Measuring Business Access to Information & Communication Technology

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ITU

- UN specialized agency for telecommunications
- Has been collecting statistics for 30 years
- With fusion of telecommunications, computers and broadcasting has expanded coverage to Information and Communication Technology indicators (ICT)
- Has expanded sources from administrative records to include surveys
- Focus on accessibility and e-readiness hence interest in ICT in business sector
- See <u>www.itu.int/ti</u>



Importance

Contribution of ICT to output growth, 1995-99, Percent



Percent of Internet users who only access from work, 2002





Source: ITU adapted from OECD, SIBIS.

What to measure

| Access PCs Internet access | Use Type of connection Uses Web site |
|----------------------------------|---|
| E-commerce Purchases Sales | Benefits & Barriers |



Methods

- Sample survey
 - OECD, Model
 Questionnaire on ICT
 Usage and Electronic
 Commerce in Enterprises
 - Eurostat, Pilot Survey
 - National

Universe Size (by employees) Micro (< 5) -Often excluded Small (5-9)Medium (20-99) Large (100+) Industry type Often Primary excluded Manufacturing Services







Source: ITU adapted from Ministry of Economic Development (New Zealand), Statistics New Zealand.

Good coverage of developed economies for access indicators





Note: All businesses with 10 or more employees except Canada. *Source*: ITU adapted from OECD (beginning 2001).

Asian Tigers and some Economies in Transition also have data

Businesses with ICTs, Percent





Source: ITU adapted from FIND 2002 (Taiwan, China), IDA 2002 (Singapore), C&SD 2002 8 (Hong Kong China), NCA 2001 (Korea, Rep.) & *Baltic Information Society Statistics* (right chart).

Scarce data for developing nations & comparability questionable





Source: ITU adapted from OECD, INEGI (Mexico, 1999, all firm sizes) and INEI (Peru, 2000, 5+ employees) & NCB (Mauritius, 2001, 10+ employees).

Some studies particularly for SMEs

Africa, 2000

Asia, 2001- 2002





Source: ITU adapted from ZEF, "The Role of ICT for the Performance of SMEs in East Africa" & The Asia Foundation, "Regional Survey of SMEs' use of eCommerce."



- Domain registrations in the .com.cc domain
- Business Internet subscriptions



Business Digital Divide

Internet access in Chilean micro, small and medium sized firms, 2001, percent





Source: ITU adapted from INE Chile and Eurostat.

Conclusions

- Need to enhance visibility of existing surveys
- Disseminate model questionnaire
- Reinforce statistical capacity
- Focus on access indicators as first step
 - Businesses with PCs
 - Businesses with Internet access
 - Businesses with web page
- Target of at least 100 countries with data by 2005

