Open, Smart and Inclusive Development: Can Information Technology Transform Development?

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TO BE HONEST, MR. JOBS, THE LAST TIME AN APPLE CAUSED SO MUCH EXCITEMENT AROUND HERE INVOLVED ADAM, EVE AND A SNAKE...
I. Challenges Call for OSI Development: Forces shaping world


- Resources revolution. Environmental challenges.


- ICT: GPT, a techno-economic paradigm shift.
ICT for Smart & Inclusive Growth

- Dramatic decline in information processing, coordination and transaction costs. New agility.

- ICT to maximize returns from globalization. East Asia.


ICT for Open & Inclusive Governance

• ICT for informing, connecting, coordinating, empowering, building communities. Development as a learning process.

• Mobile activism. New Media. Empower CSOs & youth. Perfect storm.

• Interactive mapping & Crowdsourcing--collaborate at low cost, in real time, at massive scale. Distributed problem-solving.

• Mash, aggregate, visualize, engage.

• Analytics. Smart policies, programs, services. M&E
Open, Smart, Inclusive Development: A new model of development?

• Proposed Paradigm: Open, smart, and inclusive development to harness ICT, civil society, entrepreneurship & globalization. OSI ecosystem.

• Open: open economy (trade, FDI, competition, global knowledge); open government (open data, transparent & accountable, collaborative & networked, partnership with business & civil society); open media; open platforms (open source, open standards, open content, crowd sourcing, open innovation); open culture (openness to ideas, tolerance for diversity).

• Smart: client-centered & driven services; innovative enterprises; mobilized minds; flat & net organizations; learning within programs and institutions; evidence-based decision-making; data & KM; sensors & analytics; smart cities & infrastructure & resource management (energy, transport, water, environ.)

• Inclusive: affordable & shared access; ITES & micro-work; mobile & micro finance; G2B & e-business for SMEs; grassroots innovation & crowd-sourcing; e-education & LLL; e-health; e-social programs & protection. SIs & apps dev.
II. Open & Smart Governance: Open government

• Open data to improve public services: increase pressure for performance, support informed choice, enable diverse providers & partnerships, enable localization. E-gov & open-gov interaction

• Creates ecosystems for open governance. Engage citizens, communities, SIs.

• Provide a platform for open innovation, open content, social and economic value creation. Enable others to mine data, build applications. Infrastructure to integrate data from public, business, users & civil society sources.

Resource management

• Managerial flexibility & accountability.

• Expenditure management. Budget tracking. Revenue administration: increase revenue, reduce transaction cost, detect fraud, analytics.

• Mapping needs & resources of poor communities; participatory monitoring of aid projects development results. SIs

• e-GP: open competition, transparency, analytics. Corruption 10% project cost.

• HRM: key resource. e-training, KM.
Policy Making and Oversight Institutions

• Timely info, policy analytics, social media, strategic communications. Collaborative oversight.

• e-Parliament, Mazlendo “eye on parliament”. e-Cabinet. e-Justice.

• Election monitoring. Crisis monitoring. Ushahidi

• Transparency of oversight institutions.
III. Smart and Inclusive Services: Services to Citizens

• Services to citizens: Fertile area. Networks of service providers.

• Access, quality, response, transaction costs, transparency: licenses, permits, certificates, land titles.


• PPPs, choice & competition. Anytime, anywhere mobile delivery. Reaching the marginalized thru SIs

• Augment monitoring & feedback for policy makers & service users.
Services to Business


• e-registration. e-reporting. e-tax, e-GP. Interactive, online.


• Online support & advisory services to SMEs. access to e-GP.

• Participatory regulation: citizen monitoring of government enforcement of regulations.
Cities & Infrastructure

• Smart cities as vanguards of learning, innovation, productivity, and openness. Major users of resources. To spearhead OSI development.

• Decentralization: IFMS for local governments. Localized e-services.

• Smart cities: sensors & analytics for interconnected urban systems. Modeling complex systems for monitoring & policy.

• Smart infrastructures: energy, transport, water, environment.
IV. Smart & Inclusive Growth: IT-enabled Services

- ITES: huge potential. only 10% of $800 b. addressable market being met. Youth & women participation.

- Large and small countries participating: Egypt, Mauritius, Philippines, India.

- Addressing domestic and regional outsourcing needs. Finance, telecom, major users.

- Local content industry: education, health, culture. Local content. Digitization, multimedia. SMEs. User-created content.
e-Enterprise & Finance


• e-business diffusion programs. OECD. PPP

• Smart enterprise: analytics to understand consumers & environment, manage relationships, mobilize talent & intangible assets. Intelligent, agile, resilient.

• Mobile money for micro, SMEs, remittance.
Human Development


• Health: telemedicine, mobile health, R&D, surveillance, drug supply-demand track. Patients electronic records.

Higher Education


• Transparent, performance-based resource allocation within & across HE institutions.

• High wages from ITES. High returns on investment in HE. Demand for quality HE. Virtuous circle.
V. Country Experiences & Lessons: Comparing Country Experiences

• No one size fits all. Respect for socio-political-economic context. Comparative cases as rich laboratories. “One economics, many recipes”.

• Attention to historical, real-world evidence. Learn from successes and failures. Search root causes. Avoid narrow attributions.

• Transformation defies quick fixes. Commitment, persistence & institutions.

• Importance of vision in development policy and practice. OSI.
## Assessing e-Transformation across Countries

<table>
<thead>
<tr>
<th>Country/Criterion</th>
<th>Singapore</th>
<th>Finland</th>
<th>South Africa</th>
<th>Philippines</th>
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<tbody>
<tr>
<td>Integrating into development strategy</td>
<td>H</td>
<td>H</td>
<td>L</td>
<td>M</td>
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<tr>
<td>Coverage, coherence, synergy</td>
<td>H</td>
<td>H</td>
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<tr>
<td>Leading, institutionalizing &amp; engaging</td>
<td>H</td>
<td>H</td>
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<tr>
<td>Balancing central direction with local</td>
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<td>H</td>
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<tr>
<td>Balancing long-term &amp; short-term objectives</td>
<td>H</td>
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<tr>
<td>Innovating, adapting &amp; learning</td>
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<tr>
<td>Balancing ICT as enabler &amp; sector</td>
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<tr>
<td>Emphasizing digital inclusion</td>
<td>H</td>
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**Key:** H = high, M = medium, and L = low rating for each criterion.
The e-Transformation Journey of Singapore

Leveraging Infocomm for Innovation, Integration and Internalisation
- 2010 - 2015
- 2006 - 2010

Unleashing potential of Infocomm to create new values, realise possibilities & enrich lives
- 2003 - 2006

Developing Singapore as global Infocomm Capital, e-Economy and e-Society
- 2000 - 2003

Transforming Singapore into an Intelligent Island
- 1992 - 1999

Extending government systems to private sector e.g. TradeNet, MediNet, LawNet
- 1986 - 1991

Civil Service Computerisation Programme Developing IT industry & IT manpower
- 1980 - 1985

National Infocomm Plans

IN2015
Connected Singapore
Infocomm 21
IT2000

Government Infocomm Plans

eGov2015
eGov2010
e-Government Action Plan III
e-Government Action Plan

Civil Service Computerisation Programme

Civil ICT Master Plans, Source: IDA Singapore
Singapore--evolving model

• Success story despite initial unpromising conditions. Open economy, openness to global knowledge & talent. Committed political and public service leadership. Vision & aspirations. Progressively open political system.


• Open gov: incentivized civil service. Early investment in e-gov, awareness, learning, e-skills, networks, data hubs, open data, change management.


• Intelligent Nation 2015: Innovation, Integration, Internationalization.
VI. Four Fundamentals:
1. Committing to Holistic & LT Strategy

• OSI a strategic response to globalization & technology revolution.

• ICT integrated throughout development strategy. Interactive.

• Long-term perspective. Not technology fix. Balance with Quick wins to sustain journey


• Holistic approach to minimize failure. Invest in ICT ecosystem. Authorizing environment. Soft infrastructure. HR.
2. Promoting Leadership, Institutions & Partnerships

• Transformative leaders: mobilize around vision. Understand stakeholders. Build coalitions. Manage openness.

• Institutions to coordinate policies & investments. QUAD partners: public agencies, business, academia & CSOs.

• Multi-level. Grassroots leadership, institutions & capabilities.

• CIOs as change agents. Innovation officers. Capacity for institutional change, learning & experimentation.

• Form excitement to implementation and sustainability.
3. Pursuing Local Initiative, Innovation, Learning

• OSI as techno-economic paradigm. Disruptive change.


• Innovation funds for collaborative innovation. SIs, SMEs, local govs.

• Continuous benchmarking e-service, e-skills, e-readiness. Metrics.
4. Pursuing Diffusion and Inclusion

• Address various digital divides, early on. Counter digital divide reinforcing other divides.

• Persistence and search for local solutions. Philippines, South Africa & India experiences.

• Frugal innovation fund: co-create with SIs. Livelihood e-strategies. E-innovate for e-rural.

• ICT for pro-poor programs.

• Holistic long-term strategy, leadership & institutions, local initiative & learning, and diffusion & inclusion--a reinforcing process.
Thanks You!

My recent books published by Springer

http://www.amazon.com/National-Strategies-Harness-Information-Technology/dp/1461420857


