The Costs of NOT Doing Business with Open Source Technologies in Developing Countries

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Slide one:

Thank you, Ladies and Gentlemen. And thank you especially to His Highness King Mohammed VI for the opportunity to speak at an event of such importance today.

Slide two:

Developing Countries are in, some could say, an enviable position regarding their ICT. Where the US and EU have made all the mistakes, the developing countries may learn from their experience. For example, the "infrastructure" of ICT is the most straight-forward investment in a country, and yet the least investment, from the e-governance point of view. The government's responsibilities, some listed in the middle column, demand a smooth connection among them.

The United States government's own failure to provide continuity of network among its departments, highlighted by recent natural disaster issues, is an example MENA countries can learn by, and exceed.

E-governance must still learn, and consider connectivity with its neighboring states, international treaties, and perhaps introduction to that animal, Intellectual Property.

Slide Three:

One of the greatest lessons learned by countries around the world, in growing numbers, is that Closed Source, or Proprietary, Sourceware, is too great a cost for an e-government to bear. Unfortunately, until recently, there has been no competing model.

Closed Source is distinguished by the element that when the product is purchased, the code which runs it is not disclosed.

Closed Source is hierarchical, slow to respond to change, and requires that all requests be returned to the vendor.

In Brazil, for example, one Microsoft workstation fee was USD500 and the Open Source alternative was less; Brazil's annual savings is USD120 million. And, Brazil's minister stated that the Open Source developed software 'perfectly suited to their needs.'

Slide Four:

'Open Source', or 'Free Ware', and the trade name Linux, are now the competing end user model.

It has been, and is being created, by thousands of engineers globally, most volunteers, who are passionate about the challenge of designing a system upon which anyone, one person to an entire country, may create their own projects. Anyone can contribute because everyone can read the code. The code is free to share, free to develop, free to change. It is quick and responsive. It is secure. All of that is on the e-government level. Within the country, it enables local people to create their own communities and their own commerce. It encourages local creation and support of software. It supports a booming economic powerhouse within a country. And, the money from e-commerce stays in the country, instead of flowing out to the proprietary software's country.

So there are **TWO** costs for not CONSIDERING Open Source technology: believing in the limited choices of proprietary software; and cutting off the **consideration** of open sources.

Slide Five:------- Flexible Menu

In his opening remarks yesterday (March 1, 2006), His Excellency TALBI ALAMI, Minister of Economic and General Affairs from Morocco referred to 'honest and transparent principles' (in translation) in ICT. Transparency combined with flexibility are the keys to Open Source. This chart shows but a few of the possibilities of an ICT stack. Many of the names may be unfamiliar, some familiar. Because of the stack's flexibility, the client orders and 'sees' exactly what is ordered. There is no 'fat'. The stack may start with hardware and reach to satellite technology; it may include commercial and nonprofit stakeholders. Open Source is an economic trend which appears to be ideally suited to attract investment. Indeed, both HP and Oracle have Open Source components.

Slide Six:----Savings

Of course, there is always the issue of actual savings. In the City of Garden Grove in California, a historical listing of savings from implementing Open Source has led to the City of Los Angeles considering Open Source.

In June 2005, the Norwegian Minister of Modernization, MORTEN ANDREAS MEYER, stated that the Norwegian government would stop using proprietary software and turn to open source by 2006. 'If one has a monopoly or is a very big player one is interested in maintaining the hegemony,' CHRISTINE HAFSKJOLD, said. 'In addition the public sector has great power in the software market because it is a very big customer and can make demands. (HAFSKJOLD is a spokeswoman for the Norwegian Board of Technology.)

Slide Seven:

When foreign business--in this case an entire IT or ICT industry from hardware to satellite--enters an agreement with a state, the ideal initial result is to reduce isolation. It is not only a 'feeling', but a human need that developing countries connect with the worlds of knowledge, information, art, technology, and manufacturing. On this point, there is no disagreement between Open nor Closed Source application companies.

The second result, or effect, comes quickly in the application of the ICT program. It is a point of fundamental difference between Open and Closed Source.

Closed Source follows the traditional, global model of monopolistic practice. The traditional model works like this: When foreign business comes in, it will likely quash nascent competition. Therefore, effectively removing local entrepreneurs from the market. (Joseph Stiglitz, Laureate in Economics, cites Coca-Cola and Pepsi as having overwhelmed home markets internationally. [Stiglitz, Globalization and Its Discontents, p. 68])

In a document, The Vienna Conclusions, given to the United Nations World Summit on the Information Society, two references were removed, one to free software and one to Linux as a specific example. The competition's explanation was that such software made 'it even impossible to make any income on software as a commercial product.' Thomas Lutz, manager of public affairs, Microsoft Austria.[ZDNet 25 November 2005]

Two university graduate students decided to build something called a search engine in their garage, and they built it on Linux, one of the major Open Source codes. They used it for the same reason nonprofit companies and governments choose it: no cost for the code, its security, and its flexibility. Google has done very well with Linux. So have the governments of Norway and Brazil. So have hundreds of small to large corporations around the world. It is not only very possible to make income on software; it is possible to make considerable income. Of course it is impossible to make any income on 'the competition'.

Slide Eight: Security

When the term "Security" is whispered, all global stakeholders react. In the War of Rumors against Open Source, the issue is: THE QUALITY OF SECURITY IS IN QUESTION, OF SOFTWARE WITH FREELY AVAILABLE SOURCE CODE.

The position is understandable if the system is not understood. The Linux kernel, like Microsoft, is made up of lines of code. The difference is that the security of a Closed system is in the 'walls', going up from the code to the application to the user. Like a Trade Secret, it is very safe, provided no one gets in. However once it is successfully attacked, there are virtually no barriers to keeping the attack from spreading throughout all levels. And, because it is a proprietary code, it is up to the owner to cure the attack and to notify the client of the attack.

The Linux kernel acts more like a honeycomb. Each new additional is tested and isolated, so if a hacker attacks, the attack stays in that one place. And, because the code is transparent, attacks are seen immediately. Attacks 'above the line' are similarly isolated because the Linux Kernel has strict gateway requirements. Just ask any engineer at IBM, HP, Oracle, or hundreds of other corporations.

Slide Nine: Regional Adoption

On the ground, so to speak, Closed Source has been described as 'RIGID' and 'not building

communities. This seems a strange element in a discussion of costs and investment. However, as I said at the beginning, the purchase of equipment is the easy decision. The serious commitment, and the commitment more and more countries have found in Open Source, is to community building.

With one telephone, with one laptop, a community can be created and connected to another community. Commerce begins to stay not only within the country but within the community.

Slide Ten:

WHY DID THE ONE LAPTOP PER CHILD INITIATIVE CHOOSE OPEN SOURCE?
The One Laptop per Child Initiative (OLPC) chose the company Red Hat, over Microsoft or Apple, to build an Open Source operating system. Over a million children will be learning on a Linux operating system. To Mike Evans, Red Hat's vice president of corporate development, most children will probably not know that their laptops are running on Open Source. However, ["others] will be able to create their own models and their own variations."

The Minister from Bosnia and Herzegovina announced yesterday that his country was committing to 100,000 laptops. That is 100,000 opportunities for communities of practice to grow, and become stakeholders. Eventually, those children could become specialized networks of stake holders and developers of their own projects, because the CODE is free and available for them to read and to change.

Who knows: The next great break-through could come from anywhere. Perhaps from MENA.