Singapore Infocomm Industry Development

Presented by Mr Low Aik Lim, Deputy Director, Enterprise Infocomm

16 Dec 2009
Agenda

> Singapore’s Infocomm Landscape
> Infocomm Industry Development Strategies
> Industry Development Framework
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Singapore’s Infocomm Landscape
## Singapore

<table>
<thead>
<tr>
<th>Category</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land Area</td>
<td>710.2 sq km</td>
</tr>
<tr>
<td>Population</td>
<td>4.987m</td>
</tr>
<tr>
<td>Labour Force</td>
<td>3.271m</td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>2.2%</td>
</tr>
<tr>
<td>Turnover Rate</td>
<td>2.8%</td>
</tr>
<tr>
<td>Literacy Rate</td>
<td>96%</td>
</tr>
<tr>
<td>% Secondary &amp; Higher Qualifications</td>
<td>89.6%</td>
</tr>
<tr>
<td>Mean years of Schooling</td>
<td>9.7 yrs</td>
</tr>
</tbody>
</table>

*Source: Official statistics obtained from the Ministry of Manpower, Singapore Department of Statistics and the Ministry of Trade and Industry, October 2009*
About Singapore

Infocomm Statistics

- Home Broadband Penetration: 99.9%
- Business Broadband Adoption: 65%
- Mobile Phone Penetration: 131.7%

The infocomm industry
- Significant GDP contributor
- Growth driven by tapping Asia demand

Exports comprise two-thirds of industry revenue

Infocomm industry contributes ~6% GDP

Source: IDA Annual Infocomm Industry Survey
Total Infocomm Industry Revenue by Segment (2008)

- Hardware: 15%
- Software: 15%
- Telecommunications services: 2%
- IT services: 17%
- Content services: 51%
Steady Growth of Infocomm Manpower

Year

1989 1999 2008

Infocomm Manpower

36,940 92,800 139,000
## International Rankings

<table>
<thead>
<tr>
<th>Ranking</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>World Economic Forum (WEF) Global Information Technology Report (GITR) Ranking</td>
<td>2nd</td>
<td>1st</td>
<td>2nd</td>
<td>3rd</td>
<td>5th</td>
<td>4th</td>
</tr>
<tr>
<td>World Economic Forum (WEF) Global Competitiveness Index (GCI) Ranking</td>
<td>7th</td>
<td>5th</td>
<td>8th</td>
<td>7th</td>
<td>5th</td>
<td>NA</td>
</tr>
<tr>
<td>International Institute for Management Development (IMD) World Competitiveness Yearbook Ranking</td>
<td>2nd</td>
<td>3rd</td>
<td>3rd</td>
<td>2nd</td>
<td>2nd</td>
<td>NA</td>
</tr>
<tr>
<td>Economist Intelligence Unit (EIU) e-Readiness Ranking</td>
<td>7th</td>
<td>11th</td>
<td>13th</td>
<td>6th</td>
<td>6th</td>
<td>NA</td>
</tr>
<tr>
<td>Economist Intelligence Unit (EIU) Benchmarking IT Industry Competitiveness</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>11th (First ranking released in 2007)</td>
<td>9th</td>
<td>NA</td>
</tr>
<tr>
<td>Accenture e-Government Leadership Ranking</td>
<td>2nd</td>
<td>3rd</td>
<td>NA*</td>
<td>1st</td>
<td>NA*</td>
<td>NA</td>
</tr>
<tr>
<td>Waseda University International e-Government Ranking</td>
<td>NA</td>
<td>3rd</td>
<td>3rd</td>
<td>2nd</td>
<td>2nd</td>
<td>1st</td>
</tr>
</tbody>
</table>

* There are no rankings for that year.
Infocomm Industry Development Strategies
6 National Infocomm Plans and 4 Government Infocomm Plans

- Leveraging Infocomm for Innovation, Integration and Internationalisation
- Unleashing potential of Infocomm to create new values, realise possibilities & enrich lives
- Developing Singapore as global Infocomm Capital, e-Economy and e-Society
- Transforming Singapore into an Intelligent Island
- Extending government systems to private sector e.g. TradeNet, MediNet, LawNet
- Civil Service Computerisation Programme Developing IT industry & IT manpower

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IDA’s Roles

Singapore: An Intelligent Nation, a Global City, Powered by Infocomm

Master planning, project-managing, implementing infocomm systems and capabilities for Government

Develop vibrant and competitive IT and communications industry

Architecting Singapore’s ICT roadmap, planning for key infrastructure, manpower development, security and technological developments

Infocomm Industry Developer

Government CIO

Sector Transformation

People Sector Enrichment

Infocomm Infrastructure

Manpower Development

Infocomm Security

Infocomm Policy

International Engagement

Technology

Corporate Functions

Transforming key people sector clusters & raising the infocomm sophistication of citizens

Spearheading transformation of key economic sectors, Government and society through more sophisticated and innovative use of infocomm
# Industry Development Objectives

<table>
<thead>
<tr>
<th>ANCHOR</th>
<th>GROW</th>
<th>CONNECT</th>
<th>GLOBALISE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhance innovation diversity of Singapore’s infocomm ecosystem</td>
<td>Develop world-class competitive capabilities of Singapore’s infocomm industry</td>
<td>Foster partnerships and alliances within the Singapore infocomm ecosystem</td>
<td>Facilitate the pervasive adoption of Singapore infocomm solutions in the Global Market</td>
</tr>
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Infocomm Industry Development Framework
Market Development
Vibrant Infocomm Ecosystem
**Market Development Initiatives**

<table>
<thead>
<tr>
<th>Research</th>
<th>Product Development</th>
<th>Resellers / Integrators</th>
<th>Users</th>
</tr>
</thead>
</table>

- **1996**: Government Electronic Mail System (GEMS), service-wide email for all.
- **2001**: Government Data Centre – robust, secure and comprehensive infrastructure facility for server hosting by government agencies.
- **2008**: Standard ICT Operating Environment (SOEasy), common Government ICT Environment for public sector.
- **1981**: Institute of Systems Science is established in the National University of Singapore.
- **1986**: The Information Technology Institute is set up.
- **1989**: TradeNet is launched and became first non-US recipient of the 1989 partners in leadership award.
- **1990**: LawNet, providing island-wide broadband access from public places.
- **1996**: Launch of National Computer Board LIUP (Local Industry Upgrading Programme).
- **2006**: Wireless@SG, provides island-wide broadband access from public places.
- **2009**: Next Generation National Broadband Network.

- **1996**: IDA launches ‘Overseas Development Programme’ (ODP) to serve as a key platform for local enterprises to team up with leading infocomm MNCs.
- **1981**: IDA unveils the ‘Infocomm Singapore’ branding.
- **1986**: IDA launches Internationalisation Programme to groom local enterprises to be well-known players in the global arena.
- **1998**: Institute of Systems Science and Information Technology Institute merge to form Kent Ridge Digital Labs to focus on ICT research.

- **1995**: CORENET is launched, providing an integrated environment for members of the construction and real estates sectors.
- **1997**: Singapore ONE, world's first nation-wide broadband network.
- **2006**: Wireless@SG, provides island-wide broadband access from public places.