

# Open Source: A case for transition economies

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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, BIND...**

# Most popular F/OS software

## Server operating system (FLOSS User Survey, 2002)

- 1. Linux (currently 78% of those using F/OS), 2. Free/Open BSD (9%)

## Databases

- 1. MySQL (54%), 2. SAP-DB (12%?), 3. PostgreSQL (11%)

## Web site creation and operation

- 1. Apache (72%), 2. Perl (48%), 3. PHP (32%), 4. Squid (26%),  
5. OS CMS (10%), 6. Python (8%)

## Desktops

- 1. Linux (49%), 2. StarOffice/OpenOffice (33%), 3. KDE (31%),  
4. Gnome (23%), 5. Mozilla (23%).

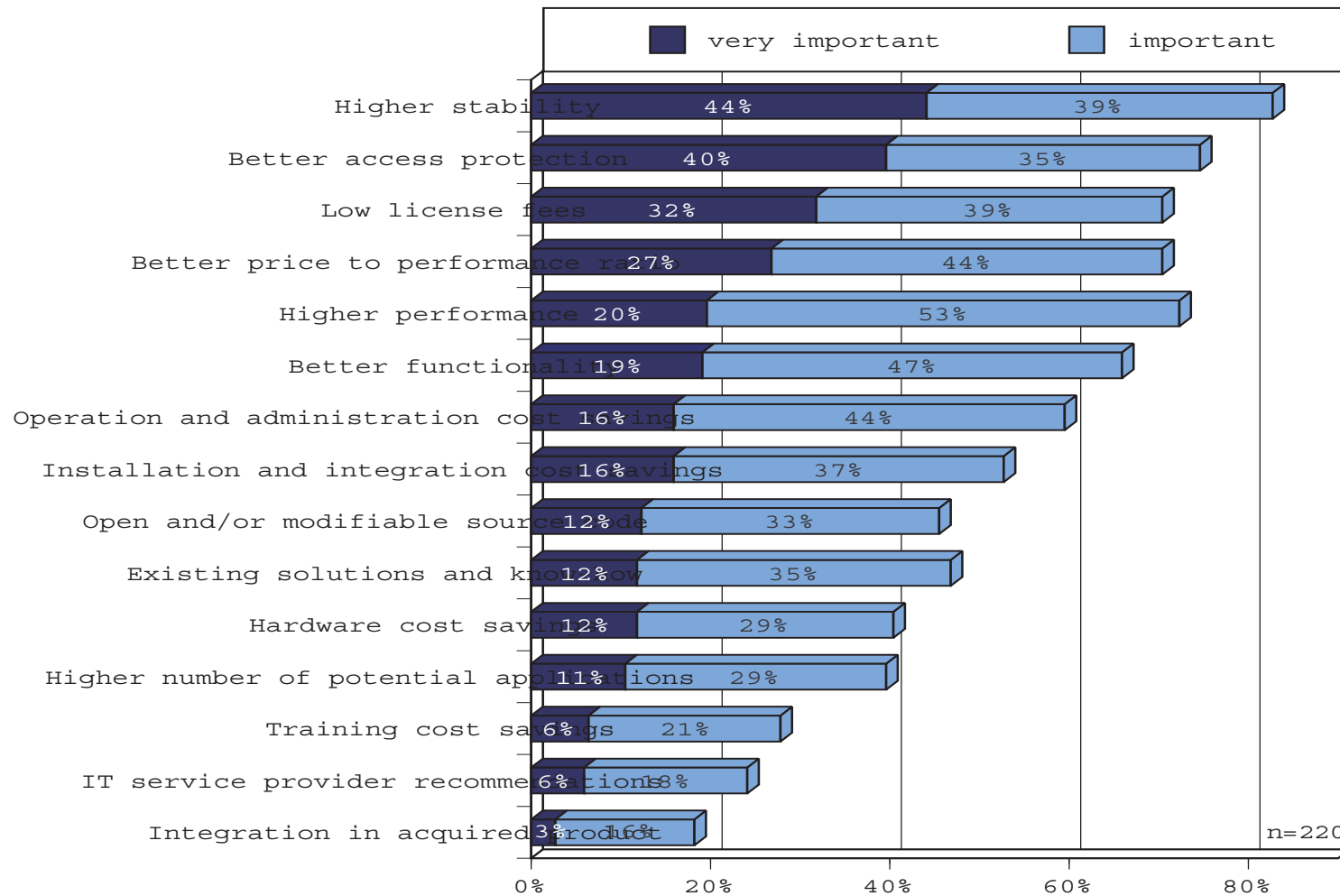
# Current or planned use of OS/FS

	UK		Sweden		Germany	
	small	large	small	large	small	large
High intensity (NACE I,J,K,N)	25.0%	74.1%	20.4%	13.2%	27.0%	51.3%
Medium Intensity (NACE D, E)	39.1%	9.1%	14.6%	32.8%	45.5%	51.3%
Low Intensity (NACE F, G, H)	25.0%	14.3%	13.6%	20.3%	52.8%	44.4%
Public sector (NACE L, M)	32.8%	38.2%	16.4%	23.5%	44.4%	69.0%
Total	31.5%		17.7%		43.7%	

Source: FLOSS Final Report – User Survey. © 2002 by Berlecon Research GmbH.

## Motivation:

# Benefits from F/OSS usage



BeTecon Research 2002

# S/w licensing costs seem low...

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

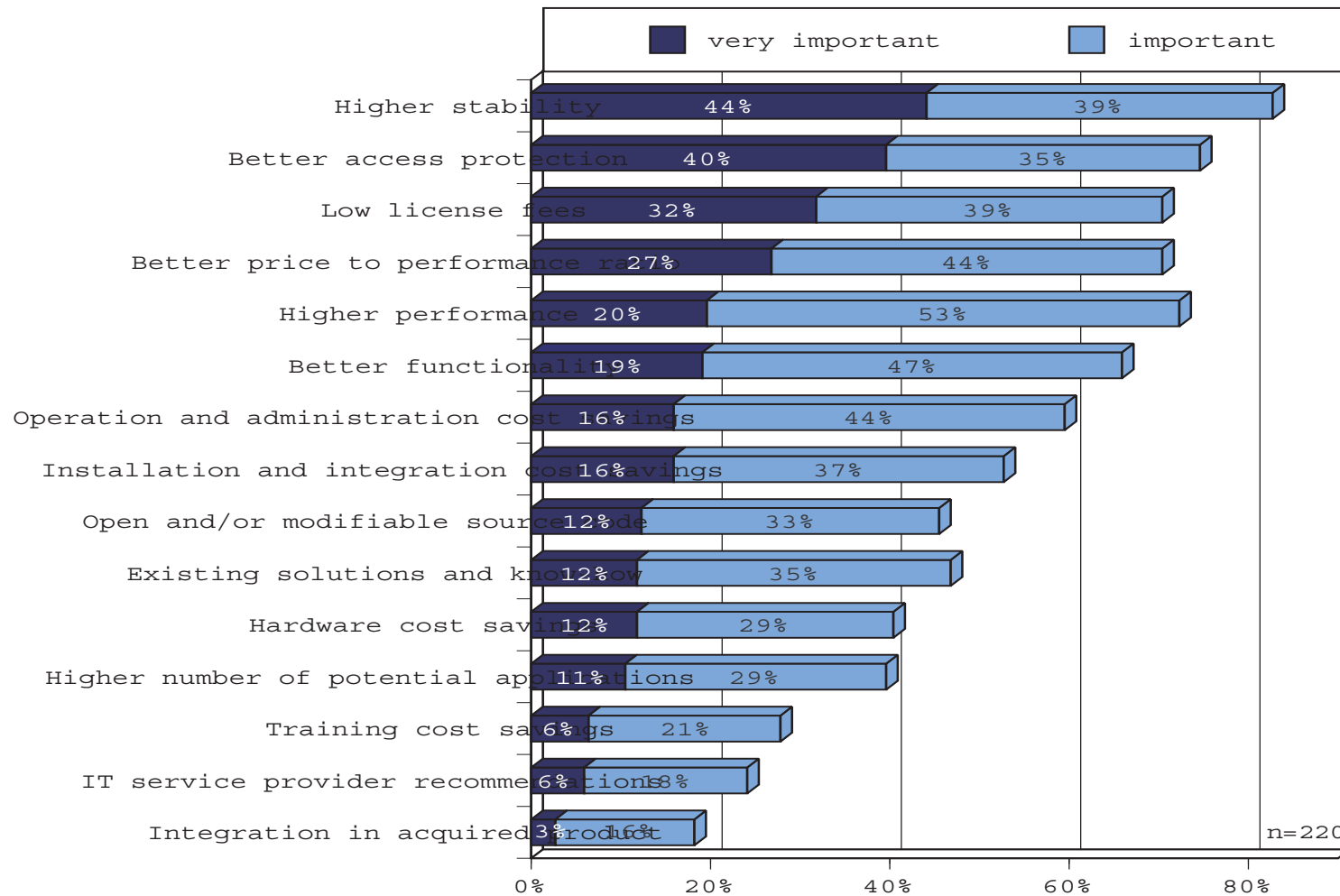
- Standard Version \$560\*

## Licensing Cost (Germany):

- Standard Version €338\*

*\*Prices from Amazon.com, amazon.de*

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



Berlecon Research 2002

# But in transition economies...

## Licensing Cost of Windows XP + Office in Germany:

- Standard Version      €338

**ARMENIA: GDP per capita €596 p.a.**

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

- Standard Version      17 months' GDP



# ...Cost really DOES matter

## Licensing Cost of Windows XP + Office in Germany

- Standard Version €38

ARMENIA: GDP per capita €596 p.a.

Effective cost of Windows XP + Office (per capita)

- Standard Version 17 months' GDP

PPP€- comparing with German GDP per capita: €22 665 p.a.

**Effective cost in PPP€ for Windows XP + Office in Armenia**

- Standard Version **€31 867**

# ...Cost really DOES matter

<b>Country</b>	<b>GDP/cap</b>	<b>PCs ('000s)</b>	<b>WinXP Cost*</b>	<b>Piracy</b>
Armenia	596	24	31849	n.a.
<b>Germany</b>	<b>22665</b>	<b>31451</b>	<b>838</b>	<b>28%</b>
Georgia	533	n.a.	35667	n.a.
Hungary	4424	1021	4293	51%
Kyrgyz Republic	268	n.a.	70964	n.a.
Poland	4119	3301	4611	54%
Romania	1541	801	12324	77%
Russian Federation	1862	7200	10201	88%
Slovenia	8211	549	2313	61%
Ukraine	673	898	28212	89%

*GDP/cap in €, WinXP cost in PPP€ equivalent*

*Windows + Office XP effective PPP€ cost calculation = €838 \* (GDP per capita / German GDP per capita)*

*Source: World Bank World Development Indicators Database, (2001 data); Eurostat; Business Software Alliance*

# 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

# Policy affects developer activity

	Developers Activity	Implementation	Policy	Future Trends
<b>France</b>	High	Ministries, Public Administration, National Education	strong	Growing Implementation, Stronger Policies
<b>Germany</b>	High	Parliament, Public Administration, Police	strong	Growing Implementation, Stronger Policies
<b>Spain</b>	Middle	Ministries, Public Administration	starting	Growing Implementation, Developing Policies
<b>United Kingdom</b>	Middle	Public Health	increasing	Starting Implementation, Stronger Policies
<b>Austria</b>	Low	marginal	marginal	Implementation and Policy not expected in the near Future
<b>Belgium</b>	Low	National Army, Public Administration	starting	Growing Implementation, Developing Policies

Source: [www.infonomics.nl/FLOSS/report/](http://www.infonomics.nl/FLOSS/report/)

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

- *Rapidly* deploy information technology
- *Affordably* deploy information technology
- 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

# More information...

The FLOSS project pages & final report

<http://flossproject.org>

Paper on FLOSS as Official Development Aid,

By Jordi Carrasco Munoz

[http://www.i-today.com.vn/itoday/open\\_source/baocao/  
jordi\\_europeancommunity.ppt](http://www.i-today.com.vn/itoday/open_source/baocao/jordi_europeancommunity.ppt)