



WorkVentures Sydney

Automating an electrical equipment repair centre

WorkVentures is a community employment and economic development agency based in Sydney. It aims to contribute to the creation of a just, creative and sustainable society by providing quality employment, economic and community development services, with priority for unemployed and disadvantaged people.

While it is not a charity in the traditional sense, WorkVentures attempts to derive long-term benefits by empowering the people it helps, and its mission is in keeping with current trends in social services.

WorkVentures focuses on ICT and ICT skills development. It established Australia's first ITeC (information technology centre) in 1984 based on a United Kingdom model. ICT is central to WorkVentures' strategy, and is used in every aspect of the business, from its internal operations to its services.

WorkVentures has developed a single integrated system to manage every part of the Sydney ITeC Repair Centre business.

An integrated business management system

WorkVentures was founded in 1979 with a loan of \$3000. By 2003 its annual revenue was \$16 million, 20 per cent of which is government funding. That figure is down from 30 per cent a decade ago.

Its partners and supporters include major corporations such as IBM, Microsoft, NCR and Fujitsu, the Australian and New South Wales Governments, and a range of community groups and philanthropic foundations.

WorkVentures currently operates five core businesses: WorkVentures Employment Services, Vocational Training Services, small business services including the Sydney and Parramatta Business Enterprise Centres, Sydney ITeC Repair Centre (SIRC), and WorkVentures Connect, a multi-sector network of neighbourhood technology centres and PC refurbishment operations. WorkVentures is committed to developing capabilities in-house. This puts it in a strong position to meet its needs and gives it the flexibility to change with the marketplace.

SIRC is a unique electronic repairs business that employs 100 people in Sydney and Melbourne and also outsources work to 50 specialist subcontractors.



It specialises in repairing equipment such as automatic teller machines, point of sale equipment, monitors and PCs. SIRC has three objectives:

- generate jobs and provide careers and training in electronics
- provide a highly cost-effective service and be a competent player in the industry
- generate a profit to help support other WorkVentures services.

SIRC uses an integrated management system to manage staff and components, record all repair jobs, track progress and identify common faults. It is a sophisticated, just-in-time service that can identify common faults through an analysis of historical data, allowing SIRC to anticipate the type and level of customer demand.



It is currently managed as an MS SQL database. Over time it has undergone several redevelopments. The current version uses a Visual Basic (VB) interface to provide access to customer specific databases managing the functions of job management, tracking and reporting. Other major functions include timekeeping, spare parts and quality management. The interface is currently being enhanced using VB.NET, to provide improved web-based access so subcontractors can access work-in-progress functions.

The system tracks components via a combination of barcode and radio frequency identification technology. Components are tracked immediately on being returned for service or repair. When a component comes in for service, the system decides whether to store it, repair it immediately or send it out to a subcontractor. The system has been designed to track the complete history of each component, and over time it has built up a significant body of data that proves a rich source of intelligence on design faults. This knowledge base is used to report to the customer so they can anticipate the type and frequency of repairs the equipment is likely to need. It also helps determine warranty periods.

The system was designed and coded in-house, in keeping with an overall commitment by WorkVentures to keep capabilities in-house rather than use contractors. They have created a flexible systems environment over which they have control and in which they can change the system according to changing business needs.

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For example, should a new management report be required, it can generally be produced within 24 hours.

Costing and financial data has also been integrated into the system so it provides a complete package that can be used to manage related activities. The repair management system is being adapted for two other WorkVenture businesses:

- support for field service engineers
- a national PC refurbishment operation that intends to decommission, refurbish and sell 40 000 low-cost PCs each year to low income people, schools and nonprofit groups.

Benefits

With the system SIRC has been able to build up a huge knowledge store on equipment and components. This allows SIRC to anticipate problems and, knowing customers hardware, to anticipate their needs and model their requirements. The sophistication of the system, and the advantage that it gives SIRC in providing services, has been recognised as representing world's best practice by several major international information technology companies. These companies now use SIRC to provide business equipment repair operations in Australia.

SIRC developed the original system based on its understanding of its own and its customers' needs. With use, the knowledge of what is possible and the understanding of customer needs have developed, which has led to improvements in the system. The development process has provided a valuable training ground, providing a range of skills such as in the reverse engineering equipment. This had immediate benefit to the service centre, and could feed back into staff training programs.



Success factors

Understand and anticipate your customer's needs. A thorough understanding of the organisation's mission, core business and business processes is a fundamental requirement to designing and implementing a successful system. You must know the strengths of your own organisation and who your customers and stakeholders are, and you must have an understanding of their current and emerging needs.

Design for flexibility. It is important to build in flexibility by designing for the future. This system was designed to capture all available information relating to the part, even if its usefulness was not immediately apparent. This resulted in a wealth of information that could be analysed and used as a basis for further enhancements, such as the ability to predict part failure, and so longer term maintenance schedules and requirements.

Commit to continuous improvement. WorkVentures encourages staff to review systems and explore modifications. For example, using the barcode track components was done ahead of competitors and led to productivity gains.

Allocate appropriate resources. Both staffing and funding resources must be adequate. This provides for ongoing maintenance, a better understanding of the system, the flexibility necessary to quickly adapt the system, and helps maintain staff skills, allowing a speed-to-market that provides a competitive edge.

Develop strong partnerships. These have been a key to success of the system and the organisation's long-term strategy. Partners should share the values, objectives and aspirations of the organisation, and should complement each other.



Barriers

The skills SIRC staff needed to develop this system were an initial barrier, but through self-education, determination, and where necessary through training, the task was well met. Both SIRC and its parent WorkVentures made additional training a priority. Their staff worked on developing and extending the system to meet customer needs.

Key lessons

An organisation can achieve significant returns on its investment in ICT if it:

- aligns ICT to organisational objectives
- values staff and commits to quality
- develops partnerships based on shared values.

References

WorkVentures www.workventures.com.au

Sydney IteC Repair Centre www.sirc.com.au

WorkVentures Connect www.wvconnect.org.au

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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