



Endeavour

An organisation realigns a fragmented ICT system to match its objectives

Endeavour is a Queensland-based nonprofit organisation that helps people with intellectual disability live independent lives. It provides employment, education, life skills training and residential facilities.

In recent years Endeavour has identified several ICT-related issues that limit its capacity to meet its objectives. This prompted the organisation to make a significant investment to strategically reposition its information systems.

Strategic ICT realignment using open service oriented architecture

To achieve a strategic realignment of its information systems, Endeavour entered into a partnership with a consulting firm, 5Phase Asia Pacific Co. Ltd. The partners developed a strategic plan that involved evaluating Endeavour's current ICT status and creating a vision for the future. The result would be the Endeavour Information System.

Endeavour is a major social and economic contributor to Queensland and has a long history of using lotteries to raise funds. The first statewide art union draw was held in 1964, and Endeavour's experience with ICT goes back to 1969 when it automated the art union. In 1990 it implemented its first client systems, in 1995 it linked all branches via email, and its first website was launched in 1998.

Endeavour has over 200 service locations, employs over 1800 staff and works with approximately 2000 volunteers.

Endeavour's long history with ICT has resulted in a fragmented environment where multiple applications are performing similar tasks but are unable to share data. Despite significant investment in ICT, Endeavour's systems cannot provide a clear picture of its overall business. Endeavour recognised that its capacity to meet its objectives was being limited by:

- **Restricted access.** With a distributed workforce, and prohibitive data communications costs, approximately 89 per cent of Endeavour staff cannot access corporate information and core business systems.
- **Lack of integration.** Endeavour has systems that hold comprehensive data but are not able to share information with other systems. This affects data integrity, which impacts on client relationships and effective management. Managers cannot obtain a clear picture of the business.
- **Lack of standardisation.** Endeavour operates a range of applications and databases that have



distinct interfaces and provide individualised outcomes to specific areas. This is wasteful because it means general staff need to learn new systems as they move around the organisation. It also increases the demand for technical support.

- **Decentralisation.** Because of the cost of data communications, remote offices duplicate head office systems to meet their service obligations and business objectives. This means less control of backup, security and information flow, and can result in critical information being lost.
- **Inability to measure and manage cost.** The organisation's information systems department has an annual operating budget of approximately \$750 000 but believes there are significant hidden costs. A more accurate estimate is essential so the

organisation can compare and contrast the cost benefits of alternative solutions.

- **Vendor dependence.** Using proprietary systems and applications such as Microsoft means that regular upgrade cycles are needed, usually every two to three years. These are virtually compulsory if maintenance and support agreements are to remain in place, and can be costly. New hardware and support skills are also often needed.

Hoping to resolve the problems posed by these limitations, Endeavour decided to:

- make a significant investment to redevelop its information systems
- align the selection and implementation of all systems with the organisation's objectives
- develop a clear and comprehensive strategic plan.

The strategic plan identified that three key systems needed redevelopment: the client information system, lotteries and payroll. Endeavour decided to form a partnership with Golden Orb Technologies Australia for this major systems redevelopment, with 5Phase as the project manager.

The arrangement enabled Endeavour to have two software engineers transfer to the Golden Orb team for the project. This resulted in significant skills transfer and development, and major cost savings.



The redevelopment will also have long-term benefits because it will enable more internal control and accountability and allow management to focus on areas of need. This will position Endeavour to take advantage of new opportunities as they occur.





The organisation believes that this strategy will deliver total cost of ownership management for developing and integrating enterprise systems internally, enabling it to take control of costs and infrastructure. Furthermore, it should provide the basis for collaborative development and integration with other service providers and government departments as part of wider e-government human service delivery initiatives.

The new system will be based on Golden Orb's service oriented architecture which employs open standards and open source. This requires the building of an application meta framework before specific applications such as the lotteries system are implemented.

When the application meta framework is in place, new applications can be added by using pre-defined business rules, speeding development and ensuring a consistent look and feel for interfaces. The system will support distributed transactions and web services, integrating legacy applications. It will be vendor, platform and database neutral, and will support multiple PC-based operating systems, thin client-based devices and mobile devices.

This approach will ensure maximum flexibility and is compatible with Endeavour's community values.

Benefits

The new, unified systems environment will produce three major benefits for Endeavour:

- for the first time, the workforce will share the same system
- in an organisation where working in isolated groups is the norm, staff will be brought closer to each other through a shared culture facilitated by common communications channels

- the organisation hopes the system redevelopment will create a new sense of community amongst staff.

The organisation will have a platform that is capable of serving all stakeholders, from clients to managers. This will increase transparency and enable more direct matching of systems design to organisational objectives.

Expected process improvements include internal management and government reporting requirements, administration processes, software requisitioning and control, and training support processes.

Twelve months into the project, the application meta framework has been developed and the lotteries system will soon begin testing. Although it is too soon to evaluate the new strategy, the project is within budget and so far there has been minimal slippage.

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Barriers

The major barrier faced was negotiating the contract. It is a large project that involves shared development of an IT system, an area that was new to Endeavour and which required considerable attention to detail.

Although it will empower staff in the field and provide them with resources never before available, the new environment will represent a significant change for many. Given the current fragmentation of systems and work practices, the process of change management is itself daunting.



Key lessons

- It is essential to match ICT projects to business needs and organisational objectives. Endeavour's management thinks the lack of an overall perspective when implementing systems might have contributed to the fragmentation of systems and control within the organisation.
- Systems must be based on real needs and address the concerns of all stakeholders.
- Working with experienced information technology consultants and developers can minimise financial and other risks. This is a large-scale, risky project for Endeavour. By working with 5Phase Asia Pacific Co. Ltd and Golden Orb Technologies Australia it managed to minimise the associated risk.
- It is important to implement strong project management procedures.

References

Endeavour Foundation www.endeavour.com.au

Golden Orb Technologies Australia Limited <http://golden-orb.com>

5Phase Asia Pacific Co. Ltd www.5phase.com

COMMUNITY CONNECTIVITY

More information

In these case studies, communities, nonprofit organisations and groups share their experiences and lessons they have learnt using ICT: enhancing capability and service delivery; supporting and building communities, networks and connections; and overcoming barriers and challenges.

Australia's Strategic Framework for the Information Economy 2004–2006 emphasises the need to ensure that all Australians can participate in the benefits of the information economy.

Key strategies in 2004–06 will be to strengthen collaboration and capabilities in nonprofit organisations, facilitate the creative use of ICT for building stronger communities and social cohesion, and develop networks, capabilities and tools to enable participation by people who are facing economic, geographic or social barriers.

For more information visit the DCITA website www.dcita.gov.au or email community.connectivity@dcita.gov.au.

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