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## Statistics in perspective: ITU Case Studies

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### 1. ITU Internet Case Studies

- Background
- Framework for benchmarking: Mosaic

### 2. Sector-level statistics

- E-government
- E-commerce
- E-health
- E-education

### 3. ICT related statistics

- Affordability/pricing
- Education/Literacy
- Languages/Content
- 4. Conclusions



# **ITU Internet Case Studies**

- Launched in 2000 (6 studies)
- 7 studies in 2001 and 2 studies (so far) in 2002
  - Country Overview
  - Telecom sector
    - Media sector
  - Internet market
    - Use in government, health, education and business
    - Recommendations











**Multimedia Malaysia:** 





Khmer Internet:

**Cambodia Case Study** 





# Framework for benchmarking: Mosaic

- Pervasiveness
- Geographic Dispersion
- Sectoral Absorption
- Connectivity Infrastructure
- Organizational Infrastructure
- Sophistication of Use





## Sector statistics

- E-government
- E-commerce
- · E-health
- E-education





#### Government as user

Percentage of civil servants with a PC

Percentage of civil servants with email

Percentage of civil servants using Internet

Number of PCs in the government sector

Government as provider

Total number of government agencies

Percentage of government agencies with web sites

Number of government services online

Government as promoter

ICT budget

Investments in ICT





Amount of e-commerce revenue/transactions:

• B2B

• B2C

Total

Number of credit cards in use

Number of companies with Internet access

Number of companies with web site

Number of companies engaging in e-commerce

% of Internet users who shop online

Median value of purchases made online

Most popular item bought online

Type of payment for online purchases (%)

Major reason for NOT shopping online





Percentage of hospitals with Internet access

Percentage of hospitals with web sites

Percentage of Health Clinics with Internet access

Percentage of Doctors with Internet access

Percentage of pharmacies with Internet access





#### **Primary/secondary education**

Number of primary schools

Percentage of primary schools with PCs

Percentage of primary schools with Internet access

Percentage of primary schools with web pages

Percentage of secondary schools with PCs

Percentage of secondary schools with Internet access

Percentage of secondary schools with web pages

Percentage of universities with Internet access

Number of Polytechnics/other technical Institutes



# **ICT related statistics**

- Pricing/affordability
- Education
- Literacy
- Language/content



# Pricing/affordability

#### Dial-up Internet access per hour, US\$, July 2001





# Education

Country	Gross Primary school enrolment (1996)	Gross Secondary school enrolment (1996)	Gross Tertiary school enrolment (1996)	Internet Penetration (2001)
Singapore	94	74	38.5	29.9
Malaysia	100	64	11.7	15.9
Thailand	87	56	22	3.8
Philippines	100	77	29	2.6
Indonesia	100	51	11.3	0.9
Vietnam	100	47	6.9	0.25
Cambodia	100	24	1.2	0.05
China	120	70	5.6	2.6
Lao PDR	100	28	2.8	0.1

Source: UNESCO and ITU (Internet penetration).



## Literacy/newspaper penetration

Country	Internet penetration	Adult literacy rate (%)	Daily newspapers as a percentage of population (1996)
Singapore	29.9	92.1	32.4
Malaysia	15.9	87	16.3
Thailand	3.8	95.3	6.4
Philippines	2.6	95.1	8.2
Indonesia	0.9	86.3	2.3
Vietnam	0.25	93.1	0.4
Cambodia	0.05	68.2	0.2
China	2.6	83.5	<b>4.2</b> (1990)
Lao PDR	0.1	47.3	<b>0.4</b> (1970)

Source: UNDP -HDI 2001 (Literacy), UNESCO (Media) and ITU (Internet penetration)





## Thailand: Internet user profile



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



# Statistics in perspective: Conclusions

- To understand the 'whys' and 'hows' of ICT (why is a country at a certain level of ICT and <u>how</u> can it improve its situation?) it is necessary to look behind the pure ICT statistics
  - Education/literacy
  - User profile: language, content
- Important issues that most countries face: definition of statistics (Internet users, for example)
  - Data is often not comparable
- Data often exists but is not disseminated
- Coordination between government agencies but also development agencies on data collection/dissemination



# Thank you

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