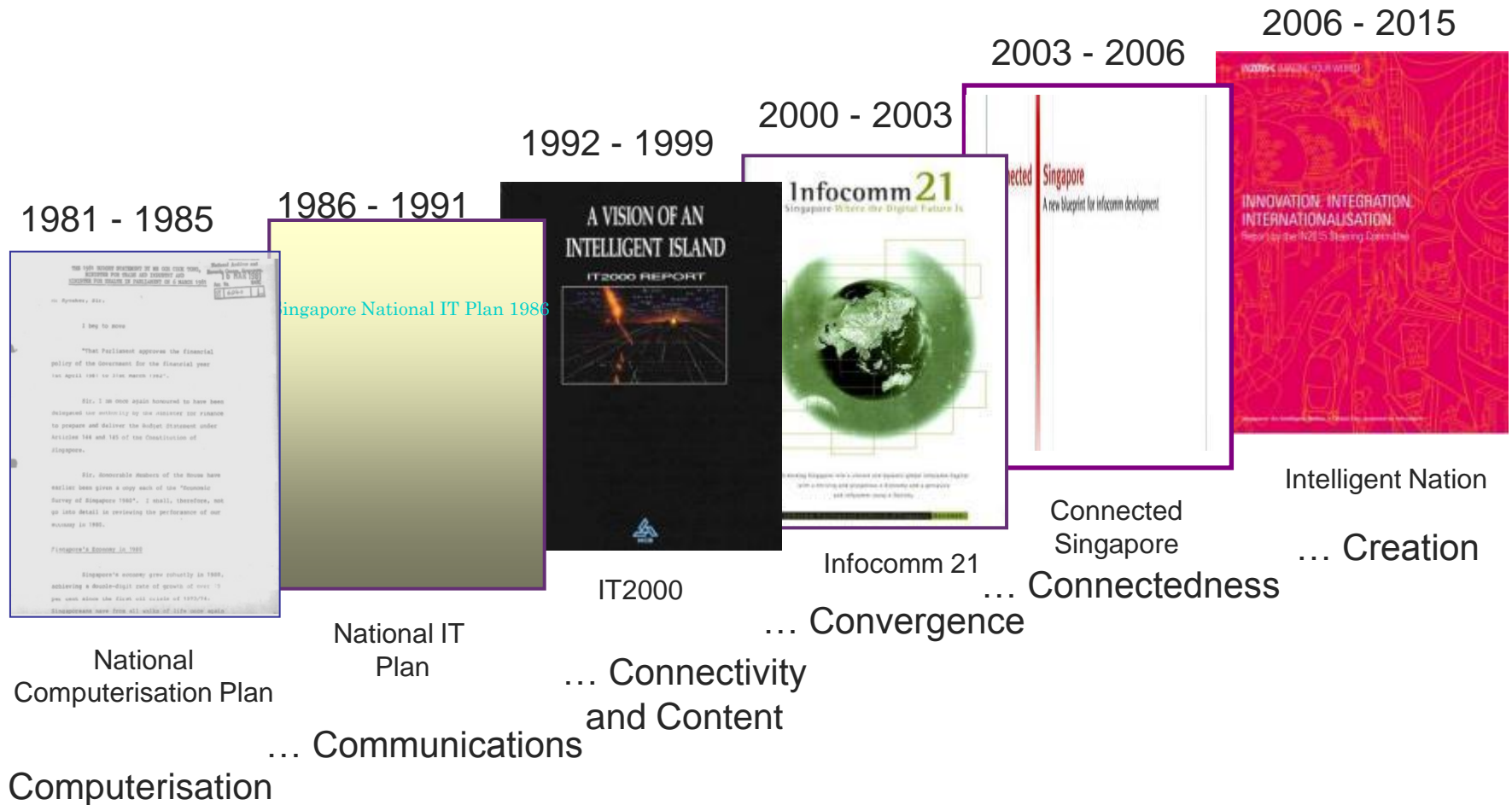
- IDA seeks to build a digitally inclusive society where lives are enriched by infocomm. IDA works with industry partners and associations to encourage all segments of society to adopt infocomm and use it in a more sophisticated way. This includes providing assistance to help low-income households, senior citizens and people with disabilities to acquire computers and get connected to the Internet. IDA also works with community organisations to develop applications that help these organisations to reach out to their members and constituents.

Agenda

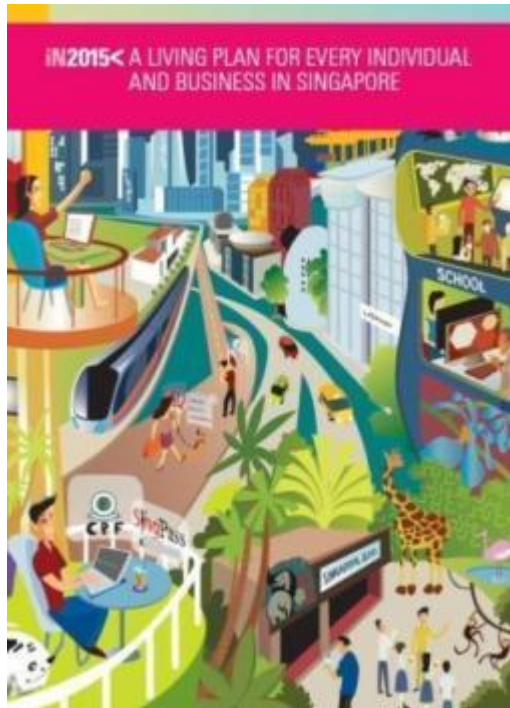


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Our ICT History: Six Master Plans



iN2015 – An Intelligent Nation, a Global City, Powered by Infocomm



iN2015 Key Goals

#1 in the world in harnessing infocomm to add value to the economy and society

80,000 additional jobs

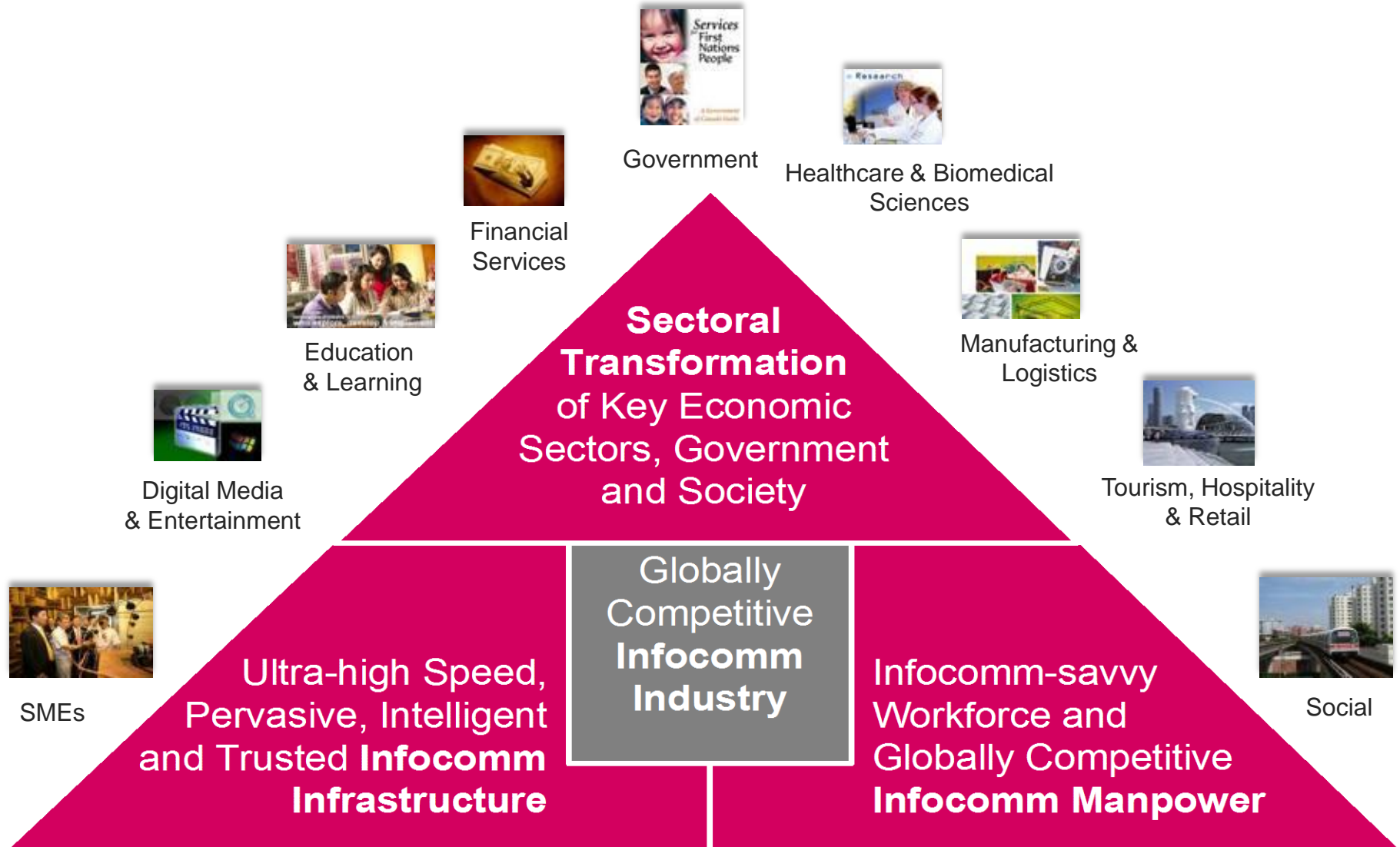
2 -fold increase in value-added of infocomm industry to S\$26 billion

90% broadband usage in all homes

3 -fold increase in infocomm export revenue to S\$60 billion

100% computer ownership in homes with school-going children

iN2015 Strategic Thrusts



ICT Infrastructure: Wireless@SG

- Free Wi-Fi access till 2013
- 7,500 hotspots
- 1.8 million unique subscribers
- Centralised Location-Based Engine from 2010

THAM YUEN-C trawls the island for some unusual and lesser-known places where you can surf for free on Wireless@SG

AT THE hawker centre in Tampines Street 11, visitors can tuck into a plate of chicken rice for \$1.80 – and surf the Net for free.

The town centre with 225 stalls and shops is one of a growing number of places in the heartland where people can expect to use the free Wireless@SG service, a government initiative meant to get people here surfing the Internet.

"So it is \$1.80 for chicken rice with free Wi-Fi. That is added value for their customers," quipped Ken Chua, chief executive officer of iCell, one of the three private Wi-Fi service providers here which are extending the free service at the usual cafes, fast food joints and libraries to more quickly surf turf.

The Sungei Buloh Wetland Reserve, the blood bank and even the toilets at East Coast Park are some of the out-of-town hotspots.

Howe surf turf
The push is part of a step-up to get Singapore wirelessly connected.

In June this year, the Government announced that it was pumping in another \$9 million to give the Wireless@SG service a boost: It will be extended for another four years and surfing speeds will also be bumped up from 512Kbps to 1Mbps by September.

The combination of Government subsidising the service for consumers who get it for free.

"We balance the free service with the paid service for businesses so it is more sustainable," said Ken Chua. "In the end, we want more people to join in the fun."

yuenc@sgph.com.sg

between the Government and three Wi-Fi service providers which comprise QMax, SingTel and iCell. The cost of the network is shared among all parties. In 2006, the Government pledged \$100 million for the project.

To date, 1.3 million people have signed up for the free service. On average, 35 per cent of people who use Wireless@SG spend more than 3.6 hours a week online.

New revenue source
Both QMax and iCell have said they will increase coverage in town centres and suburban shopping malls.

iCell, for instance, has blanketed hawker centres in Marine Parade, Bedok and Heng Road (near the Paya Lebar MRT station).

A SingTel spokesman also said it would provide the service in areas where there is demand, including the heartland.

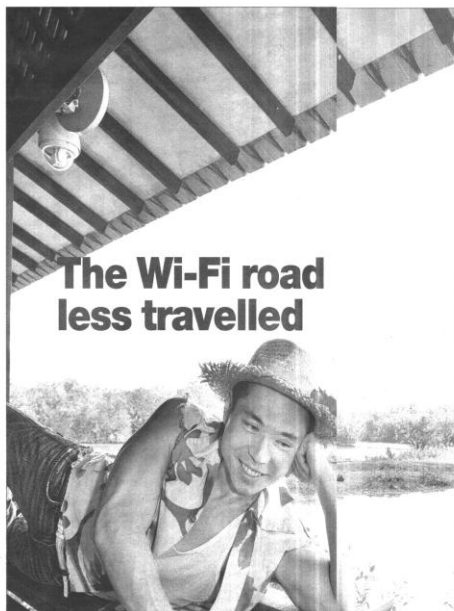
As the reach spreads, businesses are also continuing on to providing value-added services.

At the Tampines Street 11 hawker centre, for example, the wireless network also supports cashless payment terminals which the shops and hawker stalls are using to allow people to pay with e-link cards.

This means that the three Wi-Fi providers can derive revenue from the network, which goes towards subsidising the service for consumers who get it for free.

"We balance the free service with the paid service for businesses so it is more sustainable," said Ken Chua. "In the end, we want more people to join in the fun."

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Six quirky places to surf

1 Sungei Buloh Wetland Reserve (main picture)
Where: Neo Tiew Crescent

Not all areas of the Sungei Buloh Wetland Reserve are covered by the free Wi-Fi network. However, there is a little hut – Main Hide 1A – where you can get Wireless@SG signals.

Located right at the entrance to the reserve, after the welcome area, the shady hut is where you can sit on high benches and surf while gazing into the mudflats frequented by migratory shorebirds.

Some of the species you can spy include the White-throated Kingfisher, the Pacific Swallow and the Little Egret.

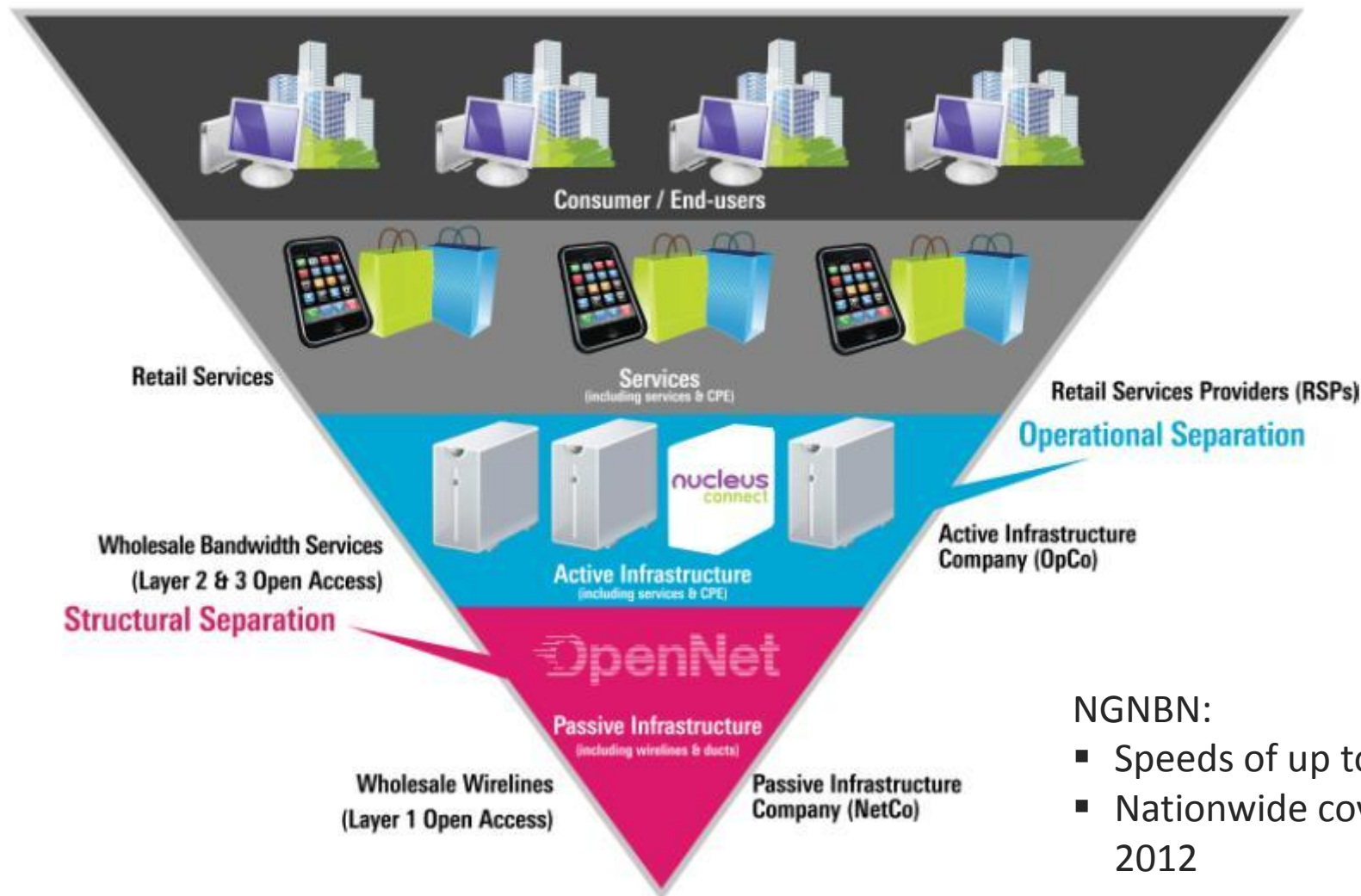
Apart from going online to find out more about our feathered friends, park visitors can also post pictures of the birds on their favourite photo sites. There are lots of little bugs and critters though, so do slather on insect repellent.

Another area where you can receive Wireless@SG signals is the Aerie Tower. A 20-minute track from the entrance, the 18m tall tower gives a panoramic view of the nature reserve with views of Jolene Bahru.

A word of warning: Outdoor hotspots are more prone to failures because bad weather can disrupt the supply of power needed by the wireless routers. So you might not want to make that trek to the tower with a mission to surf. Rather, just enjoy the view.



ICT Infrastructure: NGNBN Open Access Model



NGNBN:

- Speeds of up to 1 Gbps
- Nationwide coverage by 2012

Enabling Next-Generation Innovative Services



Interactive video services



Telemedicine



High-definition video conferencing

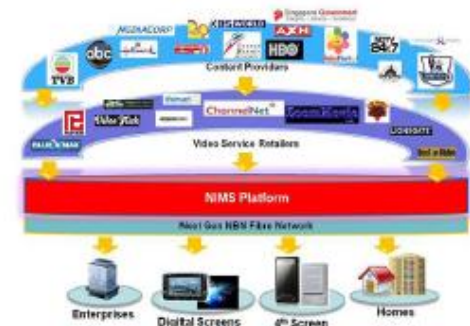


High-definition video surveillance



Immersive learning

Next Generation Interactive Multimedia Applications & Services



Sectoral Transformation: Geospatial applications

SG-SPACE improves policy planning, decision-making & delivering services

Public Sector Apps

Desired Outcomes: A more integrated Government, informed policy planning, enhanced responsiveness & improved citizen services



Emergency
Planning



Educational &
Research



onemap.sg



eServices

Integrated & Synergistic Use of Data by Government

to deliver applications & services for government, enterprises & community

For Policy Planning, eg
• Economic Development
• Transport Planning
• Urban Planning

For Decision Making, eg
• Education
• Environment
• Health

Delivering Community
Services, eg
• Emergency Services
• Social Services
• Water & Sanitation



Private Sector Apps

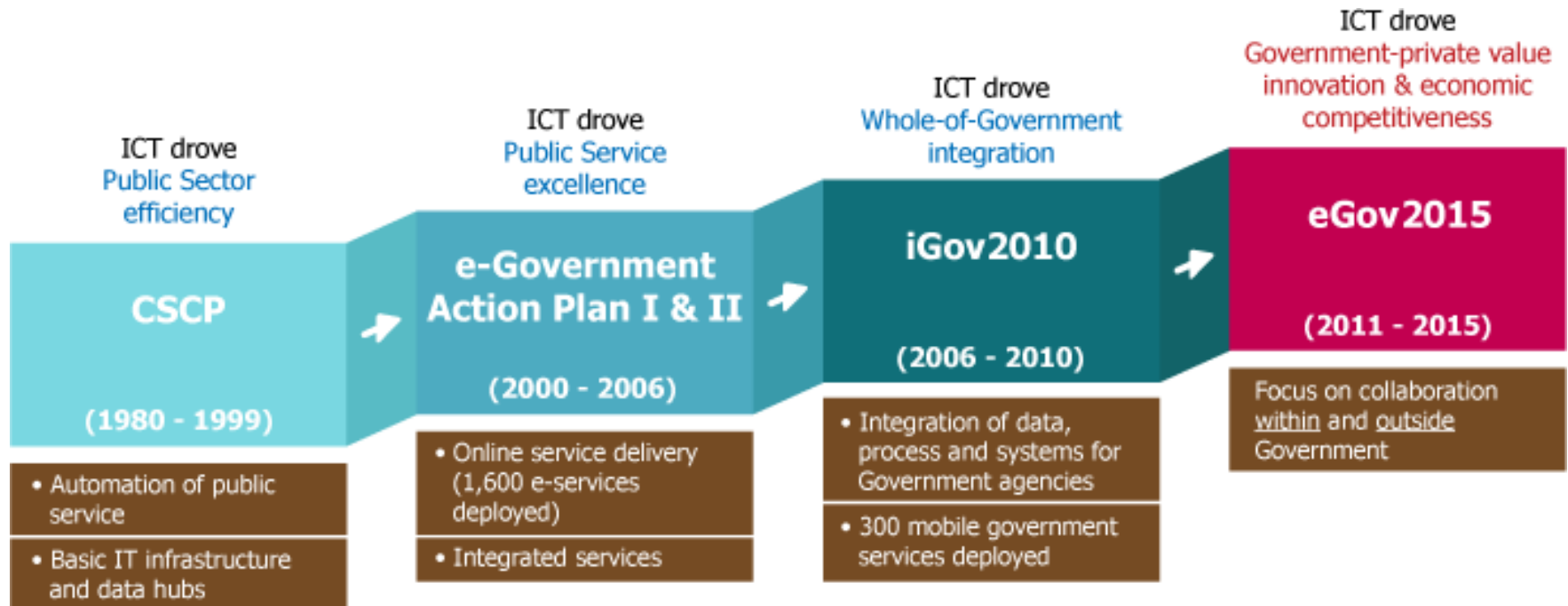


i-Singapore

Encourage Private Sector to
participate in developing
innovative services



Sectoral Transformation: eGovernment Journey



CSCP denotes Civil Service Computerization Program

Sectoral Transformation: eGov2015 – Collaborative Government

Our Vision: To be a Collaborative Government that Co-creates and Connects with Our People

eGov2015 is about **building an interactive environment** where the Government, the private sector and the people work together seamlessly, through the enabling power of Infocomm technologies.

The **vision of a Collaborative Government** will be achieved through 3 strategic thrusts, namely:

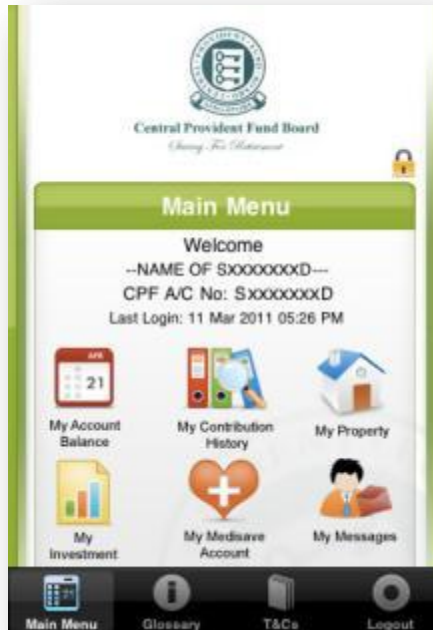
- Co-creating for Greater Value
- Connecting for Active Participation
- Catalysing Whole-of-Government Transformation





mGov@SG – Mobile Services

CPF Statements (Social Security)
at your FingerTips



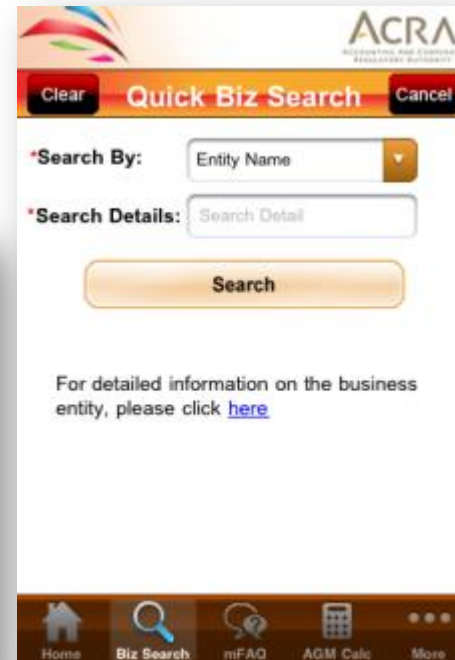
Available on App Store

Find Your Way with
MyTransport.Sg



<http://www.mytransport.sg/>

Business Info
In Your Pocket



Available on App Store

Locate 3,000
Healthcare Services



Available on App Store

Data.gov.sg

The screenshot shows the Data.gov.sg website. At the top left is the logo 'data.gov.sg' with the tagline 'discovering data, inspiring ideas'. To the right is the 'Singapore Government' logo with the motto 'Integrity • Service • Excellence' and links for 'Contact Us', 'Feedback', and 'Sitemap'. Below these is a search bar and a 'Search' button. A navigation bar contains links: 'ABOUT US', 'DATA CATALOGUE', 'APPLICATION SHOWCASE', 'FOR DEVELOPERS', 'NEWS & EVENTS', 'FAQ', and 'USEFUL LINKS'. There is also a 'ShareThis' button. The main banner features the 'APPVENTURE CHALLENGE' by IDA, stating 'The competition is now closed. Stay tuned for results!'. Below the banner is a search bar labeled 'Search Data Catalogue' and a 'Search' button. There are also links for 'Search Filter Options' and 'Browse This Catalogue'. The page is divided into three columns: 'Application showcase' with three items (Weather@SG, Property Market Information, iTraffic@SG), 'Most viewed dataset' with a list of five datasets, and 'Most common data keywords' with a word cloud including 'business expectations cluster', 'industry manufacturing price index', and others. The footer contains 'Privacy Statement', 'Terms of Use', 'Last updated on 06 Jun 2011', and 'Copyright 2011 Government of Singapore'.

- First-stop portal to discover publicly-available government data
- Access to > 5,000 datasets from over 50 agencies
- Catalyst for development of innovative applications

Singapore Government Online

Under One Roof Many Agencies, One Government



>1,600 e-services

- **100% of all feasible e-services already online**
- Single identification & password to transact with Government **SingPass**
- Citizens can subscribe to receive personalised alerts: e.g SMS/email - library books due, road tax renewal

>300 e-services on mobile phone

- > 140% mobile penetration rate
- > 500,000 transactions/mth

www.gov.sg: Under One Roof according to customer segments:

1. Government
2. Citizens & Residents
3. Businesses
4. Non-Residents

Government-to-Businesses (G2B) portal

www.business.gov.sg

EnterpriseOne Singapore

One-Stop for Businesses

- Access Commercial Registration, Business licensing and other G2B services
- Information on government grants, loans and other forms of assistance
- Laws and regulations regarding industry of business
- Useful information surrounding the lifecycle of a business from starting up, operation to exit strategies



Business Registration and Licensing



Biz-File

- Online business filing and registration
- All legally prescribed business & statutory company forms
- Multi-award winner
- From 3 days to within 2 hours

ACRA's e-filing system (BizFile) was featured in the World Bank's publication titled "Celebrating Reform 2008" as a case study. The book was launched in Washington DC in July 2008 by the World Bank and USAID.



Online Business Licensing System (OBLS)

- Online single integrated license application
- 80 licenses across 17 govt agencies
- Up to 90% reduction in processing time
- Up to 50% reduction in data entry



The
Computerworld
Honors Program
Laureate 2007
'Government'



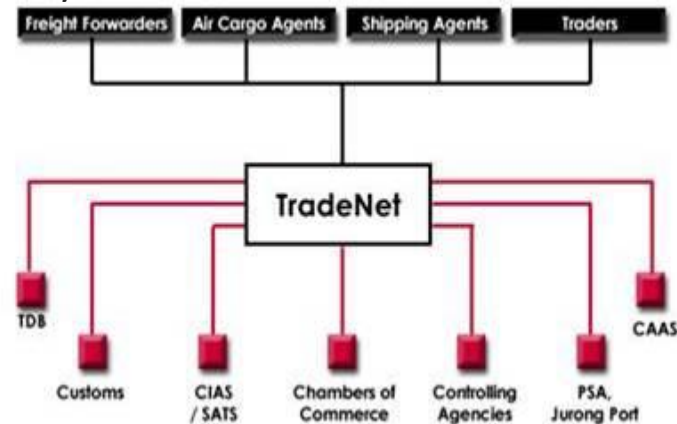
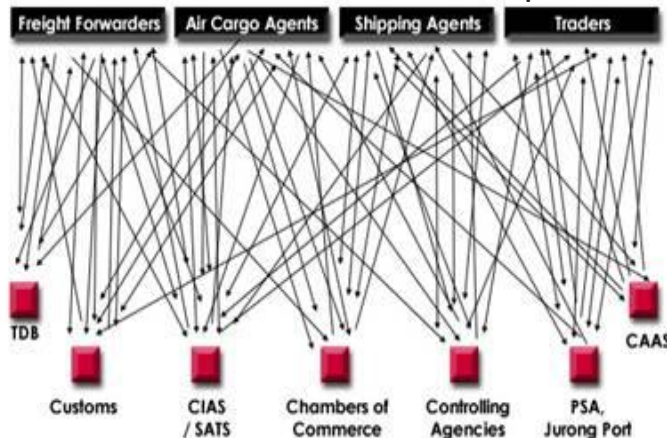
UN Public
Service
Award
2005

TradeNet®

World's First Solution : TradeNet

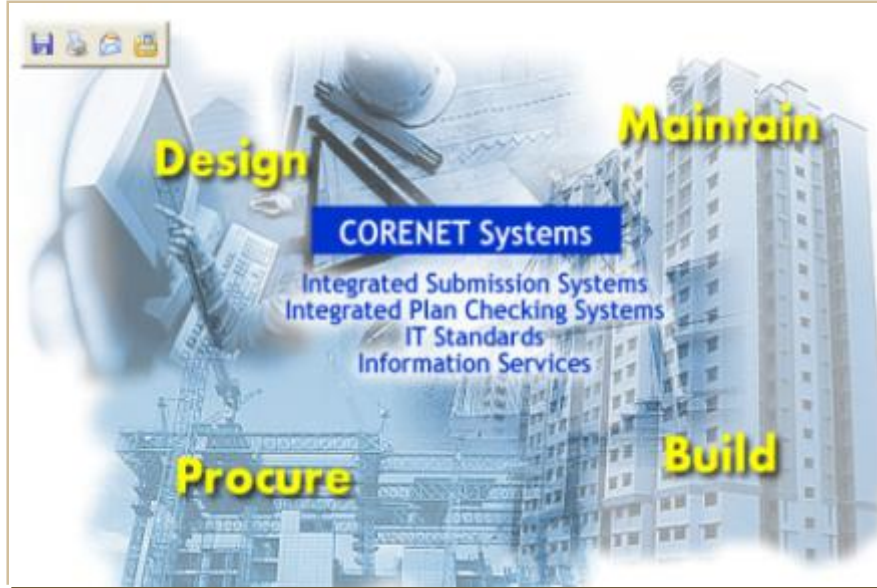
World's first nationwide trade clearance system

Implemented: January 1989



	Before TradeNet	After TradeNet
Processing time/permit	2 – 7 days	Within 2 minutes
Documents Processed	Up to 10,000 per day	Up to 30,000 per day
Number of documents	3 – 35 docs	1 doc

CORENET: Construction e-Permits

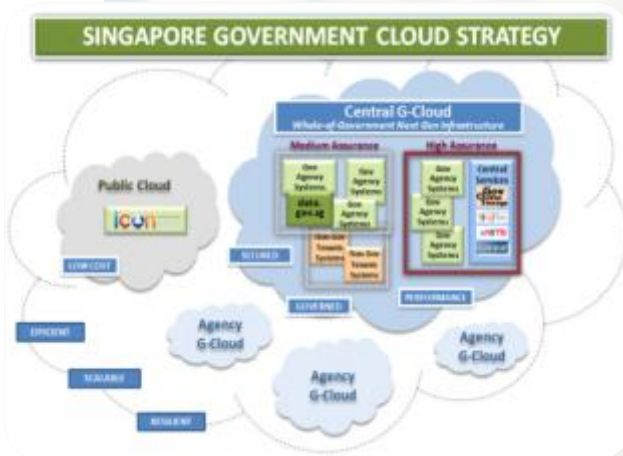


- E-Submission system to regulatory authorities for approval:
 1. Planning approvals
 2. Building plans approvals
 3. Structural plans approvals
 4. Temporary occupation permit
 5. Fire safety certificate
 6. Certificate of statutory completion
- Re-engineered the business processes of the construction industry
- Estimated savings of S\$160m a year for the industry
- Reduced building permit processing time from 102 days to 25 days

Cloud Computing for Government

A resilient and secure next-generation infrastructure for the public service

Harnessing the power of cloud...



Analytics in Government



Improve Corporate Performance Management



Enhance Public Service Delivery



Investigate Policy and Programme Effectiveness



Enhance Citizen Engagement

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IDA International

- ▶ IDA International was established to meet increasing international interest in Singapore's experience and expertise in public service infocomm.
- ▶ It serves as the execution arm for public service infocomm partnerships with foreign governments.
- ▶ IDA International applies unique know-how and consistent professional and consulting skills to assist governments achieve their vision and outcomes.

Going Overseas

Common

- Globalization
- Shift demographics
- Urbanization
- Higher level of expectation of government
- Changing medium of communication and feedback
- Climate change

Unique

- Long-term and deliberate planning is a luxury
- Verification of baseline and assumptions are important
 - Infrastructure
 - Title deed
 - Address / Postal code
- Unique and innovation solutions
 - M-Pesa (Kenya)
 - Public Private Partnership

Critical Success Factors

- Whole-of-Government approach
- Governance structure to support multi-agency, cross-agency smart city program execution implementation
- Policies to ensure integration across structural boundaries
- Ability to garner support from the industry and private sector
- Ability engage residents actively and address issues
- Continually strive to remain relevant to citizens and businesses

Thank You

For further clarifications, please contact:

Tan Lark Yang

lark.yang.tan@idainternational.sg

www.idainternational.sg