

The Use of ICT for Development

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The Use of ICT for Development

- e-Government
- ICTs and the Economy
- ICTs and the Citizen
- e-Digital Futures



E-Government: a thing for all reasons?

- Government-centric
 - e-Govt seen as an EFFICIENCY concept to render government more cost effective
 - Interactive for insiders; focus on procurement
- Citizen-centric
 - e-Govt seen as a SERVICE concept to promote welfare
 - Interactive for the public
- State-centric
 - e-Govt seen as a POLITICAL concept to unify society
 - Information about Govt policies; cultural and ethnic focus, etc
- e-Govt and Development
 - e-Govt seen primarily as a ECONOMIC concept
 - promote and facilitate trade, investment, R&D, innovation and entrepreneurs



E-Government: not so much the technology, more the people and the organization

- Government needs a champion
 - Appointment of a CIO
 - Departments need support as well as cajolment
- For Citizens
 - Web pages for individual departments → common look
 - Integrated site with search engine and meta-tags
 - Information silos → clustered approach, e.g. 'elderly', 'youth', 'work', 'leisure', etc
 - Interactive: online bookings, appointments, waiting lists, applications, payments, complaints, enquiries, etc.
 - Security
- For Procurement
 - Depending upon capex: RFPs, auctions, tenders, etc.
 - Back engine integration with invoicing, billing, payment, etc.
 - Security




E-Government: the message and the medium

- Access
 - By mode: broadband, narrowband, wireless cellular, WiFi, etc
 - ubiquity vs security?
 - By community: special provision for elderly, youth, etc
 - community centres, schools, awareness programmes, etc.
- Ethos: cultural, economic, political, social
 - Serving the citizen
 - Inclusiveness - universal services (geographic, ethnic, social, etc)
 - Uniting the country
 - Increasing participation
 - Informing the public
 - Facilitating the economy



ICTs and the Economy: Globalization and Welfare

- ICTs transform industrial structures
 - Raise productivity and reduce real costs
 - » Lower employment per unit of output
 - » Relocate jobs from low productivity to high productivity *growth* industries, but *growth sectors* may go overseas
 - » Migration raises people out of poverty
 - Facilitate global production networks and supply chains
 - » Globalization = BPO, off-shoring, international restructuring, etc. to reduce costs, closer to markets (information), etc
 - » Relocate jobs
 - Change locus of value along the supply chain
 - » supply chain protected by redundancy (hedge against risk of country, currency, regulation, management, etc.)
 - » value chain protected by (i) trade secrets, and (ii) IPRs



ICTs and the Economy: Globalization and Welfare

- Technologies, not globalization, cause of unemployment?
 - ICT skills retraining absolutely crucial
 - Economic environment for ICTs absolutely crucial
- Each country's 'national innovation system' is unique, but
 - World best practice benchmarks often overlook human and cultural factors
 - NIS require a local 'eco-system' of cultures, skills, laws, information, etc
- NIS require good infrastructures
 - Human: education, laws, 'clean' government, rigorous anti-corruption practices, etc.
 - Physical: roads, telecommunications, schools, power stations, housing, etc.
- But does this say development requires development?
 - How to break a vicious cycle (poverty, corruption, low productivity, lack of investment, poor infrastructure, etc) and start a benign cycle?
 1. Invest in education
 2. Invest in infrastructure (water, transportation, energy and ICTs)
 3. Lower the barriers to competitive market entry



e-Citizensry for Development

- E-citizens are enabled to self-help
 - Youth learn skills, dexterity and how to access information for learning
 - Middle-aged can retrain and offer their own services
 - Elderly can keep informed
- E-citizens are e-literate, therefore part of the NIS eco-system
 - 2 languages: English and/or mother tongue and language of IT
- E-citizens create demand in scale for local e-initiatives in investment and innovation
 - Youth market especially important for consumer electronics market
 - Family market for IPTV, home consumer electronics, etc
 - e-Social services sector of growing importance, e-health, e-education, etc



e-Digital Future

- Technology is digital, is Internet, is Web 2.0 and is now all about ...
 - Processing power
 - » Moore's Law unabated?
 - Broadband
 - » From 'broadband' 144Kbps to 50Mbps/100Mbps/+
 - » Two sided markets: content/services/applications and consumers/users = a business challenge for traditional telecom and media
 - Wireless
 - » 3G and beyond (WiMax/Wibro; OFDM; etc)
 - Convergence
 - » FMC; IPTV; Mobile TV; digital home entertainment systems, NFC, etc.



e-Future for Development is about innovation

- Web 2.0 =
 - P2P (peer-to-peer) – file-sharing, Skype, TVU, etc
 - » By-pass traditional business models
 - Community sites - You Tube, MySpace, etc
 - Search – Google advertising model
 - Wiki – Wikipedia, enterprise wiki's, etc
 - Virtual reality – 'Second Life', etc
- New business models, new supply chains, new value chains, e.g.'s
 - Mobile search and advertising?
 - Cross-selling, bundling, convergence?
 - Content, services and applications creation, aggregation, distribution, etc
- Threats also opportunities, but requires
 - Innovative thinking
 - Receptive environment (eco-system)
- Economic and industrial transformation always involves social and cultural transformation
 - Biggest challenge = inclusiveness and safety-nets (innovative social policy)



The End

Thank You

Any Questions?

