

Grasping the Internet: Measuring the beast

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Learning Initiatives on Reforms for Network Economies

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Why measure the beast?

- ❑ Among developing countries Internet growth lags other segments in the ICT sector
- ❑ Growing digital divide in Internet access, exacerbated for Broadband and mobile Internet

Comparable Internet data allow regulators to:

1. determine where country stands in relation to its peers;
2. how well they are doing over time; and
3. for measuring the effectiveness of policy and regulatory measures.



Why measure leased line prices?

- New entrants lease lines from incumbent where they don't have own infrastructure
 - high prices and delays hamper competition and extension into rural areas
- ISPs use leased lines to connect to Internet backbone
 - absence of competition or access regime for leased lines hamper Internet growth, broadband and *E-commerce*, *E-gov* etc
- Businesses lease lines to connect their local, regional offices.
 - High prices and delays discourage investment in the country.
- IPLC price component is significant part of total Internet retail price-impacts affordability and growth.
- High IPLC deter BPO and other off-shore based businesses



Getting a measure of the elephant

- ❑ Blind men gone missing? (Are we not collecting necessary indicators)
 - Variation: What if elephant refuses to lower its trunk? (Operator doesn't part with data)
- ❑ One feels a snake the other a rope? (Are we measuring the same thing differently?)
- ❑ We can't afford a crane big enough to weigh the beast! (National surveys are beyond our means)
- ❑ How do blind men get measure of a white elephant? 😊 (Are we burdening industry with collecting indicator data with little policy value)



Blind men missing?

	IN	ID	PK	PH	LK	TH
Internet Subscribers	DATA REPORTED	DATA REPORTED	DATA REPORTED	DATA REPORTED	DATA REPORTED	NOT REPORTED
Broadband Subscribers	DATA REPORTED	REPORTING PROBLEMS	DATA REPORTED	DATA REPORTED	DATA REPORTED	REPORTING PROBLEMS
Internet Subscribers per 100 inhabitants	DATA REPORTED	DATA REPORTED	DATA REPORTED	DATA REPORTED	DATA REPORTED	NOT REPORTED
BB-Internet Subscribers per 100 inhabitants	DATA REPORTED	DATA REPORTED	DATA REPORTED	DATA REPORTED	DATA REPORTED	REPORTING PROBLEMS

DATA
REPORTED

REPORTING
PROBLEMS

NOT
REPORTED

Blind men missing?

	IN	ID	PK	PH	LK	TH
USERS - internet	NOT REPORTED	DATA REPORTED	DATA REPORTED	NOT REPORTED	DATA REPORTED	DATA REPORTED
USERS - BB internet	NOT REPORTED	NOT REPORTED	NOT REPORTED	NOT REPORTED	NOT REPORTED	NOT REPORTED
Mobile-BB subscribers	NOT REPORTED	NOT REPORTED	NOT REPORTED	NOT REPORTED	NOT REPORTED	NOT REPORTED
Mobile-internet subscribers	NOT REPORTED	NOT REPORTED	REPORTING PROBLEMS	NOT REPORTED	DATA REPORTED	NOT REPORTED
Household internet subscribers	DATA REPORTED	REPORTING PROBLEMS	NOT REPORTED	NOT REPORTED	NOT REPORTED	DATA REPORTED
Commercial internet subscribers	DATA REPORTED	REPORTING PROBLEMS	NOT REPORTED	NOT REPORTED	NOT REPORTED	NOT REPORTED

 DATA
REPORTED

 REPORTING
PROBLEMS

 NOT
REPORTED

Blind men missing?

	IN	ID	PK	PH	LK	TH
Households with a PC	DATA REPORTED	REPORTING PROBLEMS	REPORTING PROBLEMS	DATA REPORTED	REPORTING PROBLEMS	DATA REPORTED
Cable subscribers (wired)	DATA REPORTED	NOT REPORTED	NOT REPORTED	REPORTING PROBLEMS	REPORTING PROBLEMS	DATA REPORTED

DATA
REPORTED

REPORTING
PROBLEMS

NOT
REPORTED

Blind men missing?

	IN	ID	PK	PH	LK	TH
Domestic Leased line price - 2mbps, 2km						
Domestic Leased line price - 2mbps, 100km						
IPLC Country-Singapore 2mbps						
IPCL Country-Singapore 45mbps						
IPLC Country-Singapore 155mbps						

 REPORTING PROBLEMS

 NOT REPORTED

Blind men missing?

	IN	ID	PK	PH	LK	TH
IPLC Country-London 2mbps						
IPCL Country- London 45mbps						
IPCL Country- London 155mbps						
IPLC Country-US W. Coast 2mbps						
IPCL Country- US W. Coast 45mbps						
IPLC Country-US W. Coast 155mbps						

A rope or a snake?

- ❑ How do you measure an Internet user? (subscriber x X; extrapolation, household survey)
- ❑ What is broadband? (128Kbps, 256Kbps, 512Kbps)
- ❑ What line divides mobile Internet from mobile BB Internet?
- ❑ All GPRS handset users mobile Internet users?



A rope or a snake?

- ❑ Leased line prices for bulk (carrier) or ISP?
- ❑ Prices for leased line tails (2km) or local link (2km-20km)?
- ❑ IPLC price: half-circuits or full-circuits?
2xhalf-circuits price= 1 full circuit?
- ❑ Comparability of IPLC prices—same destinations but different distances; to nearest neighbor (EU)...



Can't afford to weigh it...

- ❑ Cooperation between regulatory agency and national statistical organization crucial
- ❑ Add key questions to commercial survey to get annual household level data

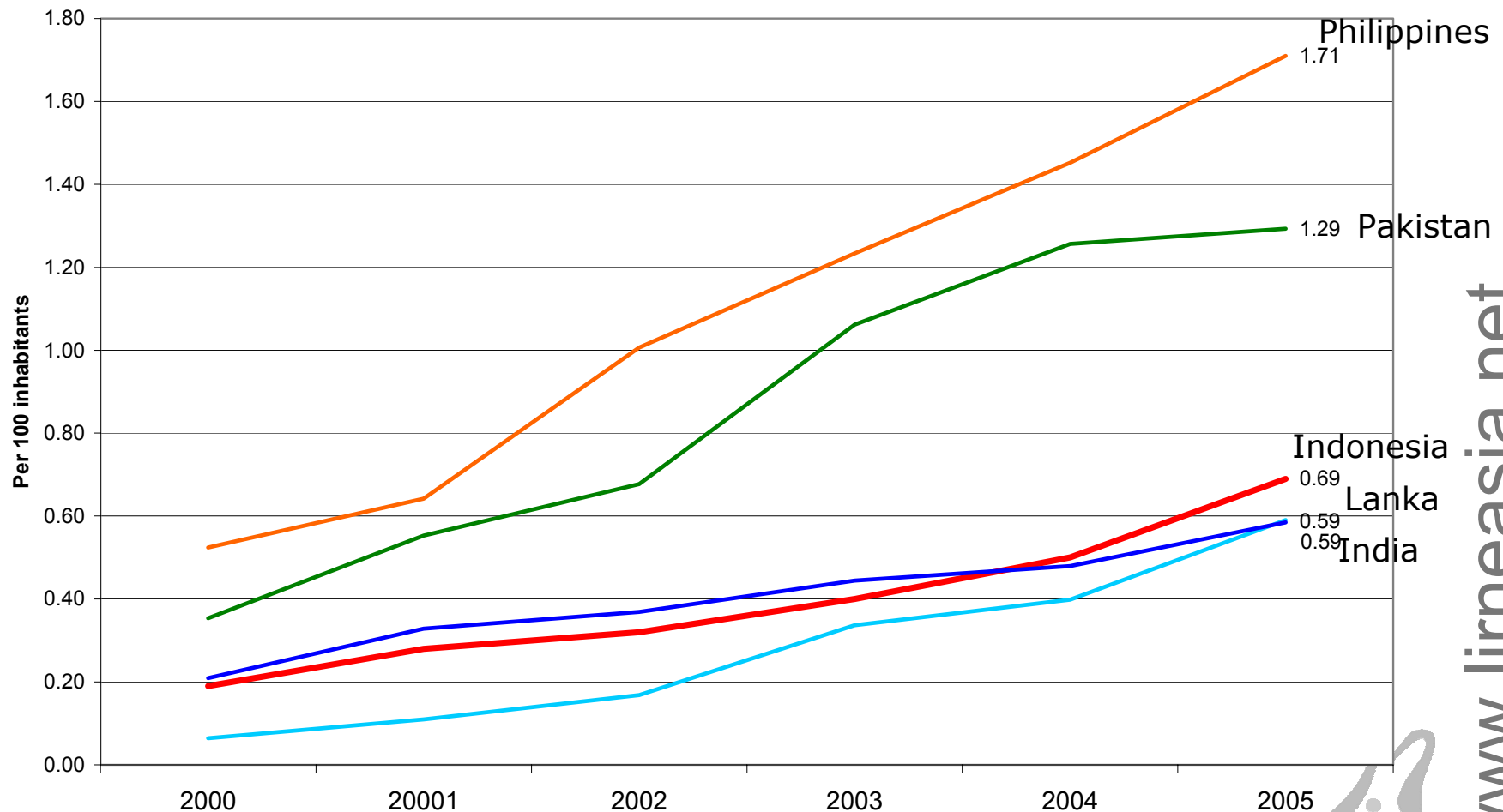


Are there any white elephants in the list..

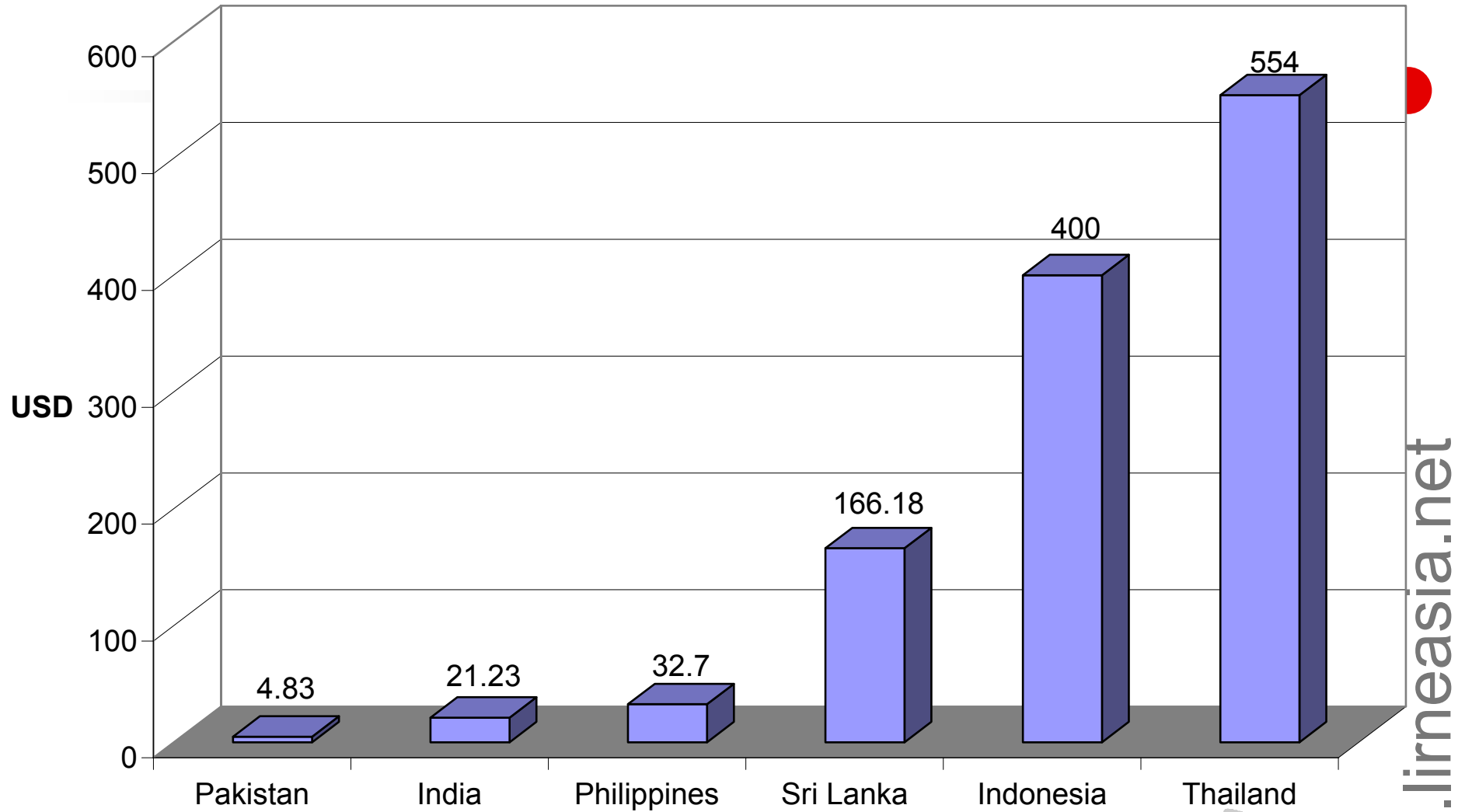
	IN	ID	PK	PH	LK	TH
USERS - internet						
USERS - BB internet						
Mobile-BB subscribers						
Mobile-internet subscribers						
Household internet subscribers						
Commercial internet subscribers						

Internet penetration in 6 countries

Internet Subscribers Per 100 Inhabitants



Monthly 2Km, 2Mbps Domestic Leased Line Prices



Monthly International Private Leased Circuit Prices to Singapore, 2Mbps

