

Public Private Partnerships and Open Technologies

*How use of Free/Open Source Software, Open Standards and Open Content
can provide a more effective and inclusive PPP ICT4D programme.*

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"The public sector within the Asia-Pacific Except Japan region represents an industry of diverse spending behavior, with (ICT) spending expected to exceed USD 32 Billion by 2011"

IDC

PPP Attractive for Private Sector Partners

- Access to governments – UN agencies hold unique position in access to and advising government agencies
- Inside track for training and deployment of vendor products
 - Vendor training and certification
 - Sales of vendor products
 - Marketing of vendor's brand
- PPP used as marketing and implementation of vendor product and solutions



The Public Sector is not just an end user when it comes to using ICT.

What it procures and implements can affect the choices of the local and target economies.






Cisco Networking Academies

- 3 Year Programme teaches students to design, build and maintain computer networks.
- 17 Cisco Networking Academies in 9 developing countries
- 400 students trained
- Trains them using Cisco materials, for Cisco Certification on Cisco products

<http://www.apdip.net/projects/cnap/>

Vendor Lock-in

Single Vendor

ICT Solution		Hardware, software – routers, firewalls and other network appliances. Example - CCNA	
Certification Body			
Certification Examination			
Training Materials			
Training			

Problems with ICT PPP

- Vendor lock-in
 - Training, Certification, Training Centers, Product sales
 - Multiplied by network effects of ICT
 - Branding – think Kleenex, but for ICT products and services
- Initial promise of knowledge transfers are not fully realized
 - Trained as end users of vendor products, continued dependence
 - High value knowledge such as access to design of software/hardware is not shared freely

Other examples

- Training centers at universities
 - Oracle education career partner
 - Sun Solaris authorized center
 - Microsoft Training partner
- Training programmes at government agencies with free licensed copies of proprietary software for users
 - Microsoft Partnership in training (school teachers).
- Vendor supported (proprietary) solutions. Solution only runs on vendor OS and on vendor applications. Partners and public users also have to depend on the vendor products.

Is it effective in achieving Public Partner goals?

“... breakdown according to job sector showed ICT with the highest number of unemployed graduates with 3,942 (19.5%) yet to find jobs.” - The Sun, Malaysia, Jul 2006”

Quick Introduction to Open options

- Free/Open Source Software (FOSS)
- Open Standards
- Open Content

What is FOSS/Open Source Software?

- FOSS programs are programs whose licenses give users the freedom to run the program for any purpose, to study and modify the program, and to redistribute copies of either the original or modified program (without having to pay royalties to previous developers). - David Wheeler
- The Four Freedoms – Free Software Definition
 - The freedom to run the program, for any purpose (freedom 0).
 - The freedom to study how the program works, and adapt it to your needs (freedom 1). Access to the source code is a precondition for this.
 - The freedom to redistribute copies so you can help your neighbor (freedom 2).
 - The freedom to improve the program, and release your improvements to the public, so that the whole community benefits (freedom 3). Access to the source code is a precondition for this.
- Examples are GPL and BSD software licenses

<http://www.iosn.net/foss/foss-general-primer>

What are Open Standards?

- Open standards describe openness in both: (1) the standards setting process; and (2) access to the specifications.
- Minimum characteristics
 - Easy accessibility for all to read and use;
 - Developed by a process that is open and relatively easy for anyone to participate in; and
 - No control or tie-in by any specific group or vendor.
- Examples – Internet protocols such as TCP/IP (network), SMTP (email), HTTP (network protocol for web) and ODF for documents.

e-Government Interoperability: Overview, UNDP-APDIP 2007

<http://www.apdip.net/projects/gif/serieslaunch>

What is Open Content?

- All material (text, sound, images) that the general public can freely use, distribute and modify without the traditional restrictions imposed by copyright. These actions can be sanctioned by an Open Content license or by commonly accepted practice.
- Example licenses are Creative Commons Attribution/Share Alike and GNU Free Document License (GNUFDL).
- Wikipedia is popular example – using GNUFDL






FOSS Open Content Primer – UNDP-APDIP

<http://www.iosn.net/open-content/foss-open-content-primer>

IOSN Linux Training Programmes

- 3 years (and ongoing) train the trainers programme for Linux desktop end users and system administrators
- Covers a wide range of skills from basic hardware configuration, system programming and automation, networking services and security
- Over 150 trainers trained, and over 11 training centers established (private, public and academic sector) – as of early 2007
- Open standards system and certification, open source software and open content training materials
- Lowered cost of certification (non-profit)
- Variety of donor and implementing partners

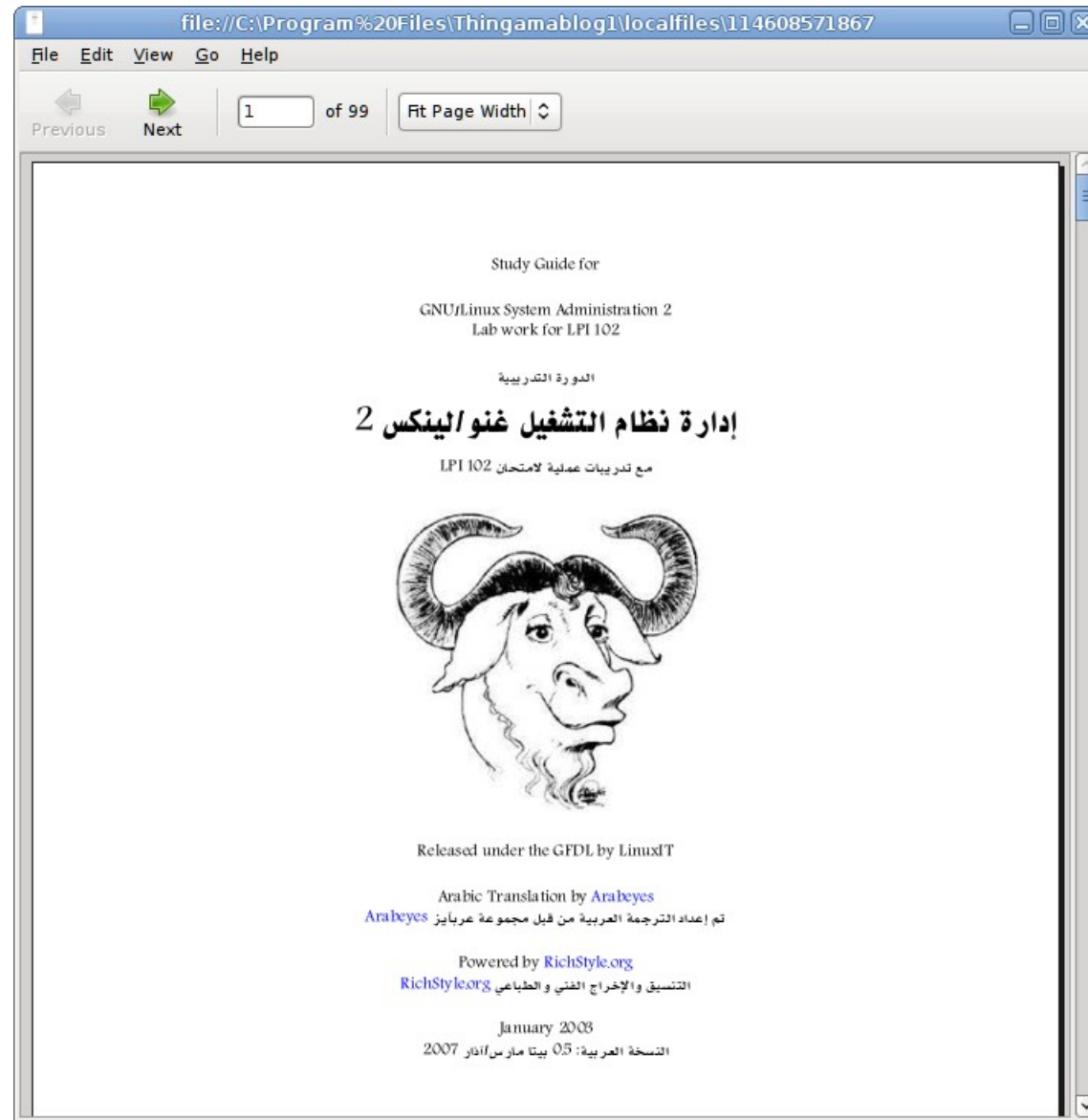
Open Training Environment vs Single Vendor

ICT Solution	Single Vendor 	Open Standard – Linux Standards Base  <div>Basic skills can be applied to deploy on a variety of Linux platforms, RedHat, Novell etc.</div>
Certification Body		LPI – Open process, community input  <div>Skill sets created through community input and certification done by vendor neutral body</div>
Certification Examination		<div>Commercial Exam LabCommunity Proctor</div> <div>Examinations can be conducted by certified commercial labs, but also through low cost paper exam administered by community proctors.</div>
Training Materials		<div>CommercialOpen Content</div>
Training		<div>CommercialSelf StudyIn house</div> <div>Acquiring skills can be through self study, in house training within organizations or through commercial companies using commercial or open content materials</div>

Benefits of Being Open

- No vendor lock-in, the process is open at all levels of the training programme
- More inclusive, everyone can share the outputs even if they are not directly involved in the programme
- Sustainable, as long as there is a need, anybody can take, reuse and modify what they need to develop their own programmes.
 - Translations and localized systems, Wiki's, Simplified introductory materials..

Outputs beyond programme targets



Partners

- Multiple donor agencies, IDRC Canada, InWent Germany, Open Society Institute
- Multiple partners for open content material – LinuxIT UK (private sector), TAFE Australia (academic)
- Multiple implementing partners, government, academic sector, NGOs and private sector
- Trainees able to use a variety of different vendor platforms and choice of both open and proprietary training materials – possibility for further non-exclusive partnerships.
- Indirect partners due to open nature, such as using RedHat Linux, Ubuntu Linux and Novell OpenSuse Linux. Using IBM LPI Linux training materials etc.

Other examples of PPP with Open Technologies

- UNDP Government Interoperability Framework Study (IBM, Oracle)
<http://www.apdip.net/projects/gif>
- IOSN FOSS Asia-Pacific Regional Consultation 2005(Intel)
<http://www.iosn.net/regional/fossap-2005>
- Linux Scholars Challenge, IBM

FOSS Encourages Innovations

- These two companies often cited for innovation are using FOSS technologies
 - Linux, FreeBSD, PHP, Python, MySQL, Apache etc.
- FOSS is not anti-commercial, Yahoo and Google are multi-billion dollar companies.
- Open Source Pulls in \$1.8 Billion in 2006 and will grow at 26% annually – IDC research

Commercial Opportunities (Why not us?)

- Recent valuation of FOSS companies
 - MySQL (Sweden) purchased by Sun for USD 1.5 Billion
 - Zimbra purchased by Yahoo for USD 350 Million
 - JBoss (J2EE) purchased by RedHat for USD 300 million
 - Novell Acquires Suse Linux (Germany) for USD 210 million
 - Zend Technologies (Israel), USD20 million in venture capital funding
 - Digium (Asterisk) – UD 13.2 million in venture capital funding
 - ZenOSS (Systems Monitoring), USD 4.8 million in venture capital funding

Challenges implementing open environment

- New way of using IP and open licensing
 - no institutional template/guidelines
 - guidelines may not be able to accommodate shared development or open licenses and standards
 - questions of ownership, liability etc.
 - experience managing open and shared development projects
- Difficult to track actual usage/outputs beyond initial project partner
 - everybody is free to take your programme outputs without permission, only needs to attribute your organization but may not necessarily contact you

Main points

- PPP without open technologies strategies can result in vendor lock-in
- Public projects should be inclusive and available freely to be implemented and reused by both commercial and non-commercial organizations.
- Open technologies, especially open source and open content licensing allows outputs to continue to be used and improved long after the programme duration.
- More cost effective, through local partnerships, free training materials and software
- More benefits for public sector, but does not remove all benefits for private sector partners.

Resources

- UNDP Centers of Excellence - International Open Source Network <http://www.iosn.net>
- UNDP-APDIP <http://www.apdip.net>
 - e-resources <http://www.apdip.net/elibrary>
- UN-APCICT <http://www.unapcict.org>
 - under ESCAP
- Open Source Competency Center, Malaysian Administrative Modernisation and Planning Unit
 - opensource.mampu.gov.my
 - khairil@oscc.org.my

End

Thank You