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**FACILITATING THE DELIVERY OF JUSTICE SERVICES
TO RURAL AND REMOTE COMMUNITIES**

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INTRODUCTION

There are many projects which facilitate the delivery of services to various cyber communities around the world (1). The major projects concentrate on helping the building up of these cyber communities and facilitating the training and awareness raising of these communities. The communities are educated on the use of technology and the importance of using Internet and multimedia based technology to enhance some or a few aspects of their lives.

The delivery of health and justice related services require the development of overall technology infrastructure that incorporates the use of existing and planned telecommunications developments for remote and rural communities. The facilitation required for the delivery of these services to remote and rural areas requires that the government and private sector cooperate to provide the necessary environment (2). In the developed world this has been achieved by the governments providing generic funding for the advancement of the telecommunication carriers which in turn provides the infrastructure development to rural areas. In the developing world, the issues are very different and there is currently aid related funds being channeled to improve the telecommunication barriers faced by these countries (3).

This paper attempts to outline a model to deliver justice services to remote and rural communities. The infrastructure issues that help to deliver such services effectively and an evaluation format for such a project will be outlined. The training issues involved in such a project will also be discussed. The paper will identify factors that help to provide these services to a larger proportion of the rural population.

The BIG PICTURE

The delivery of legal services to remote and rural communities is one step forward towards improving access to rural and remote communities to services available to the urban population. The global environment divides such communities between developing and developed countries. There is currently discussion on how the developed and developing countries differ in their need for telecommunication services (4). These discussions compare the generic needs of the developing countries and usually provide some analysis of the relationship between the GDP and costs of maintaining a telephone line in the respective countries (5). In a 1995 report by the International Telecommunications Union (ITU) it is stated that in the worlds poorest countries, the average number of telephone lines is 1.5 per 100 population as compared to 52 per 100 population in the richer

countries. In countries such as Cambodia and Chad, there is just 1 phone for every 1000 person.

The reality is that in most developing countries telecommunications infrastructure is usually low in their list of priorities. What is also important is that there must be other general infrastructure development for the delivery of services using telecommunications (including the internet). In this respect, the delivery of health related services using telecommunications plays a more important role and takes priority over the delivery of legal, justice and education services. It could be argued that the revolution in the delivery of health related services will lead the way in which telecommunications will be used to improve the delivery of other services especially to rural and remote communities.

The major issues that must be resolved when considering the 'big picture' are the importance of infrastructure development for telecommunications, the balance between private and public agencies in developing this infrastructure and the provision of training, education and research to innovate the use of the telecommunication services. The profit orientated private sector agencies will not be interested in providing access to rural and remote areas where there is low demand. This is an issue that is prevalent in both the developing and the developed world (6). To resolve this major impediment to telecommunications infrastructure development the governments of developing countries have had no choice but to provide infrastructure development grants to telecommunications and research organisations. In some countries the governments have been innovative and tied these grants to the privatisation involving telecommunications carriers in the country. Unfortunately, current state of play shows clearly that when telecommunication services are privatised, the rural and remote communities with low number of clients do not benefit (7). The lesson here is that government must take responsibility for the development of infrastructure in telecommunications if they are serious about using telecommunications as a tool to improve the development of rural communities. Research indicates that having access to basic telecommunication services improves the living standards of rural communities (8). To provide rural communities with more sophisticated telecommunication services such as effective access to the internet, it is important that governments provide effective infrastructure which is more than just basic analogue services. The additional services include digital services such as ISDN, Frame Relay and Asynchronous Transfer Mode (ATM); satellite communications; mobile telephony; Internet points of presence and Public Key certification infrastructure. ISDN, Frame Relay and ATM is necessary for providing the high speed networking capacity. Satellite technology is better able to provide coverage across wide geographical areas, especially where the deployment of cabling would be restricted or impossible due to terrain or other issues.

Security and privacy would likely be considered critical aspects of such a system (given the nature of information being transferred) and hence the need for such facilities as "Public Key" certification.

In developing countries, major global aid providers such as USAID, World Bank, WHO, UNDP and UNESCO are paving the way forward to create some infrastructure development for rural communities with the above capabilities. The projects which help create infrastructure development are in the education and health areas. The argument here is that these are important priorities for the agencies involved in providing funding and for the population in the remote areas (9). There is also a project by the Grameen Bank to improve internet access for women in remote areas in Bangladesh which also includes some infrastructure development.

It is argued that infrastructure development will eventuate and evolve as cybercommunities emerge in rural and remote areas (10). If we were to wait for complete infrastructure development before innovating service provision to rural areas, the wait may result in no developments taking place and further disadvantaging rural communities (11). This attitude has resulted in some innovative projects being developed to provide services through telecommunication services to rural communities as outlined above. What is important is that governments and aid agencies continue to develop infrastructure and set priorities on the delivery of services to remote areas.

DELIVERY OF JUSTICE SERVICES- THE VARIOUS COMPONENTS

The delivery of justice services using telecommunications has various components that will be explained in this section.

The delivery of justice services will make use of video conferencing, internet and email as the main form of communication. This will enable justice personnel in remote and rural areas to communicate effectively with their colleagues in other areas and with their clients. This will also enable the justice personnel to research and work collaboratively with their colleagues in other areas. Electronic mailing lists will be in operation to keep justice professionals in touch with the latest developments in a number of fields.

In order to provide effective delivery mechanisms of such services there must be many components that work in collaboration with each other. In this section these components will be identified and discussed.

What are the types of services that could be delivered using the methods described above?

Identifying the types of services which would be delivered using telecommunication technology is the very first function that organisations must carry out. There are currently 3 types of services that are commonly identified as being 'deliverable' using telecommunications:

- Legal Services using teleconferencing where the client may be in a remote area and the legal team in another remote area or in the city. The client can be either in a private area seeking advise from the lawyer or in a 'cybercourtroom'. In most cases, the 'cybercourtroom' is usually a room with video-conferencing facilities, some chairs and a table.
- Communication between legal professionals situated in remote areas with their colleagues in other remote areas or in the city. This is identified as an area that results in cost savings as legal professionals in rural areas need not travel vast distances to communicate with their colleagues. Using the equipment for meetings and to exchange documentation is becoming common practice among legal professionals
- Communication between justice professionals and their clients who may be in police and prison complexes throughout rural and remote areas. This reduces the need for clients and justice professionals to travel vast distances to meet each other. Clients may be provided with various services such as psychological services using video-conferencing techniques.

Project Methodology

The next stage of development is to identify what facilities are available in the rural and remote areas. The types of facilities which should be identified are telecentres, the availability of shared services with other organisations and the level of telecommunication infrastructure available in the area. These may seem simple tasks but in reality the overall telecommunication plans for an entire state or country may need to be studied in detail before final decisions can be made.

With regard to the above point, information will need to be collected about existing telecommunications facilities and assets. An overall system plan and 'road map' will then have to be developed or implementation across all applicable sites and locations.

The important question of 'standards' (technical standards) must also be tackled at this stage. It is extremely important that the standards be agreed upon and fit in with other developments such as state and district priorities. To cite one unfortunate example, an organisation purchased equipment worth A\$150,000 only to find out later that this equipment did not fit with 'standards' being

currently used by another part of the same organisation. The end result in this situation was that the equipment had to be replaced at considerable cost to the organisation.

It is recommended that any project that is carried out be done so in stages with evaluation methodologies in place for all stages. Stage one can be the identification of standards and the services that are to be carried out using telecommunication technologies. Stage one should also involve an overall 'road map' as identified above. All of the evaluation strategies and methodologies must be developed at stage one.

Stage two will involve the purchase of video-conferencing equipment and the purchase of 'telecommunication line time'. In all of the projects which have been identified to date, this component is the most costly. The purchase of video conferencing equipment is a fixed cost but the cost of the 'telecommunication line time' is high especially when it involves rural and remote areas. This is an ongoing cost and needs careful budgeting and monitoring.

It is also at stage two that computers will be purchased to complement the video conferencing equipment. The computers will be installed at various points throughout the community and is based on the success of the telecentres approach (12). Computers will be used to supplement video conferencing and to train the communities on using Internet as a tool to improve their knowledge on legal issues. In the future, when the telecommunication systems are upgraded, it will be possible to use the computers for video conferencing. This is not possible in remote areas currently as studies indicate that even in developed countries, the telecommunications infrastructure is not advanced to cope with real time Internet video-conferencing (13). The situation in developing countries is far from being able to use such equipment.

Stage two will also involve the establishing of the technical plan for the entire project.

Summary Technical Design

Video Conferencing between multiple sites using the facilities of Local Area Networks (LAN) and telecommunications links is a proven and readily available technology. There are various brands and systems available in Australia and the choice will depend upon the specific features required, cost, and the need to inter-connect with other sites. A fundamental premise is to base Legal Aid's system upon on a set of standards which can be implemented across a range of products from multiple vendors (similar to the concept of "IBM compatible" personal computers) rather than a proprietary or "closed" system.

The interconnections between sites will be achieved using whatever telecommunications link can provide the required capacity and speed, within a reasonable cost structure. These links can be a variety of facilities from dedicated ISDN links, Public Switched Network links, radio, satellite, etc. The decision regarding each link will be determined initially in Stage 1 as part of the system design, but updated as new / better facilities become available in the region.

There are multiple organisations with sites in Western Australia which have established and proven video conferencing facilities, so there is little risk associated with the deployment of this technology. This project will draw together the current vendor options and the existing facilities at the targeted sites, to determine an overall system "architecture" and a deployment plan. The deployment plan will focus first on utilising existing equipment when it fits the technical, functional and confidentiality requirements of the Legal Aid services to be delivered.



Stage three involves the training of the communities involved in using these services and utilising the equipment. This stage also involves training of the justice personnel involved in using the equipment. The training will be elaborate and include not just training how to use the equipment but also on coping with the new technology and ‘technological determinism’!

In addition to this, it is also recommended that there be public awareness forums on the use of technology for the deliver of legal services. These forums will also allow the public to familiarise themselves with the equipment and the use of the technology and equipment to access legal services. Depending on the cultural issues involved it is also recommended that these forums be held specifically for community leaders in the areas concerned. In Malaysia for example, teachers and religious leaders in rural and remote areas will be invited to these forums as they are well respected and have the capacity to enhance the use of such technology among the ‘kampung’ (village) people. What must be stressed during the public forums is that the technology and equipment helps the people in these areas to access and use legal and justice services effectively.

Studies indicate that in most developing countries and in remote areas of developed countries the most effective way for local communities to embrace technology is through the telecentres (12) Telecentres in Australia, Africa, Sweden, Canada and other parts of Asia (eg Malaysia) are seen to be accepted by the local communities and this is an important phase in gaining the confidence of the rural and remote communities to embrace technology (13). Based on the successes of telecentres it would seem an appropriate avenue through which training and familiarisation can be conducted.

Project evaluation

The project evaluation will incorporate both quantitative and qualitative measurements. Factors such as the hours of usage, number of clients serviced, number of people trained to use the service, level of customer satisfaction, perceived value of services to the community and the increase in knowledge about technology will be measured.

The evaluation will also establish if this project has increased the knowledge of the rural community on the use of technology and the Internet. This is useful as it can be used to educate rural communities about further use of such technology for information gathering. If the project is based at a telecentre, further evaluations can be carried out to determine how the telecentre can be used effectively to enhance the delivery of justice services to rural communities.

CONCLUSION-- Bridging The Gap Between Urban and Remote Communities?

Projects of the kind described here are intended to bridge the gap between the level of service to remote and rural communities and bring these services in line with the services provided to urban areas. The experience in planning the above project highlighted some important issues which must be taken into account when planning such services.

The first issue was with regard to the technology and telecommunication infrastructure available in rural areas. The above project highlighted the need for more telecommunications infrastructure in rural and remote areas. In many instances, the only reason why people in remote areas were not embracing technology, especially Internet technology was simply because it was not possible to use this technology. The current status in this regard is the gap widening further as governments are under the impression that if parts of the remote community can embrace technology, this is all that was necessary. The reality is that because there is no critical mass in remote developments (even in some developed countries), the momentum is completely lost and the gap is widening.

The second issue was in regard to training of the population in these remote communities. This is a more complex issue as the technology has to be present before commencement of training. The infrastructure development must precede training and this is not possible as there is no access to technology. What is happening in reality is that a few key people from the community are trained in hope that they will train the other members of these remote communities. Again the gap widens as training is provided to people in employment both in governmental and private enterprise. They in turn have no technology to train the other members of the community.

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