# Open Source Software: the case for developing countries

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## Free/Libre/Open Source Software

- "FLOSS" is everywhere, the Internet depends on it
- Every PC running Microsoft Windows includes open source components for networking – TCP/IP, the basic internet protocol; BIND, to access domain names...
- This model maintains some of the most important, innovative technologies today

## Open source develops local skills

- 70% of developers participate in the FLOSS community "to learn and develop new skills"
- 67% of developers participate in the FLOSS community "to share ... knowledge and skills"
- 30% of developers participate in the FLOSS community "to improve ... job opportunities"
- Over 50% of developers derive income, directly or indirectly, through their participation in the FLOSS community

Source: Free/Libre/Open Source Software (FLOSS) Study of Developers

#### ... and local businesses

- Immediate customer base local businesses are an obvious choice for integration, maintenance and support, no single vendor in control
- Low (no) entry barriers : any local businesses can provide support for any open source software

## S/w licensing costs seem low...

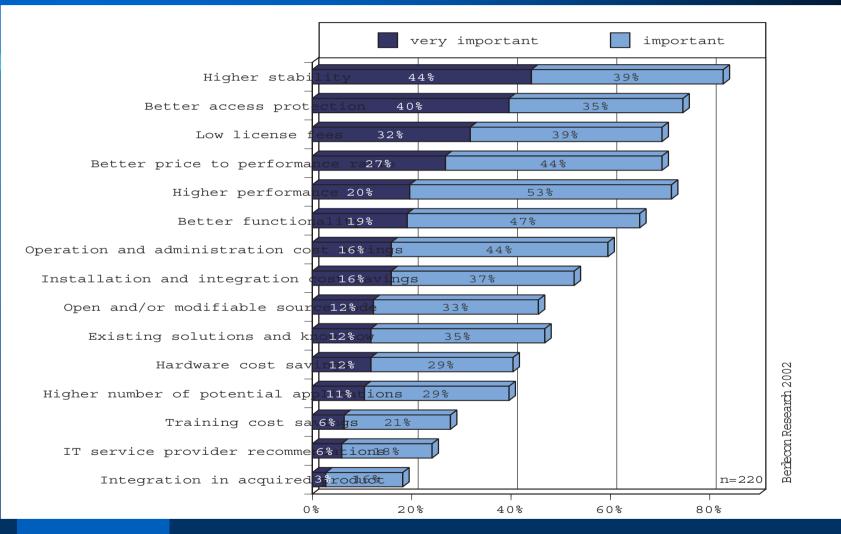
**Licensing Cost of Windows XP + Office (USA):** 

Standard Version \$560\*

Professional Version \$800\*

\*Prices from Amazon.com

### ...and not the #1 reason for F/OSS



## But in developing countries...

#### **Licensing Cost of Windows XP + Office (USA):**

- Standard Version \$560
- Professional Version \$800

#### VIETNAM: GDP per capita \$411 p.a.

**Effective cost of Windows XP + Office (per capita)** 

- Standard Version 15 months' GDP
- Professional Version 22 months' GDP

## ...Cost really DOES matter

#### **Licensing Cost of Windows XP + Office**

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PPP\$ - comparing with US GDP per capita: \$35,277 p.a.

**Effective** cost in PPP\$ for Windows XP + Office in Vietnam

Standard Version \$48,011

Professional Version \$68,587

## ...Cost really DOES matter

Country	GDP/cap \$	PCs ('000s)	Piracy		WinXP Cost*
				GDP months	Effective US\$
Argentina	7166	3415	62%	1	2757
Brazil	2915	10834	56%	2	6777
China	911	24216	92%	7	21678
India	462	6029	70%	15	42725
South Africa	2620	2962	38%	3	7541
United States	35277	178327	25%	0	560
Vietnam	411	934	94%	16	48011

GDP/cap in US\$, WinXP cost in effective US\$ equivalent
Windows + Office XP equivalent US\$ cost calculation = \$560 \* (country GDP per capita / US GDP per capita)

Source: World Bank World Development Indicators Database, 2001; Piracy data from Business Software Alliance

## Open source is the best way for developing countries to:

- Deploy ICT rapidly, affordably, widely
- Develop an ICT infrastructure while respecting IPR, limiting "software piracy"
- Develop a local ICT software and services skills base and foster a local ICT software and services economy
- Truly use ICT as an enabler for widespread economic growth

#### More information...

## The FLOSS project pages & final report <a href="http://flossproject.org">http://flossproject.org</a>

### Paper on FLOSS as Official Development Aid,

By Jordi Carrasco Munoz

http://www.i-today.com.vn/itoday/open\_source/baocao/

jordi europeancommunity.ppt