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Opinions expressed in Innova are not those of the CPSI (unless indicated) but reflect the views of individual writers

One exciting year to another

The year 2002, the first full year of operation for CPSI, was exciting and full of important lessons. The foundation set in 2002 places CPSI on a sound footing for 2003 and beyond. The following are some of the highlights and successes of 2002;-

- Public launch of the first Innovation Search – making CPSI more publicly recognizable, and to receive innovation proposals and nominations for awards.
- Solicitation of 37 innovation proposals through the National Call for Proposals and short-listing of selected projects.
- Launch of the first Innovation Zone workshop on the Use of Open Source Software in the Public Sector, including the soliciting of 19 possible projects.
- Commencement of the Open Source Software demonstrator project, developing a document submission system applicable to the public sector. The system will be launched under the name Alexandria.
- Development of the African Regional Forum project which enabled CPSI to participate directly in the capacity-building work of NEPAD. Programme activities include the development of a comparative data-base on public sectors across Africa, writing best practice case studies on public sector reform, review of donor support for public sector reform and preparations for a high-level workshop.
- Hosting of two Innovation Forums – on project selection and innovation measurement, to give strategic input to the programme of work of the CPSI.
- Concluding a partnership with Impumelelo Innovation Awards Trust on developing case studies on innovation projects, producing a generic guide on innovation and creating learning opportunities around successful innovation projects.
- Concluded a partnership agreement with the University of Stellenbosch to co-hosts the 9th Winelands conference. The theme of the conference is 'Innovative Service Delivery in the context of change'.
- Development of a partnership with the CSIR Icomtek and the Technology Research division of the State Information Technology Agency (SITA) to jointly produce the first FutureWatch report on Mobile Technologies.
- Development of a framework for innovation measurement and an Innovation Performance Survey.
- Finalising of a partnership for the Executive Programme in Innovation Management with the Da Vinci Institute of Innovation and South African Management Development Institute (SAMDI).
- Participation in the e-Africa conference planning committee, resulting in a request to participate in the development of an Africa wide e-government programme.
- Confirmation of an intention to consider CPSI as an Online Regional Centre (ORC) for the United Nations Public Administration & Finance Network (UNPAN).
- Participation in the Second Specialised Conference of the International Institute of Administrative Sciences under the theme 'Towards Quality Governance for Sustainable Development' in New Delhi, India coupled with a study tour and partnership initiation activities.
- Participation by CPSI team members as judges in the African ICT Achievers Award and the Ronald Brown Institute Innovation Awards.
- Last but not least, producing three issues of Innova, the electronic voice of CPSI.

To get progress reports on the above and to learn what 2003 holds in store for the CPSI, please make sure that you on the Innova mailing list. Register on our website (www.cpsi.co.za) or send an e-mail to maiser@listserv.cpsi.co.za with the instruction *SUB Innova <your e-mail address>* in the body of the e-mail message.

PIONEERS

Rewarding innovation within a variety of settings is fast becoming an established practice in South Africa. The various awards programmes play a crucial role in highlighting innovation, provide support for innovators, and recognising the efforts of people who are quietly working to improve service delivery. Innova will feature finalists or winners of awards programmes that complement the work of the CPSI.

Prize-Winning Project Makes Internet Access For All Schoolchildren In Namibia A Real Possibility

APC Africa Hafkins Communications Prize, November 2002

SchoolNet Namibia, a volunteer-driven organisation that is working to see all Namibian schoolchildren get access to a computer and the internet, was awarded the APC Africa Hafkin Communications Prize for people-centred information and communications technology (ICT) policy at a ceremony attended by the prize finalists and other champions of the ICT and development sector in Addis Ababa in early November 2002. Second place went to the policy programme of Bridges.org, a research and advocacy non-profit from South Africa that promotes access to ICT by researching, testing, and promoting best practices for sustainable technology use.

"Network architecture. Sector liberalisation. Infrastructure. Regulatory frameworks. Universal access. Universal service obligations. Radio frequency spectrum. Software and applications. They're all areas of ICT policy. You can see why civil society organisations and others are often intimidated by the technicalities from taking on the challenge of working for positive change in national ICT policy!" said Nancy Hafkin, networking pioneer for whom the prize is named. This is why APC – a non-profit association which has worked to promote Internet and ICTs for development since 1990 - chose to focus this year's Hafkin Prize on inspirational African ICT policy initiatives.

"ICT policy decisions impact any citizen who wants to take advantage of the opportunities that can come with new technologies," Hafkin pointed out in her congratulatory message. "Will the national policy favour technology that is state-of-the-art but not affordable to the rural areas? Will government provide service subsidies to the poorest or to the disabled? Will government encourage the development of software that the illiterate can use? All of these are the very real and non-technical questions that are determined by national ICT policy choices. Both SchoolNet Namibia and Bridges.org have been leaders in demystifying ICT policy and bringing its realities to people in Africa."



SchoolNet Namibia's objective is to provide appropriate computer technology and Internet access to ALL schools in Namibia. Primarily a hands-on training and support organization, their successful introduction of computers and internet into over 200 schools since 2000 led SchoolNet to become actively involved in policy-making at the national level in Namibia.

SchoolNet Namibia is an exemplary role model for the sustainable introduction of ICT across the education sector. The SchoolNet model which includes the adoption of appro-

appropriate school computer technology, the use of open source and free software solutions, free Internet Service provision in partnership with local government-owned telecommunication agencies, and solar-powered school computer laboratories can be replicated by education systems across Africa. The Namibian government has recognised SchoolNet Namibia in its National Development Plan for 2000-2005 as a key actor in the roll-out of ICT in education and job creation.



Awarded with a very honourable mention was the policy programme of Bridges.org, which is committed to raising awareness of the impact of policy decisions at both the policy level and at the grass-roots level.

The policy team drafts issue-based reports and briefs, gets information into the hands of government officials who can use it, informs policy-making, involves people at ground-level in policy debate, and acts as a bridge between international views and best practices and local circumstances. Bridges.org has worked closely with South African government officials to provide practical input to their ICT legislation and planning.

Bridges.org also catalyses public support for ICT policies by explaining the issues in laymen's terms, helping citizens understand the potential benefits of ICT for their daily lives. The policy team publishes community articles that detail the implications of policy issues in a meaningful way, and covers topical issues such as digital public records and citizen rights to privacy.

Web Resources

The \$7,500 USD APC Hafkin Prize – a biannual award - recognises outstanding examples of African initiatives in information and communications technology (ICT's) for development. More about the award and the 2002 finalists and winners, please visit www.apc.org/english/hafkin/

For more on the SchoolNet Namibia project, check out www.schoolnet.na.

For more information on Bridges.org, visit www.bridges.org .

Learn more about the Association for Progressive Communications (APC) at www.apc.org.

COMMENT

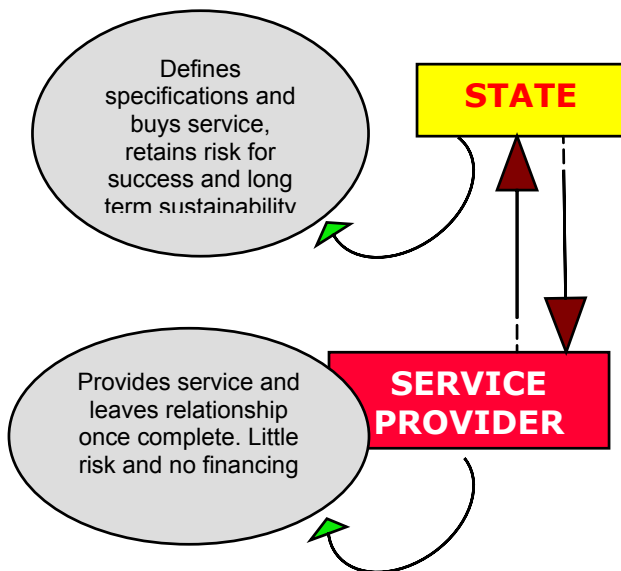
Innovative Service Delivery through public-private partnerships

Glenda White, Executive Director, Centre for Public Service Innovation (CPSI)

Public private partnerships provide opportunities to public sector institutions to enter into arrangements to greatly enhance service delivery through contracting a private, or community owned, partner to undertake delivery responsibilities on their behalf. For a predetermined fee, the partner undertakes management responsibilities and their associated risks, in what it is a mutually beneficial relationship.

Over the past four years, largely through the dedicated attention given by National Treasury to developing procedures and guidelines that regulate PPPs, the state has steadily been moving from being a simple procurer of goods and services, to being a partner, participating in a relationship of delivery together with financing institutions and service providers, rather than managing a contracted party.

CONTRACTED SERVICE



Some of the PPP arrangements that exist are :

Service contract - Government retains ownership over facilities and capital assets, and awards to a private sector partner the right and obligation to perform a specific service

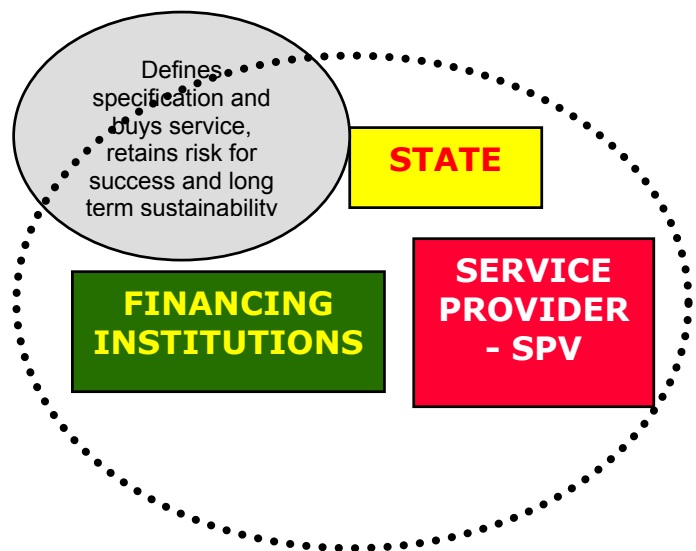
Concession - Private partner mobilises private finance on a limited resource basis, and is expected to maintain, rehabilitate, upgrade and enhance facilities

Build-operate-transfer - Private partner undertakes all of the above, for a specified period of time, after which the facility reverts back to the state

Build-operate-train-transfer - The private partner takes on greater responsibility for building capacity in the public sector counterpart, prior to the facility reverting back

However, a PPP arrangement suggests that the state always knows what it wants before it enters into a partnership. It identifies a particular need, undertakes a feasibility study, determines the requirements of a request for proposal, and then moves into advertising and contracting.

PPP



The PPP process does not in and of itself allow the space to test out possible solutions, create space to experiment and possibly exclude less viable options, for those that demonstrate better value. It is, rather, strongly regulated, requiring significant financial and capacity inputs, following through specific approval processes. This allows little room for error.

Innovation partnerships take the concept of the PPP into a new, more creative, more exploratory space. The innovation partnership creates the space for demonstrator and 'test-case' projects. These involve taking a possible solution and testing it for validity through limited and controlled application, without placing an obligation on the public sector partner to procure the service or solution post testing. Most of these applications are undertaken at the cost of the solution-provider. The intention of such partnerships is two-fold:

- To enable solution providers in the private sector to be able to reflect their capability, without going through the rigours and expense of an entire procurement process;
- To provide to the public sector the opportunity to test and observe solutions at work, before determining whether or not they are relevant to their context.

Innovation partnerships can be used creatively to tap into the vast resources that are available to government, but often remain untapped. They take the public sector into a new, relatively unknown terrain, but certainly have value to a state attempting to solve some of the significant service delivery challenges.

Web Resources

The National Treasury guidelines on PPP's and other information can be found at www.treasury.gov.za.

CASE STUDIES

Most developing countries are united by the diverse challenges of addressing poverty and unemployment, enhancing economic development, enhancing the ability of rural communities to access ICT's, and enhancing government services, especially through e-government programmes. An innovative and award-winning programme in India has managed to successfully take on these diverse challenges. Innova features two abridged case studies of Drishtee covering different aspects of the project.

Drishtee is an organizational platform for developing IT enabled services to rural and semi-urban populations through the usage of state-of-the-art software. The services it enables include access to government programs and benefits, market related information, and private information exchanges and transactions. Using a tiered franchisee and partnership model, Drishtee is capable of enabling the creation of approximately 50,000 Information Kiosks all over India within a span of six years.

Drishtee, Connecting India Village by Village

Abridged International Institute for Communication and Development (IICD) Case Study, April 2002

On 26th February 2000, Drishtee signed an agreement with the district administration of Dhar for developing modules of a low cost, self-sustainable and community owned rural intranet project called Gyandoot. This project started with the deployment of the software and was followed by the maintenance and management of the network, on a revenue sharing basis.

This model of government – corporate partnership led to faster growth of the information centres and an increase in the number of services. With inherent sustainability and low cost operation due to entrepreneurial ownership, the model became viable for replication and profitability. The next district, which Drishtee entered in under its own brand name, was Sirsa in the state of Haryana.

Drishtee is a platform for rural networking and marketing services for enabling e-governance, education and health services. It is a state-of-the-art software which facilitates communication and information interchange within a localized intranet between villages and a district centre. This communication backbone has been supplemented by a string of rural services for example, Avedan, Land Records, Gram Daak (mailing software), Gram Haat (virtual market place), Vaivahiki (matrimonial), Shikayat (online grievance redressal), Mandi Information System and a host of other customized services.

These services are provided through Drishtee in a village (or a group of villages) by a local villager, who owns the kiosk after having it financed through a government-sponsored scheme. The employment thus generated leads to a new breed of it literate generation (45,000 kiosk owners by 2003) who can pay for their meagre loans (not more than 75k) with their earnings (reasonable to high) and become a role model for the younger generation.

Starting with Gyandoot in Dhar (Stockholm challenge award winner) and then extending to other villages, Drishtee has travelled a long distance of enrichment in content. With every villager as our partner in concept "we are all set to become the world's largest intranet" (Microsoft in its journal dated 12th September, 2000)

The project has been envisaged to cater to social, economical and developmental needs of the villagers through an innovative G2C (government to citizen) model. The project sought to mark a paradigm shift by using the information technology for rural people and changing the cutting edge of

the delivery apparatus of the government, from the government servant to a man from community itself.

Drishtee is an organizational platform for developing IT enabled services to rural and semi-urban populations through the usage of state-of-the-art software. The services it enables include access to government programs and benefits, market related information, and private information exchanges and transactions.

Using a tiered franchise and partnership model, Drishtee is capable of enabling the creation of approximately 50,000 information kiosks all over India within a span of six years.

These kiosks would potentially serve a market of 500 million people, with aggregate discretionary purchasing power of Rs. 100 billion (R20 billion). In less than two years, Drishtee has successfully demonstrated

its concept in over 90 kiosks across five Indian states.

Drishtee's business model is driven by a village entrepreneur who is suitably trained to handle user-friendly software. The unit revenue earned by this kiosk owner is a few cents per transaction, but the volume of the operations and an intrinsic demand enable viability very early in the operation. This individual, educated to 10th grade or above, becomes a role model and a messenger of valuable information for the villagers. With a minimum size of 800 families as a prerequisite for a kiosk's viability, a total of 100 such kiosks or more can be successfully set up within an average Indian district.

A small fraction of the combined total revenue of such centres is enough to interest a local businessman to act as a channel partner and invest for the operational cost at the outset. This partner performs the role of a franchisee and adds value in scouting for kiosk owners, developing relations with district government, and maintaining the entire network of operations within the district.

The government lends credibility to these sets of kiosks and the channel partner's operations by assuring speedy processing of applications and grievances at the block and district levels. Though the district administration has no financial returns/investment in this network, they gain substantially in terms of higher efficiency and lower overheads. The service mix of Drishtee has been designed to cater simultaneously to different segments of the target market. Users save immensely on the opportunity cost of travelling and the time spent for getting these services otherwise.



Presently, about 15% of an average village's population takes advantage of the kiosk services where ever it has been set up. This percentage is likely to increase, but presently the remaining 85% also gain in terms of wider reach, modern outlook and a definite change in social perception. This win-win game would also include key future players in the corporate sector.

The village market, with its high potential volume, offers an attractive expansion strategy for the demand saturated FMCG (Fast Moving Consumer Goods) companies. However, the vast expanse and negligible means of penetration make the rural market cost unviable for conventional penetration. Drishtee kiosks can offer cost effective means of reaching out to this population of about five hundred million, not only for the sake of promotion but also as a distribution network.

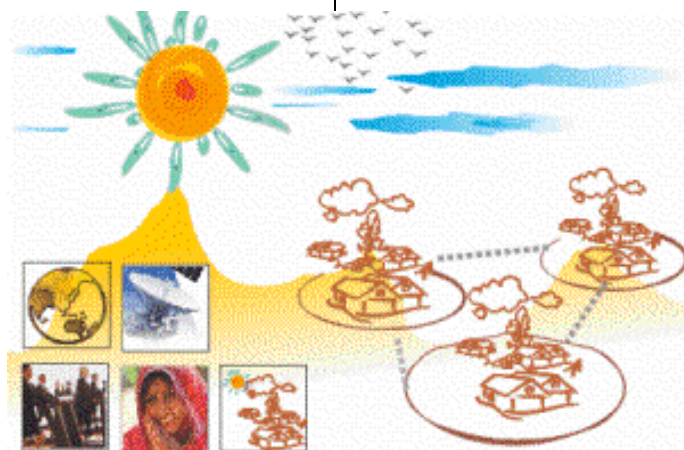
Identification of services is a continuous exercise with need identification surveys undertaken at the district level. During the formation of the initial idea a detailed exercise was taken up involving the villagers and the community. The selection of the services was a result of this interactive exercise and was based upon the advice and the felt needs of the villagers.

In these meetings, it was learnt that due to lack of information regarding the current and prevailing Mandi (agriculture produce auction centres) rates, the farmers were unable to get the best price for their agricultural produce. Villagers also informed that copies of land records were difficult to obtain. The villager who requires a copy of the land record had to go out in search of the Patwari (village functionary who maintains all land records) who may or may not be available on that particular day at his headquarters. For small complaints or for giving applications, people had to go to district headquarter which resulted in waste of time, money and potential livelihood earnings.

Kiosks or information kiosks, as they are termed in Hindi, are nodes working as rural cyber cafe-cum-cyber offices. About 2-4 gram Panchayat (village council), i.e. 2-10 villages with a population of 5,000 to 10,000 can access the services being provided by a single kiosk/ information kiosk. The information kiosks are set up in the villages, which are on the roadsides and are centrally located. These are usually the major bus stands of the rural areas and villagers normally come there to embark a bus. The kiosks have normally dialup connectivity through local exchanges on optical fibre or uhf links. Besides the computer and the modem the hardware set-up at the kiosk includes printer, UPS, furniture and stationary.

To enhance the economical viability of the kiosks, the kiosk owners (Soochaks) are given licenses to vendor government judicial stamps and powers of petition writer are also delegated to them. Due to the delegation of above-mentioned powers additional incomes are possible and the information kiosks are becoming virtual cyber offices.

The person operating the information kiosk is a local matriculate operator and is called Soochak. A Soochak is not an employee but an entrepreneur. Soochak only needs maintenance and numeric data entry skills. He needs very limited typing skills since the software is menu-driven. Village committees and the local community interactively select the Soochaks. The same was done for originally started 20 centres.



Soochak runs the information kiosk on commercial basis. He has an initial three-year agreement with Drishtee. He does not receive any salary and bears the cost of stationery, maintenance, electricity and telephone bills. He pays 20% of income as a commission to Drishtee for maintaining the network.

The hub normally refers to two layers of data interaction, i.e. From the villages to the district centers and vice versa. The third layer at the block level is envisaged for the future for better coordination and redressal rate for the applications coming from different kiosks. Normally a team of implementers, managers and technical staff is required to efficiently administer a hub. With the learnings acquired through the operations in districts, drishtee has been able to compile a manual for best practices to be adopted in partner-operated districts.

The long-term objective of the project has been to use innovative e-governance, e-commerce, and e-education techniques as a tool for social change and development through wired villages within districts.

Since the start of the network since January 1, 2000, several examples of public benefit came up initially from

Dhar –

- Farmers in Bagadi village were getting Rs. 300 per quintal from local traders for their potato crop. On taking the prevailing market rates from the information kiosk, the farmers could sell their crops to the Indore Mandi (auction centre) for Rs. 400 per quintal.
- In the interior remote hamlets of Anandkhedi and Umrela village, local teachers had not received their honorarium for a 3-month period. Upon receipt of this complaint through the information kiosk, the problem came into the notice, which was promptly rectified.

Efficiency levels in the functioning of the government departments has increased many fold resulting into better and prompt services to the rural masses self help groups in the rural areas are getting more organised and empowered due to transparency brought about in the government services. The lower government functionaries have become computer-savvy. This is apparent from increased number of applications for computer loans from employees provident fund and increased number of officials who have joined computer-training classes. Computer literacy has increased in the rural areas. Finally, the state IT policy has been re-oriented after the impact of the project to provide the fruits of the IT to the rural masses through similar project model.

Case study compiled for the IICD case studies database by Satyan Mishra (satyan@drishtee.com).

Web Resources

For more information on Drishtee - www.drishtee.com

For a collection of insightful case studies on the use of ICT's for development visit the IICD site - www.iicd.org/base/story_showpage?sc=89

In one year, OSS moved from the periphery to the centre of debates on IT strategy. Three drivers are noteworthy:- a dedicated core of Government Information Technologies Officers, support for OSS from influential quarters, greater understanding by key decision-makers in government. As a member of the OSS workgroup, CPSI continues to support OSS development efforts. Notwithstanding the interest, the full importance and significance of OSS still needs debate and discussion. To assist in the regard, Innova carries an abridged version of a presentation by Arno Webb to an e-government conference at the end of 2002.

The Importance of Open Source Software (OSS) in Government

Summary of a paper prepared by Arno Webb, chairperson of the OSS Work Group of the Government IT Offices Council, November 2002

MAKING THE BUSINESS CASE FOR OSS

The so-called VCS Model serves as basis for this talk. Prof Mark Moore groups the criteria for a viable business case under three headings taken from a model developed by Mark Moore of Harvard University. A convincing case for a new venture needs to demonstrate that it will provide additional **value**, that the necessary **capacity** to implement exists, and that there is sufficient **support** to ensure that the venture will not fail because resources are not made available, outputs are not utilised, protection against threats is not provided, etc.

In Government we are currently moving from an ad-hoc use of open source software to a more systematic strategy for maximising its benefits. We have just completed the second draft of a document on the proposed strategy. The document deals with each of the three areas in the model. Currently there is much hype around OSS. It is important though that we implement OSS for the right reasons, by amongst others first ensuring that a sound business case exists.

CURRENT STATUS IN GOVERNMENT

The OSS Work Group proposed a three phase strategy for the introduction of OSS in Government:- Introductory phase; Enabling phase; and Mature phase

The Introductory Phase, in progress, involves disseminating information on OSS, consultation with all roleplayers, trial use of OSS, testing the OSS development approach, initiating an OSS research programme, removing bias and discrimination from procurement procedures, and initiating planning to develop support capacity.

During the Enabling Phase, the recommendation is that we set in motion the plans formulated in the introductory phase; implement sound procedures for selecting software and systems where using OSS will be beneficial, develop capacity to develop, implement and maintain OSS; forge partnerships with all players with whom we can create synergies in implementing OSS, and ensure that open standards are consistently applied across Government.

During the mature phase we recommend that we manage, utilise and maintain the capacity to develop, procure, use OSS, contribute to the development of OSS in broader communities, modify existing OSS for internal use, and form part of partnerships across all sectors and across national borders, aimed at promoting OSS.

VALUE OF OSS FOR IMPROVING SERVICE DELIVERY

OSS has the potential to improve the cost and speed of service delivery and thereby efficiency in the public service. It

can also impact positively on quality. Some relevant issues are discussed.

Cost: Existing OSS can be obtained at low cost and redistributed widely without further payment for licenses. There appears to be a significant cost saving. Overall impact on the total cost-to-company needs to be investigated case-by-case. In some instances overall savings may not materialise because acquisition cost is a small portion of total cost, offset by increases in other cost components. Decisions to implement may then be taken based on the less measurable benefits.

Reasonably priced support: Quality and price of services improve when different vendors compete.

Support not vendor-dependant: Proprietary Software (PS) support can disappear when the developing company goes out of business. OSS support survives better because anybody can study the software and meet a demand for support.

Security: Availability of source code enables the user organisation to study it, determine whether its functioning poses any security risks and amend the software if so desired.

Interoperability: The availability of source code makes it easier to use a routine from one programme to perform the same routine in another. This promotes the interoperability of different programmes or systems.

Evolutionary development: OSS development tends to be evolutionary. The relatively bigger upheavals or disruptive ramp-ups that can occur when new versions of PS have to be installed are therefore less likely to occur.

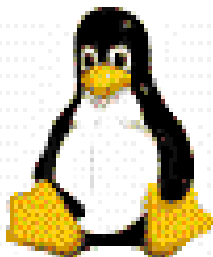
OSS runs on other platforms: The OSS development communities are in general not associated with specific platforms and therefore OSS can generally run on different platforms. Where it cannot, availability of the source code make it possible to adapt it to function on the desired platform.

Running on older machines: OSS is in many cases able to function on older machines that are no longer suitable for running the latest versions of PS.

CONTRIBUTING TO GROWTH & DEVELOPMENT

Avoids duplication: Sharing of source code eliminates the need for the same routines to be codified because programmers working for different organisations don't have access to each other's work. If source code developed for a specific government application is publicly available, corporations can spend their resources to improve this software, add value, and find new markets for it, rather than recreating it from scratch. The reverse could also apply, if government agencies are able to use code developed by commercial concerns.

More efficient research: An analogous situation exists in research communities. Sometimes organisations creating software for scientific research must spend its cash and pro-



grammer time to create a specific tool from scratch when another research facility has written software which performs the same function. Economic waste occurs which hurts national productivity as a whole.

Foreign currency savings: Money paid for PS licenses mostly go out of the country. OSS shifts the expenditure to software adaptation and training, which can be done by local service providers.

SMME development: The entry barriers into OSS-based development are often lower, making it easier for local businesses to get established.

VALUE OF SHARING

Government as a catalyst: Because Government is the country's largest IT user, its adoption of OSS will act as stimulus for adoption in other sectors.

Fast debugging: The more popular OSS is being used and further developed by many individuals across the world. Collectively these user communities tend to be able to find and fix flaws in programmes faster than a company that develops and sells proprietary software.

Peer review: The peer review made possible by open source code brings many more minds to bear on the software and leads to software which is more error-free and resource-efficient than proprietary software.

Sharing software with Government's clients: There will be cases where clients that want to use ICT to access government services are in need of software. OSS will be a good solution, as it can be provided without charge and will allow the user to adapt or further develop it.

Cost of licensing and licensing administration: This obligation can be minimised by using OSS.

Risk of piracy: Piracy almost becomes a non-issue when using OSS because redistribution is normally not restricted.

SUCCESS FACTORS

Critical mass: The OSS model works best where there is a wide range of users who contribute to development. The true OSS model will not work for specialised, unique applications.

Develop in-house expertise to support users: For the widely used OSS products, support from vendors, other corporate backers and special interest groups is easily obtainable. For ordinary end users, in-house support is essential.

Institutional arrangements for external support: A suitable arrangement has to be developed to coordinate the capacity in government, business, parastatals and professional groups.

OSS in curricula: Suitable material on (a) the most prominent OSS software available and (b) software development by means of the OSS philosophy should be introduced at various levels in the education system

Management structures: OSS development often takes place in widely dispersed communities. A competent management structure needs to be put in place to ensure continued coherence in the development.

Support: Support is needed at all levels in the organisation and also from outside stakeholders.

Find the best licensing arrangement: It may be necessary, for example, not to disclose certain portions of in-house developed software that are part of an OSS programme or suite, either to protect a competitive advantage or to avoid another security risk. The license adopted must allow this.

Version control: People contributing to the development are normally widely dispersed and could easily be working on different versions, making it difficult to integrate all their contributions. A strong centralised version control function is essential. There is also a need to control forking, i.e. different groups taking products into different (incompatible) directions.

Communication strategy: This is a part of implementation that is sometimes neglected. It should always be an integral part of change management.

Sufficient focus on the non-technical user: A criticism sometimes leveled against OSS is that the technically oriented developers do not provide adequate graphical interfaces for the non-technical users. If this need is not addressed specifically, user support will be weakened.

Speed up downloads – create download sites: OSS can take hours to download from international sites. It may be justified to create more local download sites.

Security: Uninitiated people often have reservations about security of OSS. The advantage of OSS is that the source code is available. It could be analysed to identify possible vulnerabilities that can flow from it. Critical analysis show that as long as the overall architecture in an installation is sound, OSS does not bring significant advantages or disadvantages.

Check the architecture: The overall soundness of architecture is therefore a success factor.

Thorough cost analysis: Although OSS can be obtained free of charge or at a very reasonable price, it is essential to do a thorough cost-benefit analysis. In many cases the cost of procurement will be a small portion of overall cost of implementation and maintenance, overshadowed by other costs that may be higher for the OSS alternative.

Seamless integration: Ensure that different pieces of software integrate as well after OSS implementation as before.

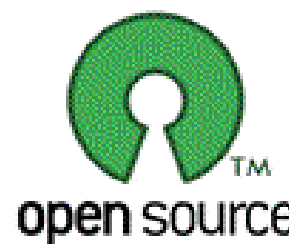
Change management: There is a hierarchy of needs associated with successful software implementation:

- The services to be delivered must meet the real need.
- Change business processes to utilise ICT optimally.
- The software itself must perform properly.
- The transition from the old to the new must be consciously managed.

Change management strategies must be designed to take the stakeholders through a number of phases:

- Being totally unaware of coming changes
- Knowing "about" them
- Having adequate knowledge and understanding
- Supporting the changes
- Committing effort to making it happen
- Implementing changes
- Adapting the new practices to optimise them
- Assimilating the new practices with the total environment

Change management should not end before all these phases have been completed.



Web Resources

OSS workgroup information portal - www.oss.gov.za

INNOVATION BRIEFS

Innovative approach to school management launched

[Newsbits –Innovation Hub, February 2003]

Kgatelopele Technologies, one of the companies participating in the pre-incubation programme at The Innovation Hub, recently launched their Open-Source School Management System pilot project at The Innovation Hub in Pretoria.



The aim of the launch was to create excitement and enthusiasm about the project among the stakeholders and member of the open-source community. Dr Bob Day, ICT Executive Director at UNISA, gave a keynote address.

The project resulted from initial efforts of the Shuttleworth Foundation to develop an open-source school management system that would cater specifically for the needs of schools in Africa.

When the project was put on hold, an advocacy group consisting of stakeholders in the education sector in Africa was formed. This was followed by the formation of a consortium to develop an OSS school management system, consisting of Kgatelopele Technologies, CSIR Icomtek, Wits Computer School and Netday, at the Department For International Development (DFID), as the initial funders of the project.

The pilot project involves seven schools from Gauteng and the North West province that are using the e-SchoolMan, the system developed by Kgatelopele Technologies. The consortium will use feedback from the pilot schools and additional research from the relevant stakeholders to develop the new system, with a new name, by the end of July this year.

Open-source technology will change the face of school administration in Africa by making it possible for schools with limited resources to access, at no cost, state-of-the-art multi-platform software that can be customised to suit the specific needs of the school.

Source: www.innovationhub.co.za/newsbits/

OSS used for Interactive Chat Sessions On The Internet

The Open Source Software Work Group recently conducted a very successful chat session on the internet, utilising open source software (OSS). The chat was held on a server running OpenBSD (OSS), using an open source Internet Relay Chat (IRC) application.

The machine on which the chat was run was a very old one (1994), that would normally have been thrown out as redundant equipment a long time ago. The session nevertheless worked flawlessly and there was no lag in response time. SITA kindly made the facility available.

Anyone can start a chat channel at any time, however for secure chats the procedure is for all prospective participants

to forward their details to the organiser, who then registers them as group members. At the agreed time, all participants log into the chat room and start chatting. The moment a group member finishes typing in his contribution and hits "enter", the contribution appears on the screens of all other participants.

All participants see all contributions scrolling across their screens as they are submitted and can read and respond immediately. Members can chat directly with each other without disturbing the discussions in the main chat room and can easily exchange documents and files.

Participants can join or leave the session at any time. The whole discussion is available to be saved by the participants when logging out.

This facility can be a great time saver. If you wish to try the application, contact Aslam Raffee [aslam@gcis.pwv.gov.za] for more information.

Source: OSS work group

Special Issue on Rural Connectivity

[Bytes for all.org e-mail newsletter]

A key priority area for CPSI is enhancing access to government services, particularly people within rural communities. Issue 10 of the Bytes for all.org e-mail newsletter is timely as it looks at the issue of Rural Connectivity.

Bytes for All, originally an initiative of two people from India and Bangladesh, was established to close the knowledge gap in Southern Asia and to work toward increasing the availability of information technology.



The latest issue of the newsletter includes links to articles and case studies, and identifies solutions and practices that have been successful in connecting the un-connected in South Asia and elsewhere in the developing countries. Not only the technologies but also the problems, prospects, policies and social implications of such solutions are discussed.

Rural connectivity is a huge issue in South Africa. Internet connectivity range from a low of 0.2 people per thousand population in Bangladesh to a high of 8.5 people per thousand population in Pakistan. Many innovation solutions have been developed in response to this challenge.

The Bytes for all.org newsletter is a valuable resource for people involved in the delivery of innovative public services. Previous issues featured:

- Education (Issue 5)
- Public Health (Issue 7)
- Disaster Mitigation (Issue 8)
- E-governance (issue 9)

Source: www.bytesforall.org