



## **Lumbu Indigenous Community Foundation DCITA Backing Indigenous Ability Discussion Paper Response**

Lumbu Indigenous Community Foundation is Australia's first Indigenous controlled, national, philanthropic foundation.

Lumbu has pioneered an innovative model of community development to create sustainable positive change in Indigenous Australia. Our model blends Indigenous knowledge, private and public sector experience and philanthropic support to build effective community organisations that are driven and controlled by the community. Communities choose to work with Lumbu to develop indigenous-led projects that deliver broad social benefit within Indigenous communities.

### **Summary**

Lumbu analysed the Backing Indigenous Ability Discussion paper and found that the relevant elements captured are key to providing services and encouraging remote and rural indigenous people to access internet services. Lumbu supports a collaborative relationship, in relation to policy development, forming between DCITA and the BIA participants.

Lumbu has identified the need for DCITA to organise a reference group involving the BIA participants, which is responsible for pooling infrastructure and connectivity equipment and services. Lumbu perceives several benefits:

- Cost in brokering common services and equipment
- Cost in shared maintenance
- Reducing complex technical knowledge required by BIA participants
- Direct feedback to DCITA of project uptake

The approach of collaboration needs to extend to the projects as well. Where there are standards and best practices, projects should be compliant. Open format storage practices should be adopted, and clearly enunciated ownership of specific information undertaken with all information based projects. If there is sufficient commonality between projects, Lumbu believes that the participants should form a reference group, so that DCITA can actively track progress and the committee can act as a forum for participants, which allow them to share ideas.

To assist BIA applicants in identifying funding from other government departments (a whole of government approach), Lumbu suggests that DCITA is the most appropriate body to manage a list of government funding options and agencies. BIA participants would be expected to use this resource to identify possibilities of joint inter departmental funding.

## Discussion

The BIA funding has been allocated for projects which will provide support and encourage rural and remote indigenous people to use the communications channels, which were previously optional, but now are fast becoming mandatory channels for service provision. Where government departments and other service providers previously had a website, where forms may have been distributed, it is now possible to do online applications. There is increasing pressure for services to be provided and brokered using technology such as the internet. Without equipment, training and support rural and remote indigenous people will be disadvantaged because of lack of understanding and access to these services. It seems that the BIA funding has been created to address this.

The discussion paper broadly discusses: public phones, the internet, video conferencing, community champions and cultural appropriateness as being aspects to be explored by Backing Indigenous Ability, in a sustainable manner.

Lumbu Indigenous Community Foundation (Lumbu) can see the much needed benefits of the Backing Indigenous Advantage. There is a tremendous disparity between rural and remote indigenous people and average white Australian in the area of IT and communications. This can be attributed to many things, such as the lack of culturally appropriate delivery, infrastructure and actual role models within the community. DCITA have addressed this through the Discussion paper.

Prominent in the discussion paper is sustainability. IT projects in general are high maintenance due to the changing pace of technology. With every technology gain, infrastructure dramatically improves on a yearly basis. "Bleeding Edge" technology soon falls behind the edge of obsolescence within a matter of 2-3 years. This phenomenon is not limited to hardware, but all facets of IT. As the hardware becomes increasingly powerful, the software grows to use the available capacity. Features are added to packages and programs, which increase the complexity. Thus, there is a continual need to grow with the technology changes: both infrastructure and software. If the infrastructure and the knowledge are not maintained, IT systems can be rendered "unusable".

Often it is a practice to purchase bleeding edge technology in an attempt to combat the effect of technology gains. This is very costly and may only lead to an extension of 2-3 years, before requiring inevitable upgrades. There is a questionable Return On Investment (ROI) to this approach. Making a sustainable IT project is a tough challenge in the face of technological changes.

The BIA funding is only 36million and lasts for 4 years. If sustainability is to be addressed, Lumbu believes that effective coordination in the allocation of the funding can result in large savings.

In terms of any Internet based project, the key elements required to roll out are:

1. Connectivity
2. Infrastructure
3. Applications
4. Training; and
5. Championing.

## Connectivity and Infrastructure

These elements are also identified by the BIA Discussion paper. Of these components, Lumbu believes that 1 and 2 will have a high degree of commonality between all projects. For remote communities, the most viable form of connectivity, given the population size is satellite. For areas which are rural, there may be access to broadband services.

Infrastructure consists of some form of intelligent routing and distribution to pc based end points. There are a myriad of options, which may be application specific. Traditionally, people envisage internet delivery to hard wired PCs, which connect to a central point. This model is being challenged at the moment by improvements in the fields of wireless communications combined with tablet technology. It is conceivable that in the not too distant future, perhaps 3-5 years, it will be possible to provide connectivity to an area of around 30 sq km, using the wifi max technology, which is close to commercial availability. Thus it is possible that machines within that area will be able to communicate large amounts of information, relying on a couple of base points. This concept has tremendous potential to deliver internet cheaply for remote areas.

Tablet PCs and handheld devices are increasingly challenging standalone PCs in terms of functionality. Items such as the nokia 770 or the Blackberry are devices which are capable of using G3 or wireless (802.11b/g) infrastructure to get internet connectivity and provide a platform for web browsing, email, as well as being open for application development. These devices may be the key in the future for delivering internet services to environments, which are hostile to PCs.

Such infrastructure can be used amongst most projects. Lumbu believes that DCITA should pool the resources of all BIA participants that require infrastructure and connectivity, so that it can be coordinated. Lumbu would prefer to see that the participants form a group, lead by DCITA, which tabulates infrastructure and connectivity requirements and manages logistics for all the projects. Lumbu loosely calls this the Infrastructure Management Group.

The body would also have the advantage of brokering cheaper services by arranging higher volume contracts. DCITA would require participation from BIA participants, to ensure that participant's requirements are met. The body would require separate funding and should have DCITA participation.

The suggestion in the discussion paper is that existing resources should be shared in a community, such as the internet access from a school. Ideally this sounds logical. The additional knowledge and the equipment required for routing and connection sharing and also bandwidth splitting, makes the idea less practical. Where as, a pool of services to provide connectivity and infrastructure managed by DCITA and BIA participants would allow greater autonomy over services.

An additional benefit to this is that the maintenance can be pooled for all BIA participants. The knowledge required for maintaining infrastructure for connectivity and routing is highly specialised. Having a resource per project is expensive. Sharing these costs across projects would require less vertical technical knowledge and allow projects to focus on applications, training and championing.

## Champions

Lumbu sees that the champions will actually be project specific. The complexity of projects often require a broad level of IT knowledge. For instance for a successful history application, the areas of data storage and protection, user interface design and development and also perhaps an information consent model are required. Each of these areas alone is complex. A champion should not be expected to know all of these areas. Lumbu perceives that a champion is actually going to be a high end user of the application, at best. They will not be expected to be able to directly fix system based failures, but may assist in trouble shooting.

Typically in any IT project, support is divided up into 3 tiers:

Tier 1 – user support: Simple questions from users about how to drive the system

Eg Where is the “any key”?

Tier 2 – simple system faults: Failures of the system which are due to underlying infrastructure

Eg How come I cannot access the homepage?

Tier 3 – complex system faults which require modification of system

Eg I put my information in and I never can find it again. The system operation is at fault.

Lumbu expects that the champions will only be able to provide tier 1 support and assist with tier 2 and 3 support. If the DCITA adopts the concept of shared management of connectivity and infrastructure, tier 2 support can be shared between projects. DCITA can provide a managed response to cater for project participants.

## Applications

In order to encourage participation of rural and remote indigenous people, Lumbu agrees with the Discussion paper, that the projects will need to be delivered in a culturally appropriate manner and provide training and championing. Cultural appropriateness may mean the development of language or pictorial based interfaces, which the target users are most comfortable using.

Lumbu expects that most project submissions will feature around applications. Lumbu does not expect the uptake of technology to occur if the project is to simply provide access to the internet. Lumbu believes that there has to be incentive in the form of an application, which encourages community or user participation. This has loosely been coined as a “killer app”. For the mainstream, the killer app has been email. It seems that for indigenous users, the killer app luring interest to technology, are the knowledge capture applications: applications which attempt to archive indigenous knowledge. Around Australia there are countless knowledge aggregation projects. The projects are a fantastic way to preserve cultural knowledge and represent an opportunity for cultural practices to be preserved and maintained. There is a tremendous amount of cultural capital being created through these projects, which demonstrate indigenous abilities.

In a sense, the capture of this information can be likened to the collection of museums of cultural artefacts many years ago. Many articles of cultural significance

were locked away from their rightful custodians. This is occurring in the digital age. Often universities and individuals are doing cultural collections, which are then under the control of the individual leading the project, or the university. The western system of copyright becomes an issue also which complicates the ownership of the digital collections. Lumbu expects that any knowledge collection projects using the BIA funding should actually strive to formulate guidelines for ethical practices and information ownership of all Knowledge collection projects.

#### Funding

Lumbu firmly believes that DCITA should be responsible for providing the facility for pooled infrastructure support. DCITA would directly benefit in terms of documenting a clear understanding of the implementation issues for roll out and acquire information to share innovative solutions amongst all BIA participants.

The discussion paper has made the suggestion that funding should be drawn from across government. Lumbu expects that DCITA will provide a service which collates a list of services and service suppliers within government. DCITA is best placed to be able to establish ties with other government areas to increase access to appropriate funding.

If the Infrastructure Management Group is accepted, DCITA may be able to fund the group through DEWR and actively train indigenous people to provide the support. Thus an ongoing training component, with immediate industry outcomes, can be funded through DEWR.

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