MALAYSIAN ICT SECTORAL OUTLOOK:
Trends, Challenges and Prospects

The Experience of a New Participant

Shaifubahrim Saleh
President, The National ICT Association of Malaysia

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Geneva, Switzerland
14 - 15 May 2012
PIKOM in Brief:
Voice of ICT Industry in Malaysia

Membership: 1986-2011

- Formed in 1986
- Commands 80% of ICT industry

Wisma PIKOM: 2012

International Affiliations

PIKOM Annual Events

- Digital Lifestyle Expo 2011
- Leadership Summit 2011
- WCG 2011th
- SME 2011
- Charity Golf 2011
- Smart Sourcing Summit 2011
About Malaysia

Population: 28.3 million
Total Fertility Rate (TFR): 2.2 (below replacement level)
Per Capita income: USD7,760 (RM25,866)
Pre-crisis GDP growth: 5.7% (2006-2008)
Revised GDP Growth: 2.0% (2009-2010)
World Competitiveness: 10th position

Unemployment rate: 3.6% (low unemployment)
Consumer Price Index: 2.8% (low inflation)
Literacy: 93.1% (high literacy)

QUALITY POPULATION THROUGH ICT

- Research
- Development
- Innovation
- Knowledge worker
- Knowledge Economy
- Knowledge Society
- Innovative Economy
- Digital Economy
**New Economy Model Proposition: Higher Value Adding / Higher Income Nation**

**LOW INCOME – FACTOR DRIVEN ECONOMY**

- **1980 GNI per capita:** RM1820
- **1980 Household Income:** RM692
- Land, labour and low skills

**MIDDLE INCOME – INVESTMENT DRIVEN ECONOMY**

- **1980 GNI per capita:** RM5406
- **1995 GNI per capita:** RM26,420 (USD8,256)
- **1995 Household Income:** RM4,025 (USD 1,183)
- Until mid 90’s
- Infrastructure, Capital, Factory, Technical Skills and Semi-skilled Workforce

**HIGH INCOME – INNOVATION DRIVEN ECONOMY**

- **2010 GNI per capita:** RM26,420 (USD8,256)
- **2009 Household Income:** RM4,025 (USD 1,183)
- By 2020 GNI per capita
  - 2020 Target: USD21,834
  - 10th MP (2011-2015)
  - USD12,139
- Developed Economy Benchmark: USD14,818
- Info-structure (ICT), science, R&D, knowledge capital, innovation skills, XY Generations, entrepreneurship and globalization

**GNI Per Capita (USD$)**

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<thead>
<tr>
<th></th>
<th>1970</th>
<th>2009</th>
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<tr>
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Next Economic Major Thrust: Endogenous Growth through New Transformation Policy
VISION2020

1 Malaysia

ETP

Government Transformation Programme

GTP

Digital Transformation Programme

DTP

Preservation and enhancement of unity in diversity

New Economy Model: A High Income, Inclusive & Sustainable Nation

Effective delivery of Government Services

Accelerate the Development of Digital Economy; Improve Quality of life

People First and Performance Now

131 Entry Point Projects; 60 Business Opportunities; 8 Strategic Reform Initiatives (SRI)

6 National Key Result Areas (NKRA)

25 Entry Point Projects; 28 business opportunities;


National Transformation Policy Strategies
An Overview:
ICT Policy Strategies in Malaysia
Malaysia’s ICT-related trade and private consumption are driving the Internet’s strong impact on the economy

<table>
<thead>
<tr>
<th>Peers</th>
<th>iGDP Index rank</th>
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</thead>
<tbody>
<tr>
<td>United Kingdom</td>
<td>5.4</td>
</tr>
<tr>
<td>Taiwan</td>
<td>5.4</td>
</tr>
<tr>
<td>Malaysia</td>
<td>4.1</td>
</tr>
<tr>
<td>Japan</td>
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</tr>
<tr>
<td>Hungary</td>
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<tr>
<td>United States</td>
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<td>Germany</td>
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<tr>
<td>India</td>
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<td>France</td>
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<td>China</td>
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<tr>
<td>Argentina</td>
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<tr>
<td>Italy</td>
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</tr>
<tr>
<td>Brazil</td>
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<tr>
<td>Mexico</td>
<td>1.0</td>
</tr>
<tr>
<td>Vietnam</td>
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</tr>
<tr>
<td>Morocco</td>
<td>0.9</td>
</tr>
<tr>
<td>Turkey</td>
<td>0.9</td>
</tr>
<tr>
<td>Russia</td>
<td>0.8</td>
</tr>
<tr>
<td>Nigeria</td>
<td>0.5</td>
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</tbody>
</table>

1 2009. 2 Numbers may not sum due to rounding.

SOURCE: Gartner; Global Insight; OECD; ITU; IDC; WHO; ICD; iConsumer US 2010; Euromonitor; H2 Gambling Capital; World Travel and Tourism Council; PhoCusWright; Pyramid Research; UNESCO; McKinsey analysis

Contribution of ICT GDP mainly comes from private consumption of ICT Products
ITA Played a Crucial Role in the Transformation of Malaysian ICT Sector

**Inflection Phase**

1970 E&E

1994 MSC

2011 IDE

**Knowledge Economy**

**Knowledge Work Force**

**Industrial Economy**

**Industrial Work Force**

**E&E Free Trade Zone**

- The first Inflection Point occurred after the necessary development period following the innovation of the microprocessor. In Malaysia, this resulted in the establishment of a Free Trade Zone (FTZ) in Penang, turning it into a manufacturing powerhouse and earning it the nickname, "Silicon Island." By 2000, manufacturing contributed roughly 40% of the nation's GDP.

**Multimedia Super Corridor**

- The second Inflection Point was precipitated by the convergence of computing, communications, and content in the late 1990s. In order to take advantage of the opportunities arising from this Inflection Point, Malaysia launched the Multimedia Super Corridor or MSC Malaysia in 1996. With the emergence of MSC, Malaysia, the nation became a producer instead of merely being a trader of ICT products and services.

**Innovative Digital Economy**

- The World Wide Web was born around the same time and is now bringing about a third Inflection Point that will create a digital economy.
Selected tax structure

- Generally: 10%-30% import tax and 10% sales tax.
- Electrical circuit boards, integrated circuits and integrated circuit boards dutiable at 30% import tax and 10% sales tax.
- ICs 10% sales tax only. For use in PCs, no duties chargeable.
- Except CD ROMs which are for computer use, video CDs and other CDs are charged 10% sales tax.
- Computer cables are dutiable at 30% import tax and 10% sales tax. Modems require an approved permit from Telecom Malaysia.

Malaysian Experience

- Structural Changes in ICT Sector
- Expanded trade volume
- New jobs created
- New ICT industries emerged
- Demands for new ICT products and services emerged
- Fosters new R&D in ICT sector

ITA Impacts

ITA Benefits to Malaysia
Trend # 1:
Structural changes in ICT Sector
Trend # 2:
ICT Trade grew during industrial era, now declining
Trend # 3:
Share of Computer Professionals are increasing in the ICT workforce

Average annual growth rate of ICT workforce 6.4%

Source: PIKOM estimates from MLFS unpublished records
Trend # 4:
3 out of 4 ICT Graduates employed in ICT User Industries
Trend # 5:
Professional workforce at 13% poised to expand
Digital contents can be created or captured or manipulated in various devices

Digital processes requiring shorter frame of time, cost effective and ease handling

Digital storage requires less physical storage, ease of storage and retrieval and longer shelf-life

Digital distribution easily done, cost effective, globally sharable and targeted mass

Trend #6:
New ICT Products are emerging in line with IDE
Trend # 7: Shifts in mobile communication sector towards cellular products
Trend # 8: Demand for Internet digital media products growing
Trend # 9: Significant Expansion in e-Government Services
Trend #10:
R&D micro-electronics sector poised to introduce new ICT products and services in the market
Key Challenge #1: Supply of quality ICT graduates declining
Key Challenge 2 #
ICT Remuneration still low
<table>
<thead>
<tr>
<th>Broadband Plan Descriptions</th>
<th>Capacity Quota (GB)</th>
<th>Monthly Fee</th>
<th>RM per GB</th>
<th>Download Speed Kbps</th>
<th>Download Speed Mbps</th>
<th>Cost per Mbps</th>
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<tbody>
<tr>
<td><strong>FIXED BROADBAND</strong></td>
<td></td>
<td></td>
<td></td>
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<td>Coefficient of Variation (CV)</td>
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<td>38.4</td>
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<td><strong>MOBILE BROADBAND</strong></td>
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<td>114.4</td>
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Key Challenge 4 #
Highly skewed broadband provision
Challenge # 4:
Lack global competitive edge in broadband leadership
A number of parameters are in place in order for the nation to move up not through infrastructure alone but also through building human capital and harnessing the demands of YZ technology savvy generation

**Challenge #5:**
Meeting ICT demands of YZ technology savvy generation
1. To increase ICT contribution to 17% by 2020;
2. To increase the contribution of ICT Services in trade;
3. To nurture high value adding research, development and innovation activities in ICT segments in micro-electronics, nano-technology, MEMS, bio-informatics, cyber security, cloud computing and mobile commerce;
4. To increase scope and coverage of broadband ubiquity;
5. To expand the scope and coverage of pervasive computing in all spheres of life;
6. To create competent workforce;
7. To create competent and vibrant ICT industry;
8. To create adequate top-notch ICT jobs;
9. To promote green ICT across all sectors of economy;
10. To be globally competitive

Top 10 Aspirations for Malaysia as a member in Information Technology Agreement
THANK YOU