

On behalf of UNESCO, I welcome you all to the first Regional workshop on Public Sector Software Principles.

I do realize I have turned the words around on the workshop heading but I think it sounds more appropriate to word it as such since we are here to deliberate for these two days on the role of the Public sector in relation to its approach to software in the same spirit as it does for infrastructure and other public undertakings.

As India moves into the information society and envisions taking its place in the global space as an empowered knowledge society, it is the role of the public sector to lay down the foundation to enable such a process. Just as the Indian public sector played a crucial role in the economic development of the country during the industrial age, it is just as important for the public sector to consider the long term vision and goals it wants to achieve in the coming information age. Just as India invested in the development of its own industry rather than become dependant on the goods of the developed nations, it needs to invest in human development and self reliance if it wants to keep pace and make its mark in the current information age.

The role that the Public sector plays and the decisions it takes will determine the status and economic influence India will have if it invests in public sector software instead of becoming largely dependent upon western propriety software.

So why is software for the public sector so significant? What makes it different from ordinary software?

Unlike traditional, closed software - also called proprietary software - the building blocks of each open platform software are truly open to public view. That means students, teachers, developers, public servants - anyone - can get a hold of those blocks, modify, change and adapt to their need and innovate to their requirement, it allows them to create and become creators of content rather than passive users. What's more, the license on the product won't stop anyone from distributing the software. Open platforms are a non-discriminatory and most accessible use of technology.

Why do we think this type of software has so much potential? Firstly, because it makes good business sense. Open source software is cheaper than ordinary proprietary software and that means it has huge promise in a country like India.

When it comes to IT, India is talent rich, but often resource constraint. Its abilities as a technological powerhouse are recognized across the globe. However, sometimes it finds itself unable to afford the cost of legal, closed software. And - as the effects of the world financial crisis are still rippling across the globe, the public sector here, just like businesses, is facing tightening budgets and rising operating costs (and you may not have large budget available for software). Investing in Open Source Software can provide a financially sound solution.

However, as we all know, money is not the only criteria. There's no point in buying a product simply because it's cheaper than the alternatives. However, investing in open source software isn't just low cost. It's advantageous for many other reasons.

Let's look at the big picture. We need to consider ethics. Software is not ethically neutral. Using closed, proprietary software means you are making an ethical choice, one that may be against the very nature of your position in a public sector organisation. If you work in the public sector, you stand for certain values. Among these are social justice, equity, public welfare and accessibility for all. Your professional stance goes hand in hand with the values of Open Source Software. Both you, and OSS, are striving towards an egalitarian, creative learning environment - one that promotes liberty.

For, both ethically and philosophically, Open Platforms are about freedom: Freedom to use a programme; Freedom to study a programme; Freedom to adapt a programme; Freedom to distribute a programme.

The founder of the Free Software Movement, Richard Stallman, defines FOSS as follows: "Free software is a matter of liberty, not price. To understand the concept, you should think of "free" as in "free speech".

Just imagine the impact this kind of freedom has on a child's education. Open platform learning infuses the classroom with dynamism. It disregards traditional notions of passive, parochial, hierarchical learning. Instead it promotes on-the-spot action and real-life challenges. Software is no longer a given, or a mystical creation. OSS is an open book. It allows students to explore, to work with their classmates and understand complex technology.

It's the opportunity to learn together, to collaborate, which really sets OSS apart from proprietary software. Open software is only as strong as the community which supports it. OSS is a catalyst that promotes strong, vibrant relationships between people. Open source programmes are created and changed collaboratively. OSS is continually advancing because of the community that improves and adapts it. OSS communities grow spontaneously and become self-sustaining.

And we're not talking about an anonymous community. We're talking about a living, organic entity, which is specifically Indian. Most closed, proprietary software originates in the West, specifically in the United States of America. However, OSS allows people in India to control the software they're using -- and adapt it to the specific needs and demands of their country. For instance, OSS can work well in resource-challenged areas here. Whereas proprietary software may demand new computers that may be financially unviable in many parts of India, OSS can run well on older computers, making the most of available facilities.

In fact, scores of successful initiatives are already proving how effective Open Software can be in this country. Software sponsored by the Indian Government has been used to establish an open source software-based centre of excellence in the Hubli Software Technology Park in Karnataka. The National Research Centre for Free/Open Source Software (NRC-FOSS) is concentrating on research and development, human resource development, networking and entrepreneurship development. The centre also acts as a focal point for all FOSS-related activities in the country, including the creation and maintenance of the national FOSS portal. Indian universities are also in on the act. For instance, the Academic Council of Indira Gandhi National Open University has taken the decision to adopt the 'Open Distributed Technology Enhanced Learning Framework' for all of the university's courses.

The state of Kerala is a good case study of the ability of government to resist proprietary software and be truly self sufficient. Its government is responsible for the largest simultaneous deployment of OSS based ICT education in the world. The [IT@Schools](#) program provides ICT-enabled education to 1.6 million students per year in the state. It's designed to scrap passive learning and rote memorization. Instead it aims to encourage children to think critically.

And the programme is not just about the children. Teachers are also empowered to be confident to teach with the aid of ICT. The project has trained about ninety thousand teachers in a participatory process. Teachers unions and civil society organisations are working hand in hand with the state government. ICT Training is being carried out by teacher-training institutions themselves, rather than being outsourced. In this way, OSS is becoming deeply embedded in the education system.

The Kerala government acknowledges that using OSS has saved them crores of rupees. What's more - it's earned them scores of awards. So far IT@Schools has scooped The World is Open Award 2008, for promoting the use of Open Source Technology, as well as a national e-governance award.

This is the kind of model we wish to replicate across India. But it's not going to be an easy ride. There are a number of challenges to overcome.

Firstly, certain loud and powerful voices object to Free and Open Source Software. The strongest of these are the companies that make closed, proprietary software and want to protect their interests.

Secondly, many people in India simply don't know about OSS. Or many harbor misconceptions - believing that there may be security concerns with OSS, or a lack of customer support machinery. There is little chance of widespread adoption of OSS in the public sector, if people don't even know about the technology. What we need is a public awareness campaign. Governments, educational leaders - and each one of us - need to spread the word.

Thirdly, we have to provide practical training in Open Source Software. IT experts in India do not always have the knowledge of OSS products needed for their maintenance and upkeep. We need to provide this training across the country, in local areas and in local languages.

Change is a slow process. We have bureaucracy, lack of knowledge and powerful commercial forces to cut through. But with the dynamism, freedom and openness enshrined in OSS, that change is possible. Together we can make sure Free and Open Software becomes institutionalized in the Indian public sector. Together we can create a vibrant generation of Indian students, teachers and public servants: A generation that embraces the challenges of new technology; that is critically

engaged with the world and that is ready to propel India forward on the International stage.

I look forward to the outcomes of the discussion of this workshop, which will set the tone and trend for the subsequent workshops to be held across other regions in the country. The input from the domain experts here today will go into the development of the guidelines for 'Guiding principles for public sector software' and 'Experiences and learning as well as challenges from public software projects'. These documents will feed into the subsequent international workshop on a similar theme, which will be held in the month of April in Kerala.

We have an intense agenda ahead of us and I am sure, given the level of participation we have in this room, that we will have very reach and fruitful discussions.

Thank you