National ICT Strategies

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Agenda

• Why NICTS are important?
• What is a NICTS framework?
  – ICT Policies;
  – e-Readiness Assessment;
  – Benchmarking;
  – ICT Strategies and pathfinder projects;
  – Core Management functions.
• What are the critical success factors?
Why NICTS?

• Elevate the priority for ICT4D;
• Link ICT to the achievement of Country’s National Policies and at a Global level the MDGs;
• Critical enabler for developing countries and small states to fully exploit the benefits of ICTs;
• Citizens and key stakeholders are demanding Government services online;
• Create a roadmap to chart the course for a well orchestrated introduction of large ICT investments;
• Prevent the creation of technology Islands and interoperability issues; and
• Avoids the formation of a “Wide Technical Footprint”.

National ICT Strategy Workshop, New Zealand 12-20 April 2010
National Goals and Development Objectives

- Foundation for the ICT Strategy;
- Drives ICT Policies;
- Defines Government Priorities; and
- Linkages to International Objectives – MDGs.

Millennium Development Goals - 2015

- Reduce extreme poverty (less than $1 us per day) by half;
- Achieve universal primary education;
- Eliminate gender disparity all levels of the education system;
- Reduce under five rate of mortality by 2/3;
- Reduce maternal mortality by 3/4;
- Halt and reduce HIV / Aids and other diseases;
- Ensuring improved environmental sustainability; and
- Building global partnerships for Development.
National ICT Policies

• Defines the National Vision for ICT
• Must be linked to National Goals / Priorities;
• Necessary to obtain Government / Political Buy-In;
• Long implementation timeframes;
• Extensive multi-stakeholder consultations including work groups;
During 2006 the World Bank conducted a study on ICT4D and found that the following thematic areas were identified in National ICT Policies for 40 countries:

1. e-Government 95%
2. Infrastructure 90%
3. e-Education 88%
4. Legal / Regulatory 85%
5. ICT Industry 70%
6. IT HR Development 63%
7. e-Business 58%
8. e-Health 35%
e-Readiness Assessment

• Provides an assessment of the current level of ICT Sophistication
  • Infrastructure
  • Industry Competitiveness
  • Skills Development
  • Legal and Regulatory environment
  • e-Government initiatives underway
• SWOT analysis;
• Utilize international and national recognized indicators – WEF, ITU, World Bank;
• Primary or Secondary Data?
Telephone Lines - Connectivity

### Telephone Lines per 1,000 population

<table>
<thead>
<tr>
<th>Range</th>
<th>Median</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 - 650</td>
<td>105</td>
<td></td>
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</tbody>
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**Region**

- **Africa**
  - 16
  - 2
  - 0

- **Asia / Pacific**
  - 14
  - 2
  - 1

- **Caribbean / Mediterranean**
  - 16
  - 3
  - 5
  - 5
  - 2

Legend:
- 175 or less
- 175 - 350
- 351 - 525
- 526 - 700
Internet Penetration

Internet Users per 1,000 pop.

Range 2 - 559  Median - 39  Average

Africa  Asia / Pacific  Caribbean / Mediterranean

# of countries

- 16 countries with 1 to 5 internet users
- 16 countries with 6 to 10 internet users
- Various countries in different ranges

125 or less
126 - 250
251 - 400
401 - 550
Benchmarking

- Sets a target that a country should strive towards;
- Defines the gap between current and future state;
- Informs the development of a roadmap to move a country towards the future state;
- End state could be visualized which will lead to staff motivation;
- ICT baseline / indicators
  - International Rankings
  - Reference countries
  - Best Practices / Centres of Excellence
National ICT Strategy

- Create a Roadmap to bridge the gap;
- Business case to implement the Strategy;
- Specifies Resource and Funding requirements and sources;
- Procurement of factors of production;
- Pathfinder projects to be implemented to demonstrate progress and build momentum;
- Conduct Extensive stakeholder consultation on strategy to obtain buy in;
- Design and implement an effective Governance structure;
- Create a Monitoring, evaluation and reporting mechanism; and
- Approval and Commitment of Senior Executives.
Funding

- Funding to be considered early in the project;
- Involve funding agencies in the development process;
- Sensitize funding sources;
- ICT sophisticated countries could provide skills, equipment, lessons learned;
- Need to include resource model to sustain the ICT investments;
- Resourcing options – Regional Funding Agencies; bi-lateral agreements; PPPs.
Change Management

1. Establish a sense of urgency
2. Form a powerful guiding coalition
3. Creating Vision
4. Communicating Vision
5. Empower Others to act on Vision
6. Plans for Short-Term wins
7. Continuous Improvement and Sustain Momentum
8. Institutionalize the new Approach
BPR Framework

Impetus for Change

Map Current Processes

Re-Design Processes

Re-Tool

Re-Orchestrate

Prototype

ICT Enablers

Change Management

Communications Management

Governance and Project Management
Airline Reservation System

Old: Manual system; limited scalability; long wait times

- Book Flight
- Phone Airline
- Check Roladex File
- Manually Record Flight
- Write Ticket

New: Massive revenue increase; Automated; immediate response

- Online Transaction
- Sabre Reservation System

• 92% of bookings with first airline contacted;
• AA created algorithm to display AA first on system
Project Life Cycle

Defining
1. Goals
2. Specifications
3. Tasks
4. Responsibilities

Planning
1. Schedules
2. Budgets
3. Resources
4. Risks
5. Staffing

Executing
1. Status reports
2. Changes
3. Quality
4. Forecasts

Delivering
1. Train customer
2. Transfer documents
3. Release resources
4. Release staff
5. Lessons learned

FIGURE 1.2
Critical Success Factors

- Senior Minister as strong Sponsor for the initiative and Champions within each Ministry – Singapore Prime Minister;

- Must be directly linked to National Goals and Development Objectives;

- Involve funding organizations as early as possible in the process;

- Start planning the implementation of the Strategies early in the process;

- Viewed and positioned as a National Development Initiative – not as a Government IT Initiative;

- Broad national engagement involving government, industry, academia and civil society is a must;

- Think big, start small and scale fast – put Infrastructure in first;

- Obliterate before you automate; and

- Robust governance, project management and communication processes.
Thank You