Centre for Applied Studies in International Negotiations (CASIN)

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ICT for Development

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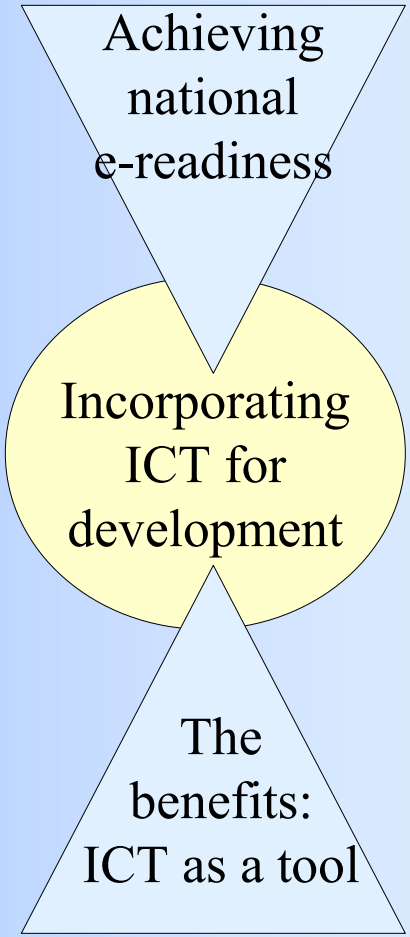
Telecommunication Data & Statistics Unit (TDS)

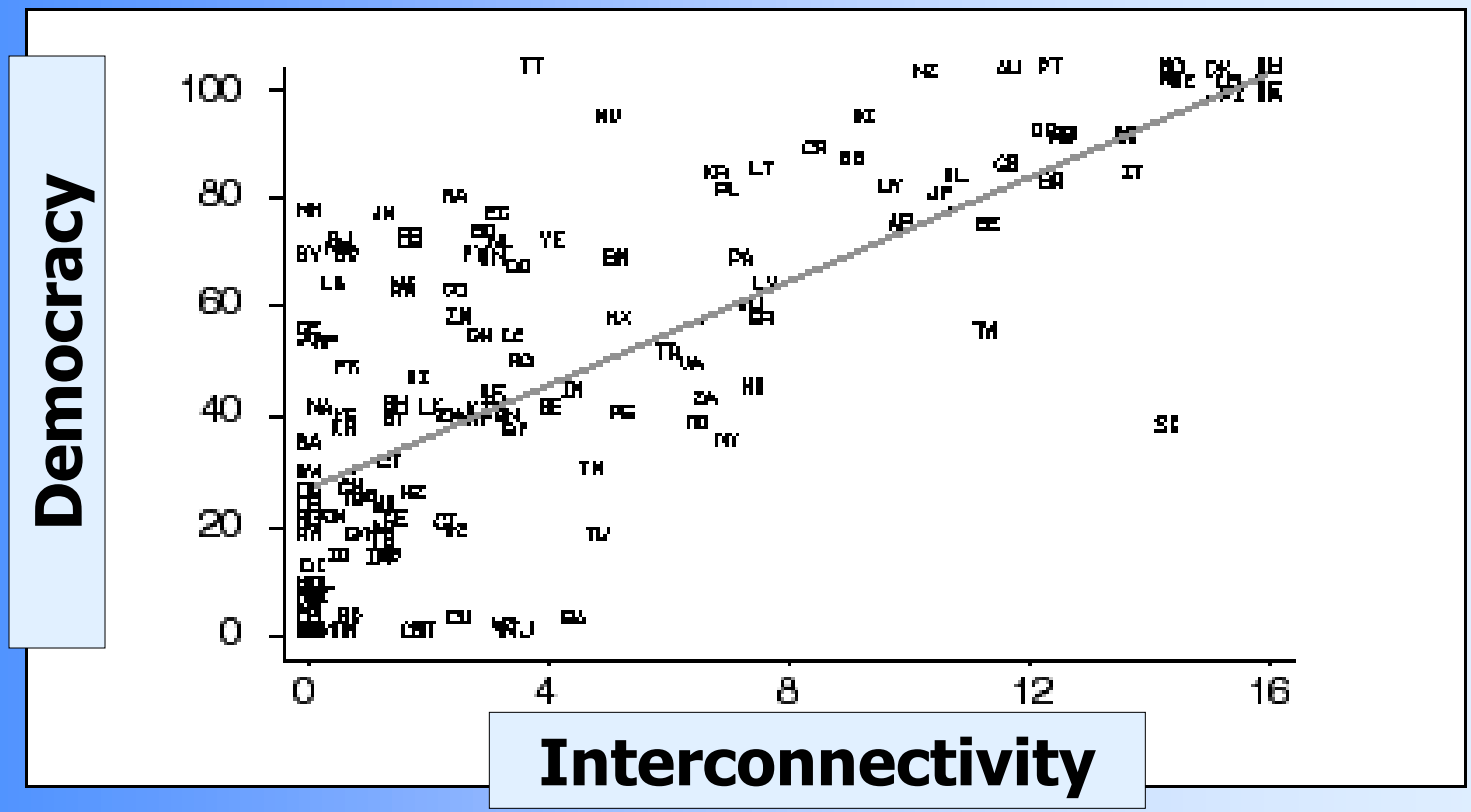
Presentation overview

1. **ICT for Development**
2. **What is the ITU and what does it do?**
3. **Statistics and Analysis, and why it matters**

34. **Lessons learned**



Is it this simple?



Note: The Democracy variable is derived from Freedom House data and the interconnectivity variable is based on data from numerous e-mail networks and measures the number of emails exchanged

Source: RAND, 1997, http://www.rand.org/publications/RGSD/RGSD127/sec4.html

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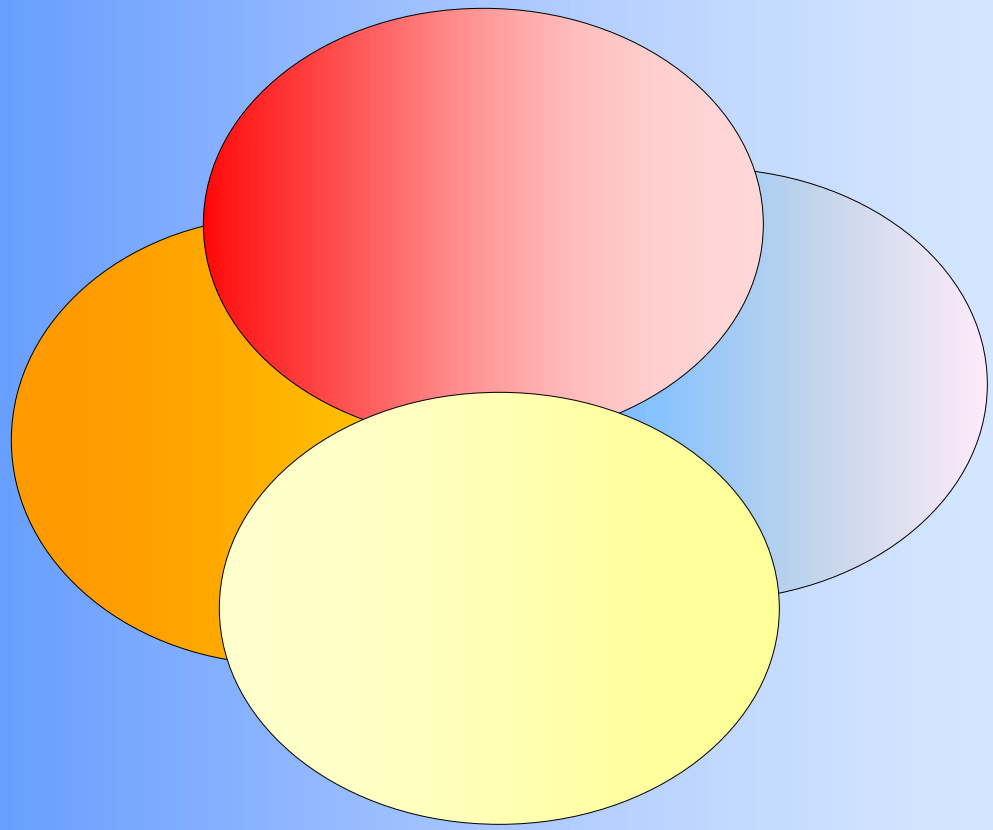
How can ICT promote development?

ICT for development

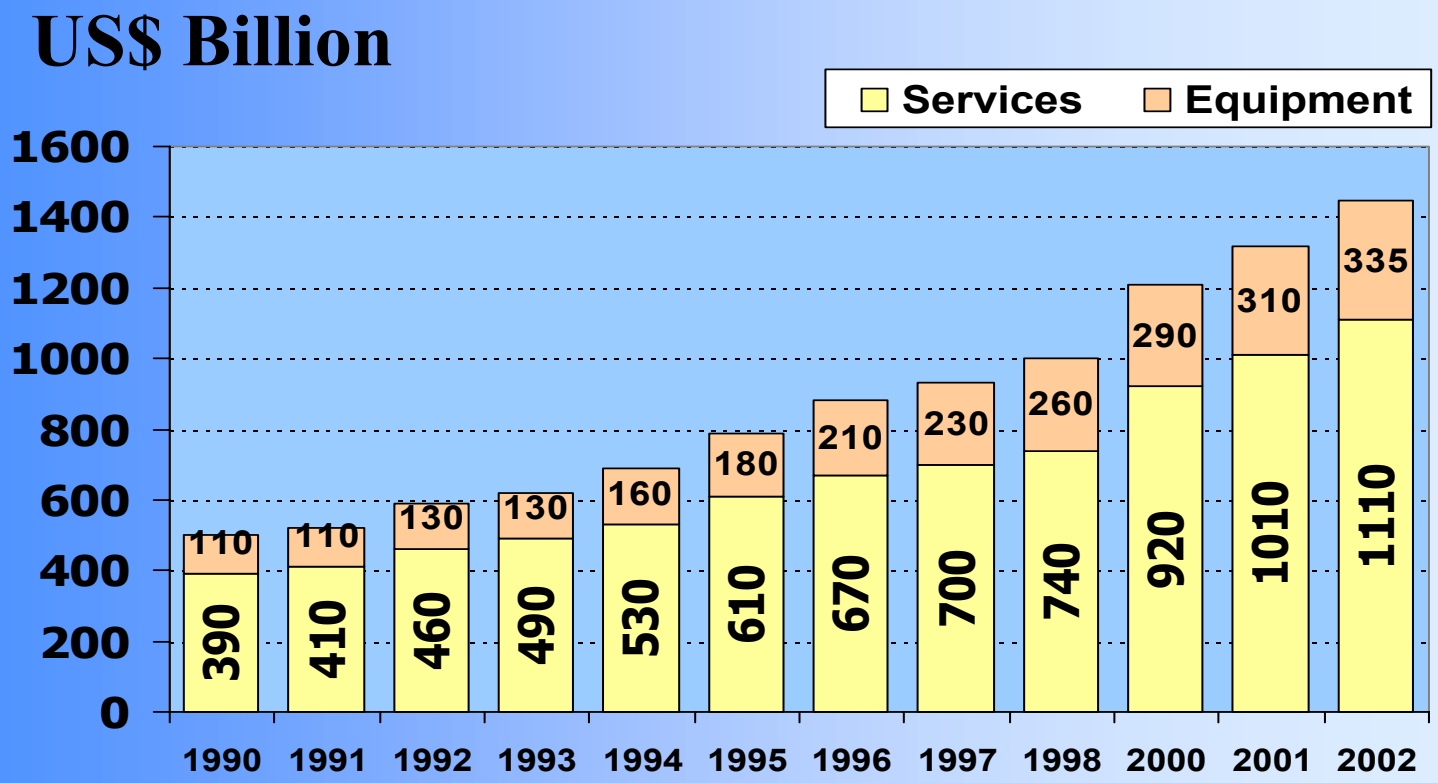


Global economy/Economic trends

Sector	Share of world GDP	Trend
Agriculture	< 10%	↘
Manufacturing	< 20%	↘
Services	>30%	↗
Knowledge economy (ICT)	>40%	↗

Source: World Bank

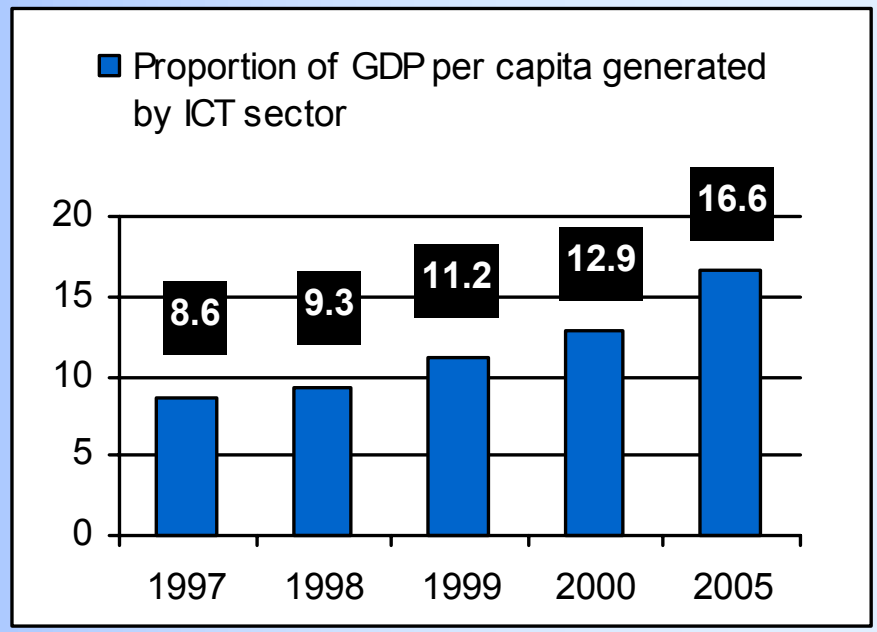
Global Telecom Revenues



Source: ITU

ICT in the economy

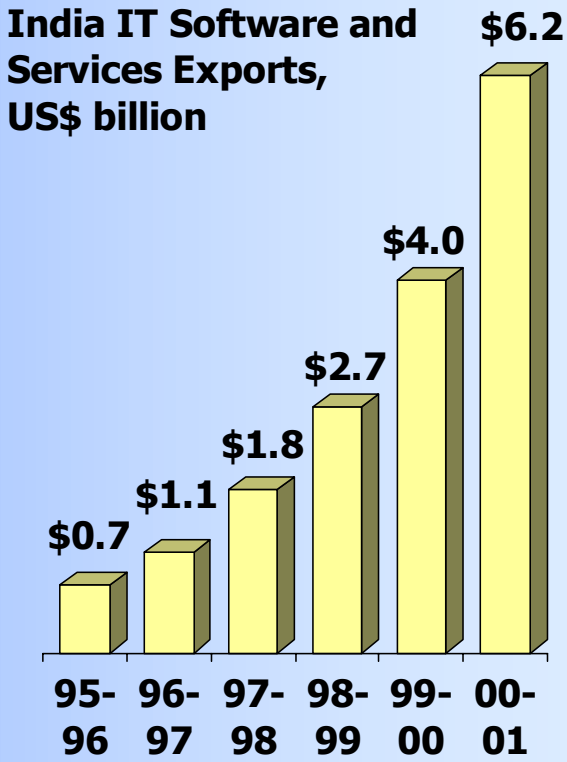
- **The effects of Korea's investment into ICT, and particularly broadband technologies, are remarkable:**
- **Total production has increased from 15 billion Euros in 1991 to 119 billion Euros in 2000. This trend has equally contributed to the country's international trade surplus, which increased from US$ 2.7 billion in 1991 to US$ 15.7 in 2000.**



"The spillover effects of the investment in broadband Internet service on overall industries roughly amount to US$ 7.07 billion to US$ 9.46 billion and has created from 4'900 to 8'300 jobs by 2001": **Ministry of Information and Communication, Korea, 2002.**

ICT as an economic driver

- **Last year India exported some US$ 6 billion of software, equivalent to 14 per cent of its total exports. The Indian software industry employs over 400'000 IT professionals.**



ICT creates better jobs…

- ✓ Many jobs of different levels / skills
- ✓ Higher pay
- ✓ Higher productivity jobs
- ✓ "White-collar" jobs
- ✓ Socially respected jobs
- ✓ Women participation in the workforce

Transparency Accountability Effectiveness	Empowerment and participation
Government ICT are revolutionizing the internal workings and external relations of public administrations ICT help to put countries in the spotlight (human rights abuses, corruption etc)	**Society** Information flows in both directions and gives people a voice to influence policy making and to participate
ICT provide the backbone of collaboration for civil society	

Transparency Accountability Effectiveness

- **Witness.org is a human rights website that supports local activists and uses PCs, imaging and editing software, satellite phones and email to reveal human rights violations to governments and communities**

- **In El Salvador Probidad (www.probidad.org) promotes democratization efforts by using ICT to monitor corruption, mobilize awareness about the complexities and costs of corruption and promote local and context-specific measures to promote good governance**

Transparency Accountability Effectiveness

- **South Africa's Political Information and Monitoring Service (PIMS) aims to promote democracy by providing easy-to-understand summaries of complicated documents and by helping citizens to make submissions to parliament**
- **In Vietnam "Your lawyer" is a CD-ROM with information on citizens' rights, how to start a business, protect land rights and get a divorce. It is distributed to media organizations, and representations in all provinces and peoples' councils.**

Delivery of services

- **The South Africa IT Strategy project (SAITIS) provides Internet access in schools as well as community Internet access points where public information terminals allow citizens to access government online services**

Delivery of services

- **In Estonia and in Hungary the state and local governments have set up rural telecottages to promote education and research in rural areas. Farmers are expanding their access to markets by offering their products online locally. Estonian web designers, some of which live in rural areas, have clients all over the world.**

For more ICT success stories…

ITU's

Information and Communication Technology success factor home page

http://www.itu.int/osg/spu/wsis-themes/ict_stories/index.html

Reminder…
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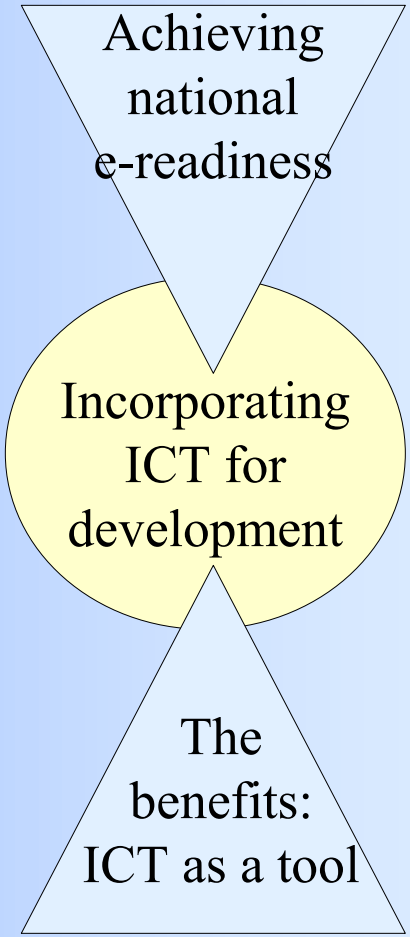
3. **Statistics and Analysis, and why it matters**
4. **Lessons learned**



ITU

- **The International Telecommunication Union (ITU) is the United Nation specialized agency for telecommunications**
- **Founded in 1865, the ITU has 189 Member states and 667 sector members**
- **It is based in Geneva and has 11 regional offices around the world**
- **The three Sectors of the ITU are**
  - Radiocommunication
  - Telecommunication Standardization
  - Telecommunication Development Bureau (BDT)

ITU's purpose

- The ITU is an impartial, international organization within which governments and the private sector work together to coordinate the operation of telecommunication networks and services and advance the development of communications technology
- The International Telecommunication Union is unique among international organizations in that it was founded on the principle of cooperation between governments and the private sector
- Its members include telecommunication policy-makers and regulators, network operators, equipment manufacturers, hardware and software developers, regional standards-making organizations and financing institutions

The World Summit on the Information Society (WSIS)

- **To bring together major players to discuss the changes, the opportunities, and the dangers, emerging from the fundamental global transformation**
- **Participants will include heads of state, executive heads of the UN agencies, industry leaders, non-governmental organizations, media representatives and civil society**

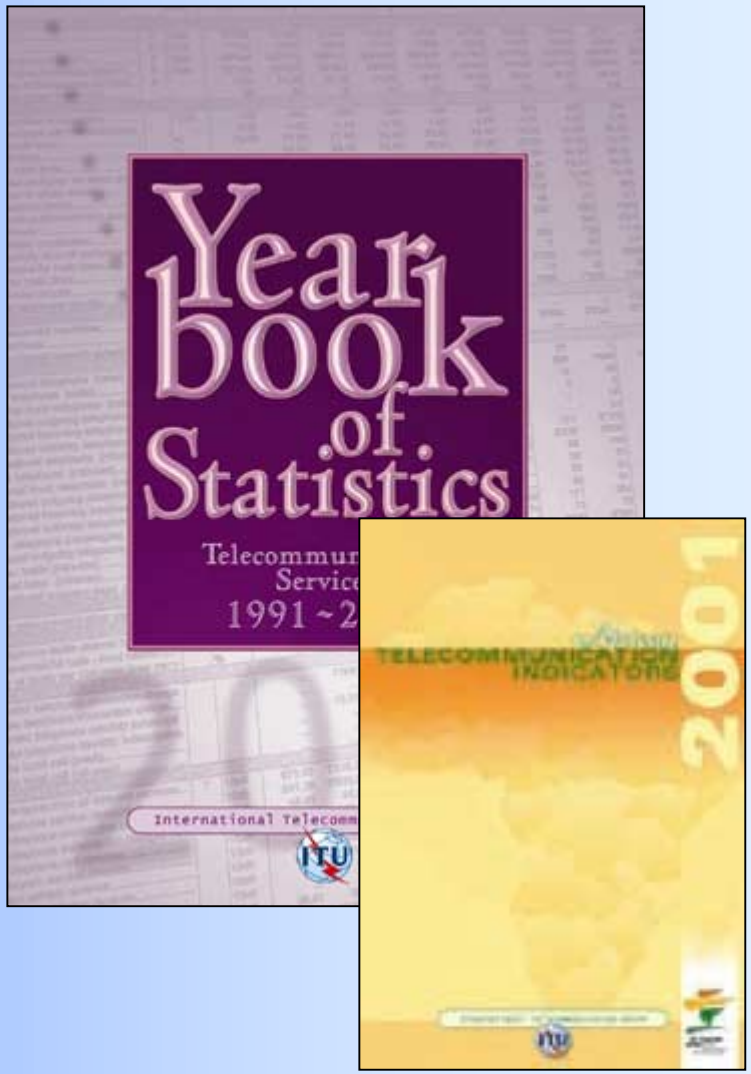
Statistics and Analysis – and why it matters

- As a UN agency the ITU is in charge of producing statistics covering its sector. This activity is part of the global statistical system of the UN
- The Telecommunication, Data, and Statistics Unit collects data for some 200 economies
- Data is collected by means of an annual questionnaire and provided by government ministries, regulators, and telecom operators

Data dissemination

- **World Telecommunication Indicators Database**
- **ITU Statistical Publications**
- **Free statistics**

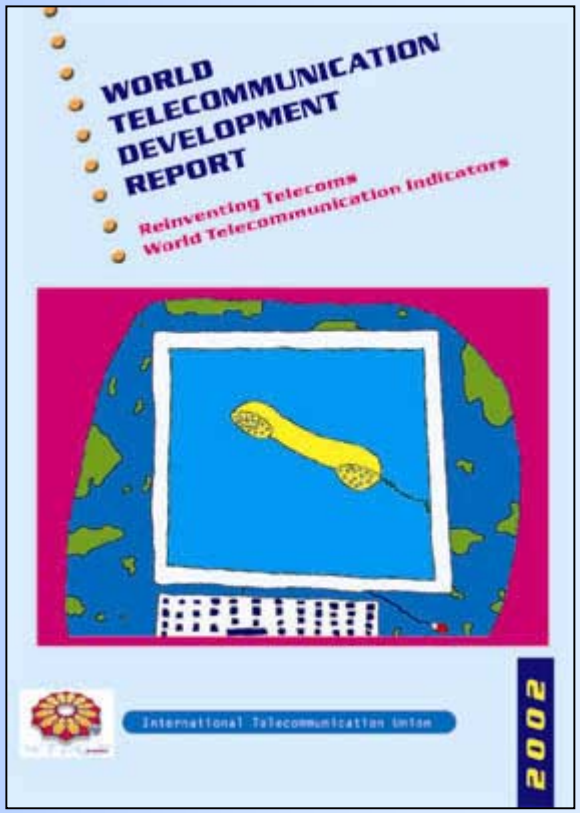
www.itu.int/ITU-D/ict/statistics/



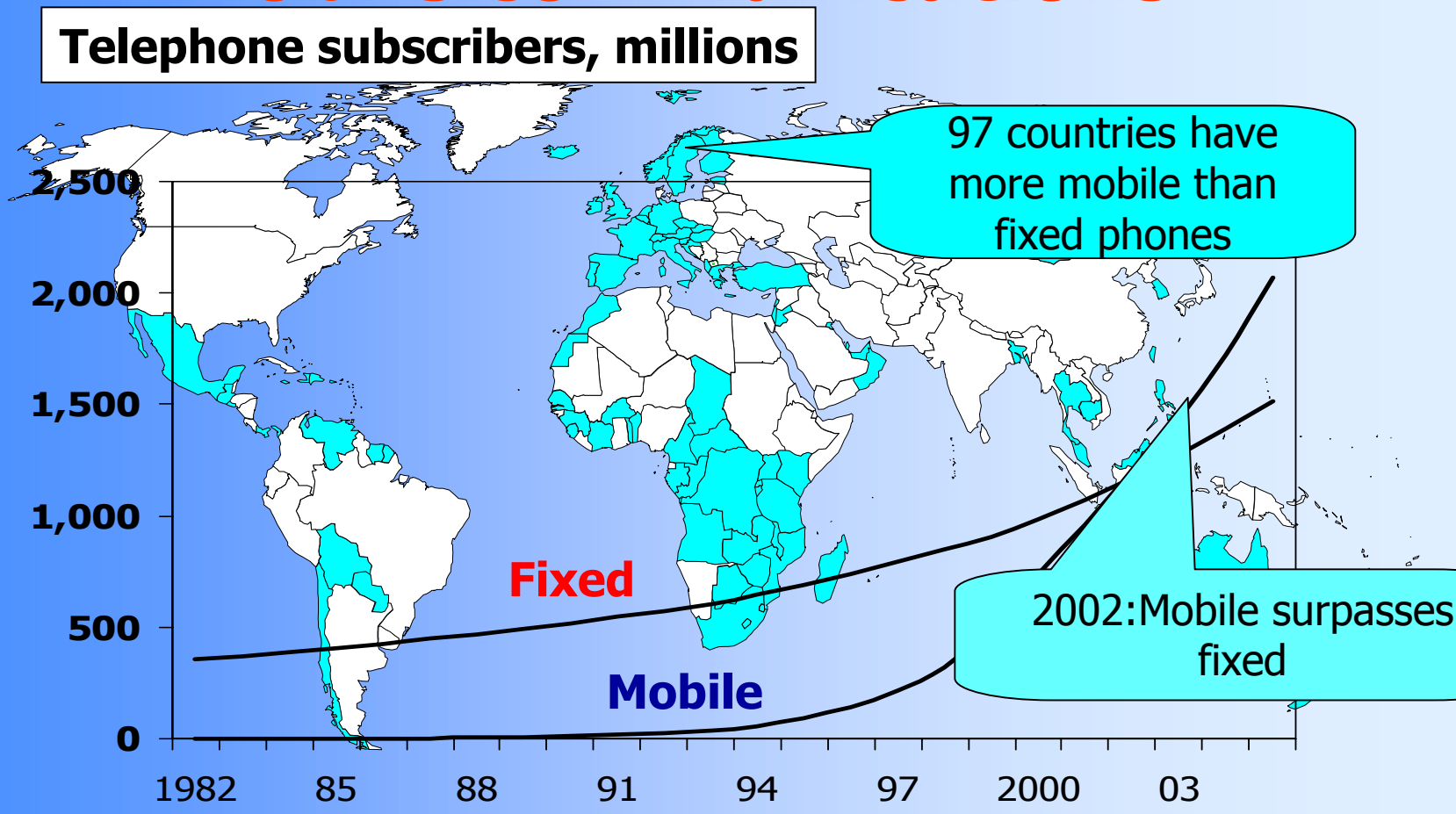
Analysis – using and interpreting the statistics

World Telecommunication Development Reports

- **Analyzing trends and developments**
- **What has worked and what hasn't?**

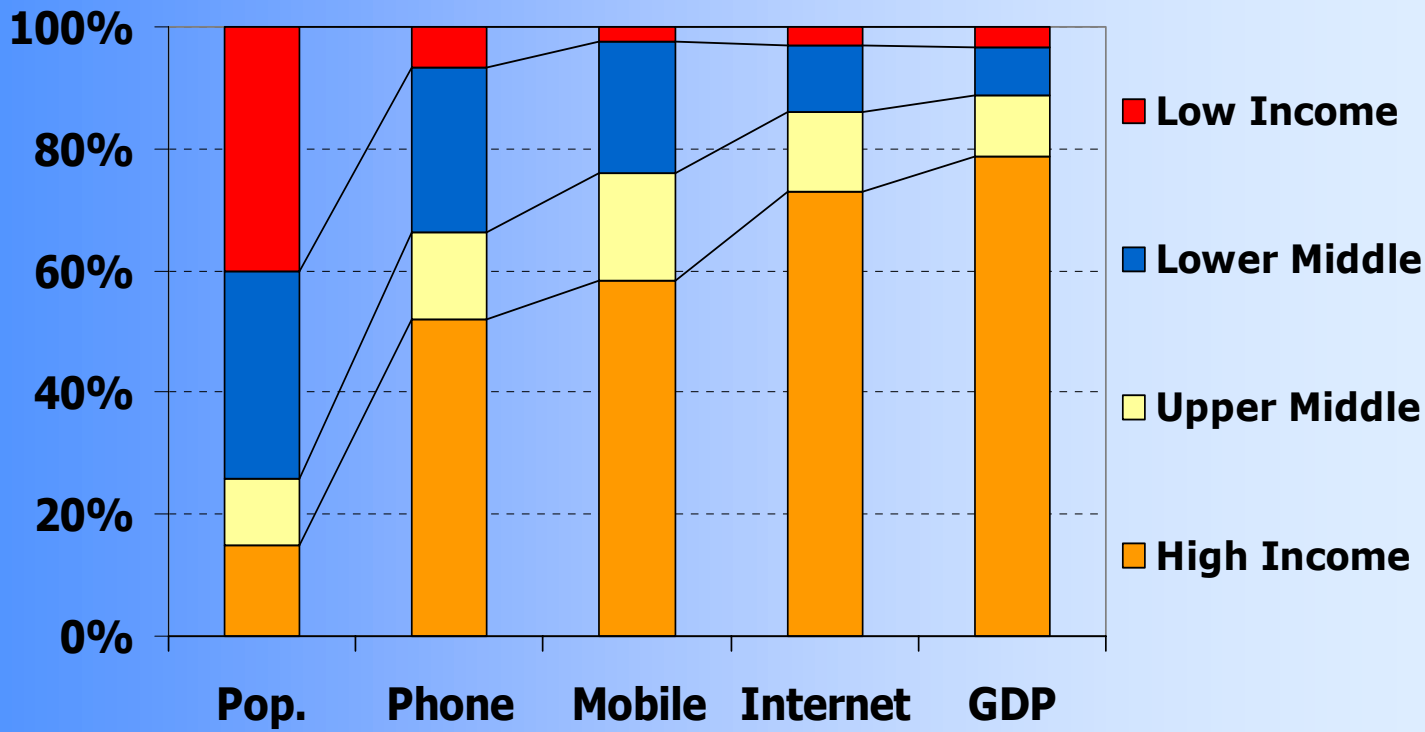


Trends: Mobile communications



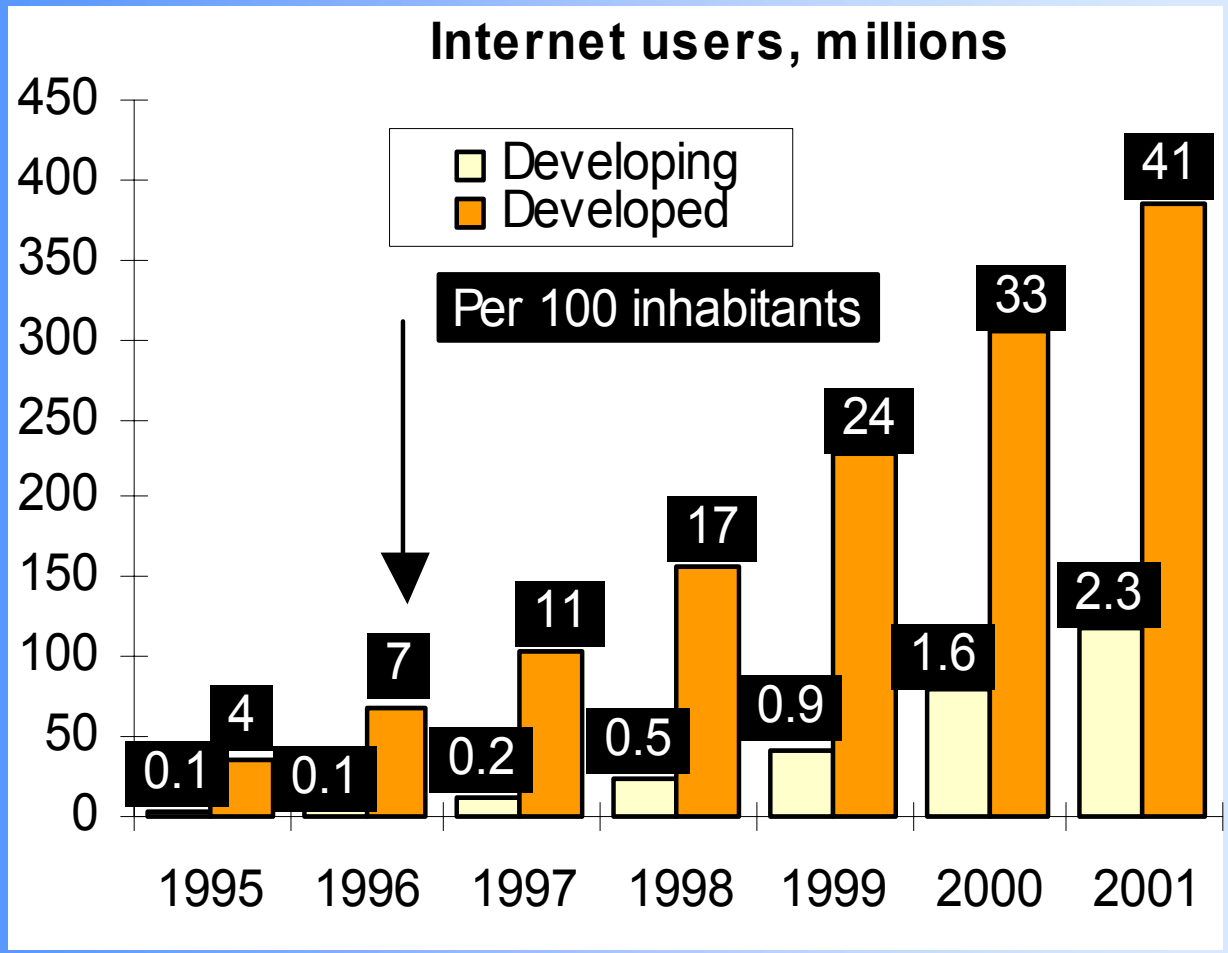
Mobile has raised access to communications to new levels…
policy-makers must look to mobile as a way of achieving social policy goals

Identifying the Digital Divide



Source: ITU

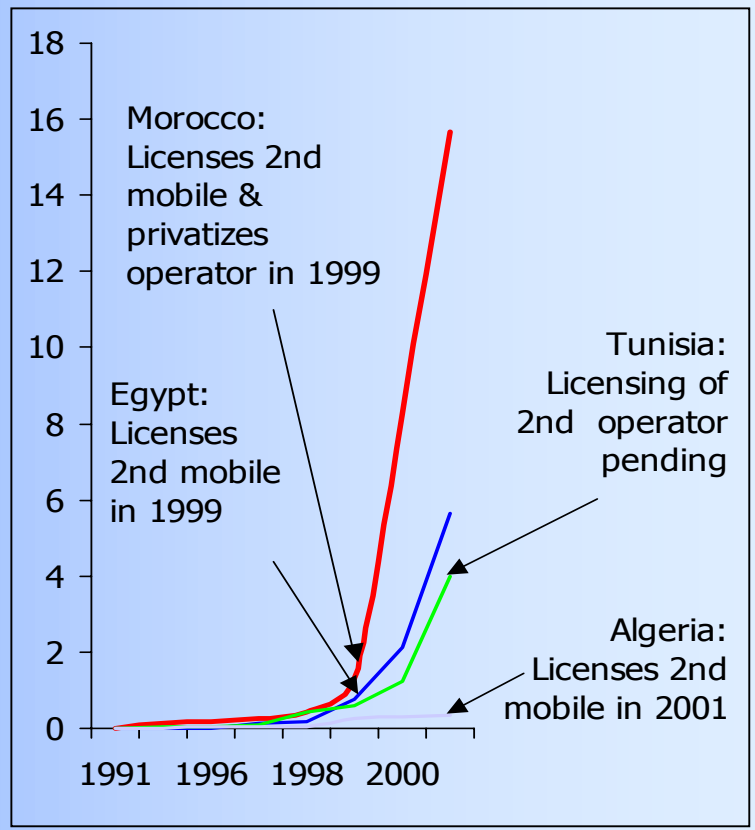
The Internet divide



Source: ITU

Understanding the Divide

- **The difference between fast & super-fast growth is often the quality & timing of reform**



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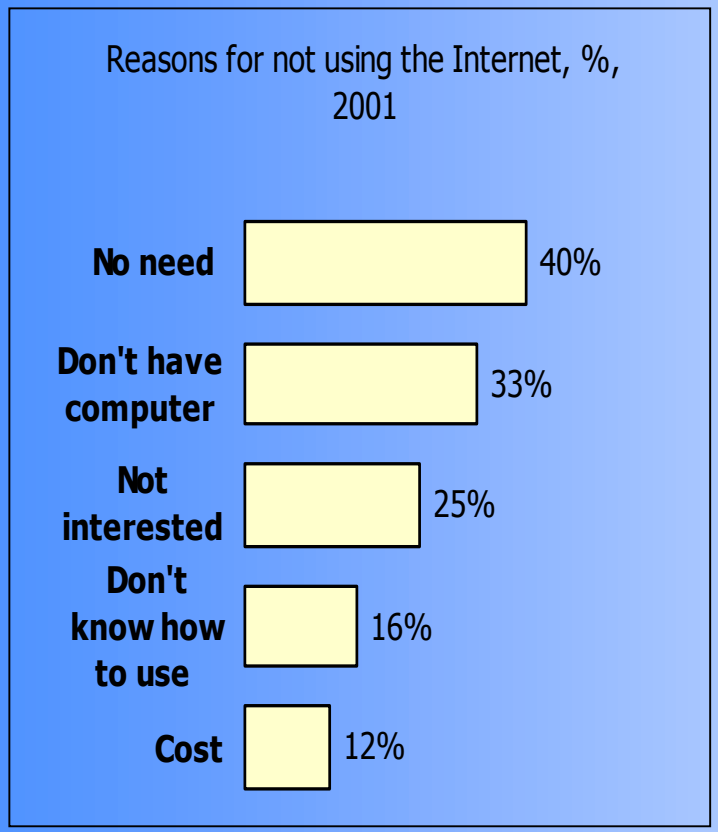
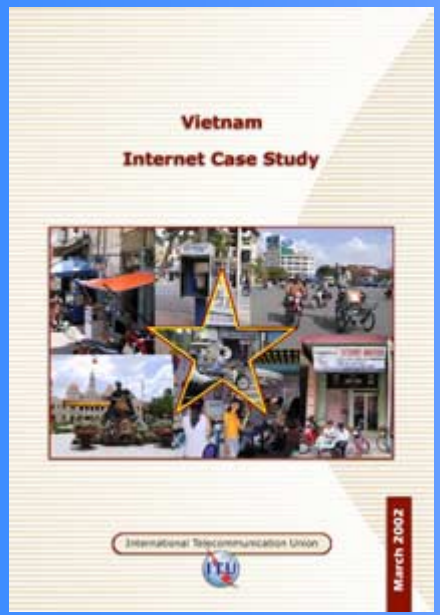
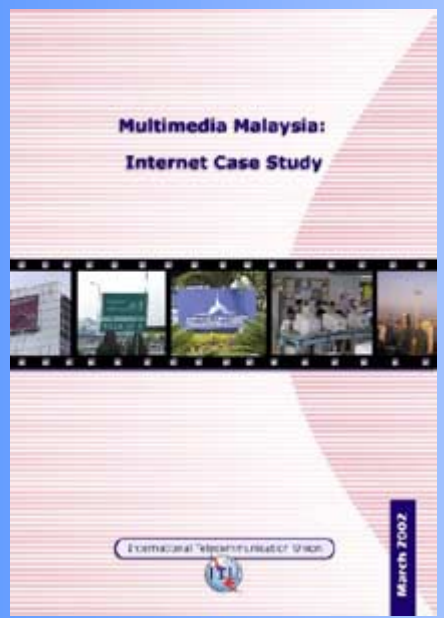


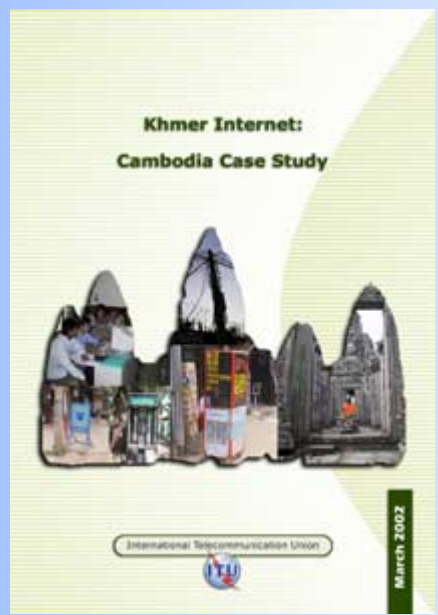
- **Awareness and content are major factors that influence Internet usage**

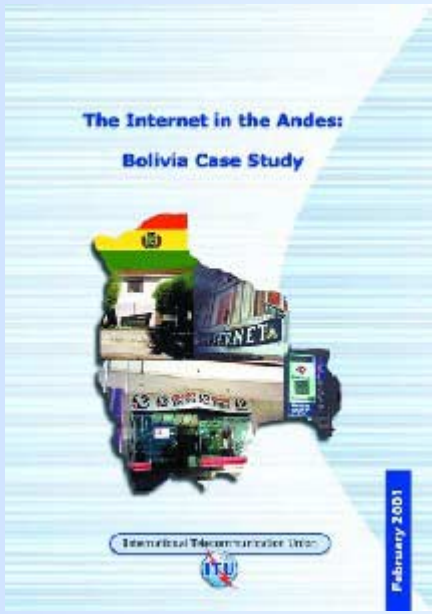
Country Case Studies

- **Launched in 2000 (6 studies)**
- **7 studies in 2001 and 2 studies (so far) in 2002**
  - www.itu.int/ict/cs
  - Country Overview
  - Telecom sector
  - Media sector
  - Internet market
  - Use in government, health, education and business
  - Recommendations

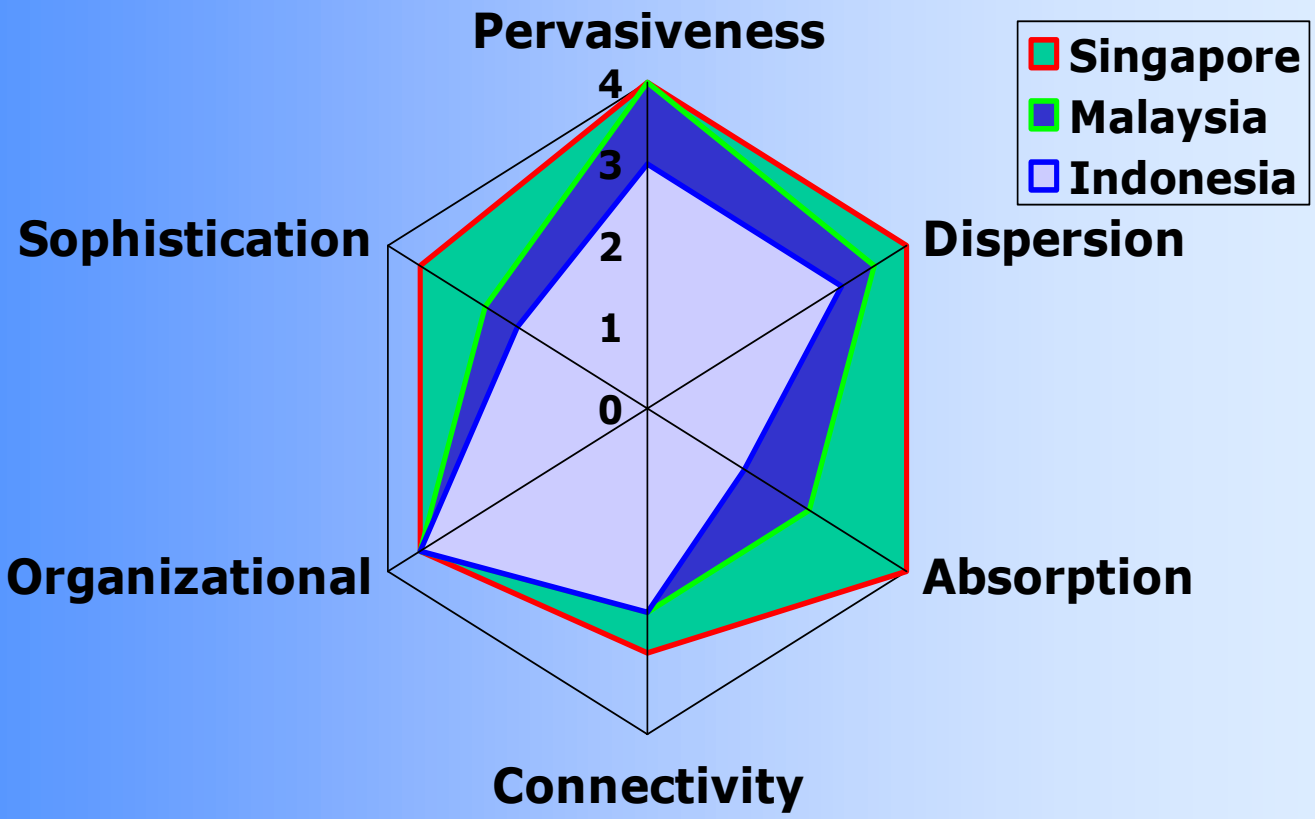








ITU Case Studies: Benchmarking countries



ICT related statistics and the digital divide

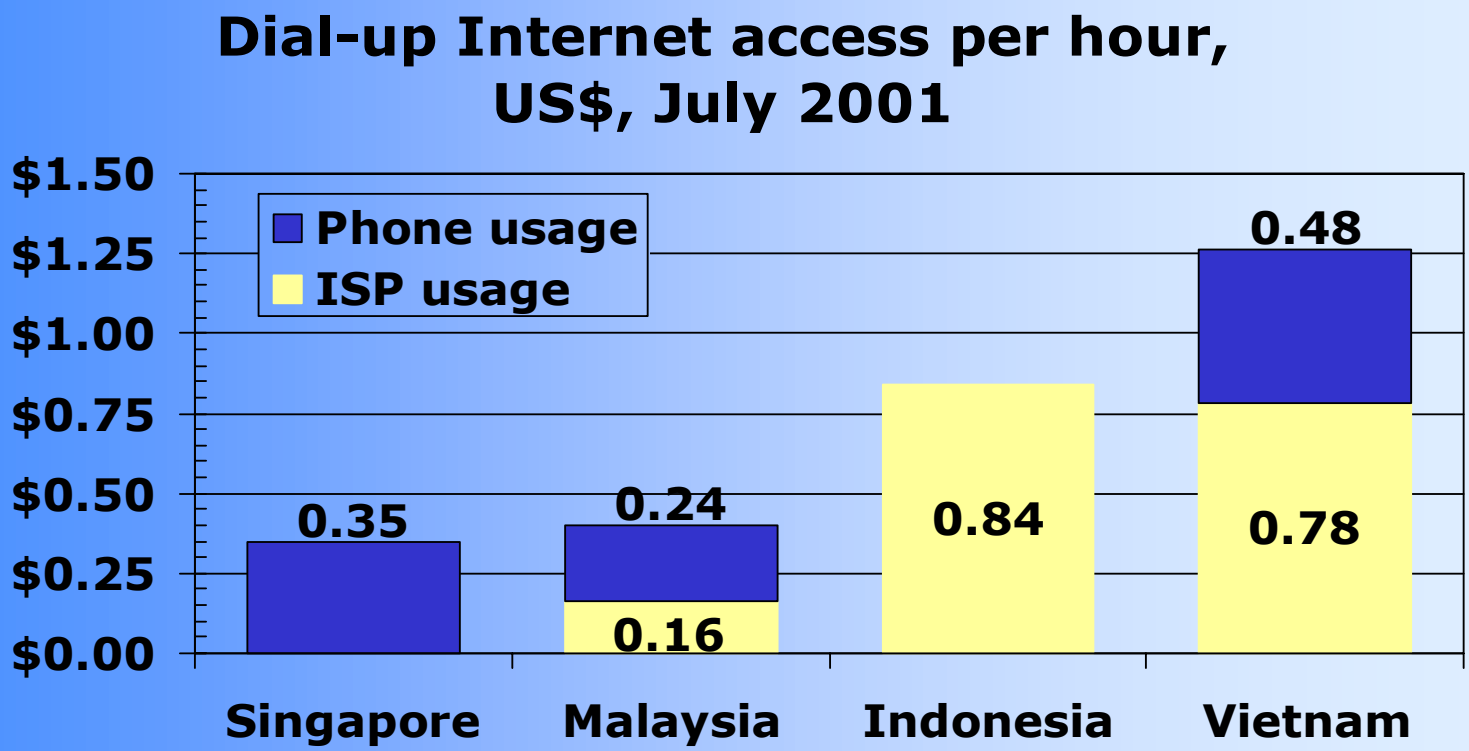
Hard factors
- Infrastructure
- Pricing/affordability

Soft factors
- Language/content
- Education
- Literacy

Internet use =  +  + 

Infrastructure + Affordability + Human skills

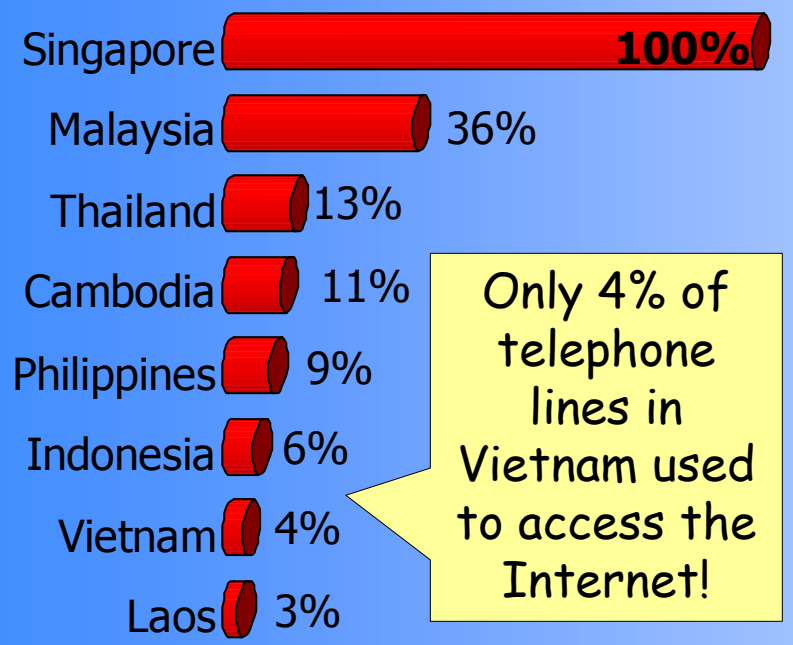
Pricing/affordability



Traditional arguments for Digital Divide

Infrastructure

Internet subscribers as % of telephone lines, 2001



Internet users are not close to level of telephone lines

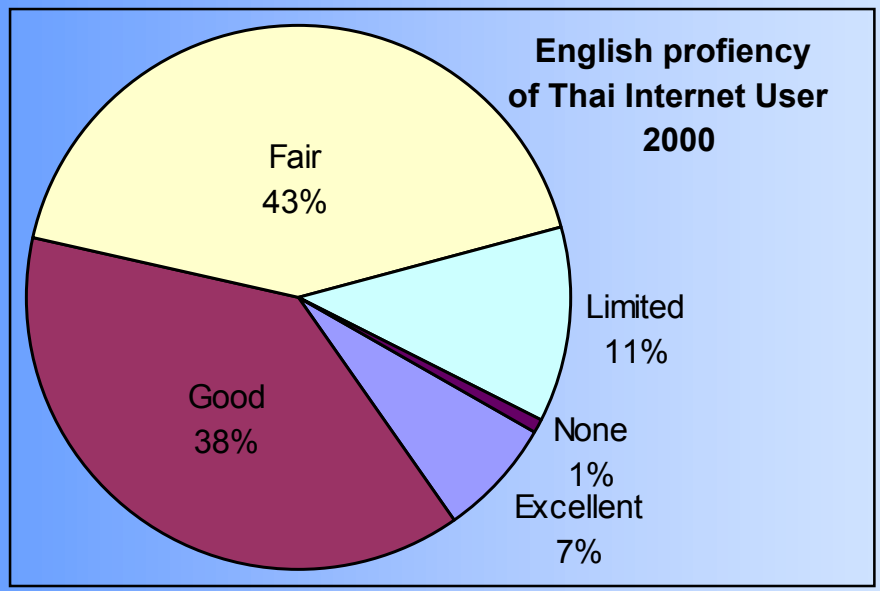
Affordability

Mobile to Internet price ratio, 2001

Mobile much more expensive than Internet yet there are many more mobile than Internet users

Language/Content

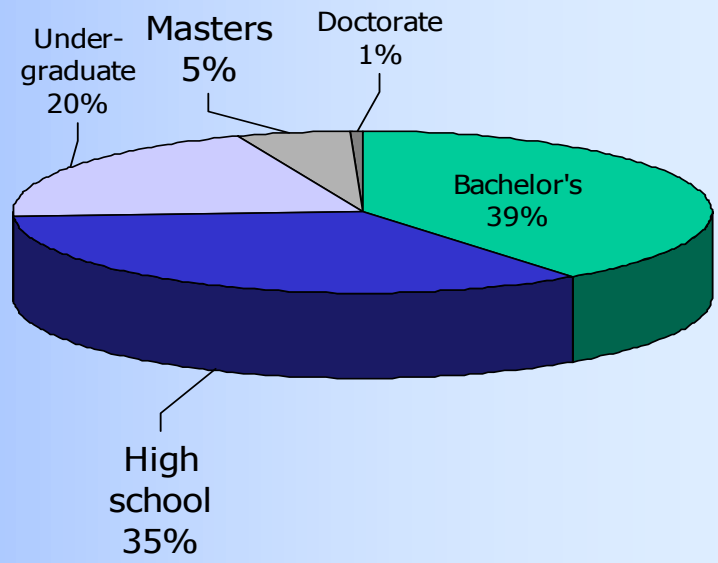
If you do not understand some basic English, you are not likely to use the Internet



Source: ITU adapted from NECTEC. "Internet User Profile of Thailand 2000."

Education

- **65% of Indonesian Internet users have a college degree or are in college**
- **50% of Indonesians with college degree are online compared to 0.5% without**
- **Wiring Indonesian high schools would add another 10 million users (compared to only 2 million currently)**



Profile of Indonesian Internet User

Source: APJII

Lessons learned…

Know where you stand and where you are going….!

- **Collection of statistics (beyond the pure ICT statistics)**
- **Analysis**
- **Trends**
- **User profiles**
- **What are your needs?**

To adopt the appropriate policies, a government needs to identify its SWOTs?

- **Strengths**
- **Weaknesses**
- **Opportunities**
- **Threats**

Vison!

- **Top-level support and a vision for ICT development**
- **Coordination of ICT initiatives to avoid duplication and guarantee success**
- **A comprehensive ICT and e-development strategy**

Private/public partnership

Governments

- need to attract and work closely with the private sector
- need to create the appropriate environment for private companies to invest

"A combination of well-designed concession agreements with foreign telecommunications operators, clear government support for a broad e-readiness program, aggressive public awareness-raising, and governmental commitment to the digital revolution have made for Estonia's successful adoption of ICT to both position the economy, but also to address selected development goals" Toomas Hendrik Ilves, Estonian Minister of Foreign Affairs, 2001

Be critical!

- **Objectivity about achievements/goals**
- **'We can do better' mentality**

External aid

- **Governments can learn a lot from other countries, including from the mistakes they made. Cooperating with other countries and participation in international/regional forums and meetings is of great importance.**

- **When asking for development assistance governments should**
    - develop their own ideas/projects because no one knows their needs better than they themselves
    - get involved in the project, without letting outsiders decide unilaterally
    - Have a (financial) stake in the project
    - Incorporate ICT element in projects

Thank you

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