

The University of Adelaide

Technology Transformation

Strategic Plan 2010-2012

Executive Summary

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Executive Summary

Introduction

This Technology Transformation Strategic Plan establishes a program of ICT investments / initiatives which will support the University of Adelaide in achieving its aspirations as they are reflected in the "Building a Great University", the University's Strategic Plan for 2008-2012.

It provides the linkage from the University's key priorities to the proposed initiatives such that the University's key decision makers and stakeholders will have increased confidence that they will be able to realise strategic outcomes where these are dependent on technology capabilities.

The plan has been developed to:

- Establish a framework within which proposed initiatives can be assessed
- Establish the demands for and allocation of capital funds for 2010
- Determine the relative priority to be assigned to initiatives
- Ensure interdependencies are identified and addressed

A critical feature of the plan entails the establishment of a partnership based approach to the identification and delivery of future services. Hence, initiatives in the later periods (2011 and 2012) will be determined as a product of the partnership engagement. Accordingly, the plan provides:

- a framework within which initiatives can be developed and considered
- identified priority initiatives, principally for 2010

Implications of Key Drivers and Strategic Directions

The University's Strategic Directions revolve around three key themes:

- Developing world class research and an outstanding research training environment
- Providing a high quality learning environment, incorporating excellent programs, innovative delivery, high quality supervision and excellent support services
- Ensuring the requisite enabling services and resource capabilities to support research and teaching

Within these themes, there are a range of business strategies, some of which are dependent on new or strengthened information management and ICT capabilities. The technology transformation strategy also needs to enable the University to adequately address a range of external drivers and imperatives. The following table identifies these business strategies, external drivers and their associated ICT implications.

Business Strategy	ICT Implications
Research and Research Training <ul style="list-style-type: none"> • Attract and retain best researchers • Improve cooperation and access • Foster entrepreneurial culture • Support high performing groups • Compliance (e.g., ERA, ARC/NHMRC Code for the Responsible Conduct of Research) 	<ul style="list-style-type: none"> • Enable easy, consistent access to information and services for staff • Support information and knowledge exchange and collaboration • Provide appropriate data management, high performance processing, and collaboration services • Maintain appropriate capacity planning

Business Strategy	ICT Implications
<p>Education</p> <ul style="list-style-type: none"> • Improve graduate experience • Foster excellence in teaching and learning • Ensure support during transition to tertiary study • Enhance student services • Improve quality of facilities and ICT • Support student growth 	<ul style="list-style-type: none"> • Enable easy, consistent access to information and services for students • Streamline business processes and supporting systems • Support new models of teaching and learning • Ensure basic services are neither a barrier or frustration to students • Maintain appropriate capacity planning
<p>Enabling Services and Resource Capacity</p> <ul style="list-style-type: none"> • Implement Service Excellence program • Support growth with appropriate facilities and infrastructure • Improve quality, delivery and access to ICT resources • Ensure significant investment in library management systems • Reduce University's ecological footprint 	<ul style="list-style-type: none"> • Streamline business processes and supporting systems • Establish basic services as consistent and reliable utility service • Ensure basic services meet future growth demands • Assess application portfolio • Explore GreenICT strategies
<p>External Drivers</p>	<p>ICT Implications</p>
<ul style="list-style-type: none"> • Review of Higher Education • Review of the National Innovation System • Changing nature of teaching and research • Increasing student (30%) and research activity (70%) • Enhancing staff and student experience • International collaboration • Connection with other sectors • Changing technology • Compliance with State and Federal legislation 	<ul style="list-style-type: none"> • Support changing models of research • Enhance the teaching and learning experience • Enable collaboration within and across sectors • Ensure appropriate investment and capacity to support future growth • Exploit new technologies • Support efficient data collection and reporting • Support knowledge and information management

Current Situation

An appreciation of the current position of the University with respect to ICT is critical to the formation of effective strategies. Key issues currently faced by the University include:

- Need for investment to ensure the sustainability of existing services, let alone development of new capabilities and services
- Majority of resources directed towards “business as usual” activities, seeking to maintain acceptable service levels for basic services
- Lack of engagement with Faculties and Schools in terms of business needs and investment decisions

Vision for ICT

Given the University's goals and aspirations, the vision for ICT is to provide capabilities which provide a competitive advantage to key research activities, enhance student and staff experience, support changing models of teaching and learning and streamline supporting business processes.

In support of this vision, the following guiding principles have been established:

- Enable the University's core business – excellence in research and teaching
- Deliver a rich, engaged student and staff ICT experience
- Promote operational efficiency
- Ensure systems are robust and agile
- Ensure information and systems are secure
- Manage ICT as an investment

Key ICT Delivery Strategies

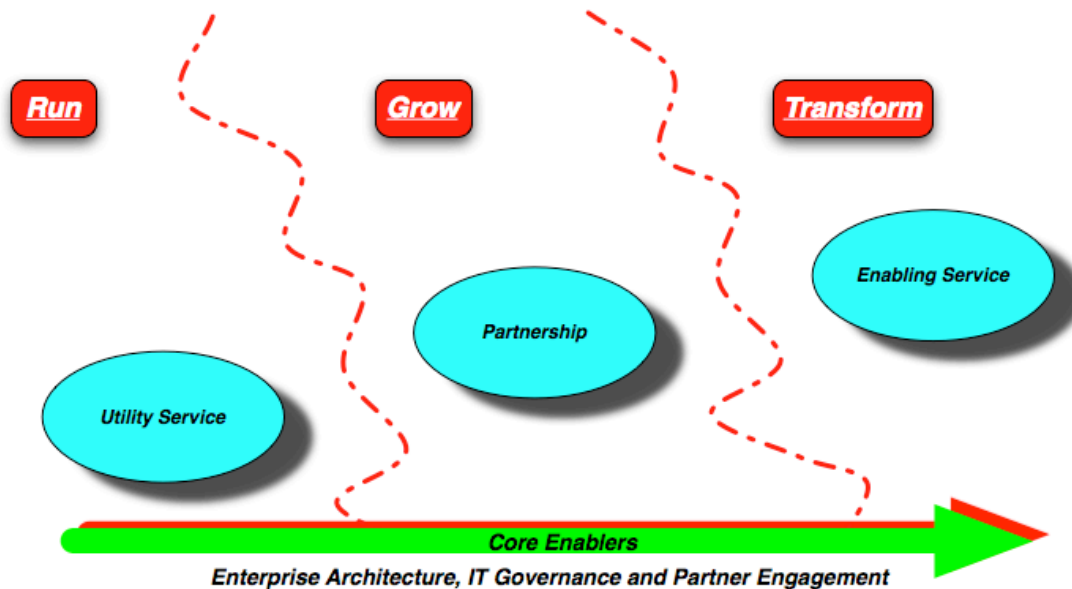
The following strategies provide an effective means of responding to these ICT demands and implications:

- Establish **partnership** engagement with Faculties, Schools and Business Units which promotes and leverages client innovation and enables these clients to direct ICT investment towards the services most critical to their needs
- Ensure effective ICT services supporting **research**, including data management, high performance computing, collaboration and visualisation
- Ensure simple, consistent staff and student **experience**
- Engage with appropriate **external providers** (including eResearch SA) to deliver required services
- Support the **streamlining** of business processes, leveraging greater value from existing investments
- Deliver high quality, reliable basic services as a **utility** service

The following strategic framework establishes an evolutionary and maturity based approach within which these strategies can be pursued, enabling the University to:

- Establish a balance between the provision of utility services and development and delivery of enabling services supporting changing models research, teaching and learning
- Introduce a partnership based approach to the identification and development of enabling services
- Adopt mechanisms which provide the flexibility to support trials and innovation, to leverage capabilities required and adopted by leading research and education groups, and to convert valued

innovations into reliable enabling services



The framework entails three stages with a focus on particular capabilities and services:

Run – establish operational excellence in the provision of utility services

Grow – build a partnership engagement with key clients to promote and leverage innovation and provide effective client support

Transform – establish enabling services developed through partnership engagement

The “Grow” phase incorporates the use of two key disciplines – enterprise architecture and portfolio management, ensuring that:

- the formulation, delivery and management of initiatives are aligned with the business needs of the University
- new capabilities are able to be leveraged across different areas requiring these capabilities

This builds on the achievements in 2009 in establishing effective governance arrangements and an architectural capability. IT governance, enterprise architecture and partner engagement are core enabling capabilities which will be sustained through subsequent phases.

The transition between the Run and Grow phases will be characterised by a variety of adhoc and disciplined combinations of utility services and partnership services to support innovative activities, in a sandpit or hothouse environment, and their subsequent development into robust, reliable services delivering value more broadly across the University.

This framework establishes the means by which the University can progressively redirect investment from basic, utility services towards value-adding and differentiating enabling services supporting research, and teaching and learning.

Proposed Initiatives

The initiatives arising from the ICT Delivery Strategies are summarised in the following table in priority order. Each initiative includes a reference to the section in the main report, the primary outcome of the initiative, the priority assigned to the initiative and the strategy to which it relates.

Proposed Initiative	Key Outcome	Strategy Supported	Priority
Support for Partnerships (7.2.24)	Engagement with Faculties, Schools and Admin Units	Partnership	Critical
Data Storage, including Research Data Storage (7.2.6)	Increased data storage and improved data management practices	Research External Providers	Critical
Learning Hub (7.2.10)	Enhanced student experience within Learning Hub	Experience	Critical
Printing Improvements for Students and Staff (7.2.15)	Improved student experience and more cost effective printing	Experience	Critical
Digital Delivery – enhanced online teaching and learning (7.2.7)	Improved capacity to create and access digital recordings	Experience	Critical
Virtualisation of Student Computing Suites (7.2.27)	Improved access to software and applications for students	Experience	Critical
Staff Collaboration Solution (7.2.21)	Improved staff experience using single, standard email and calendar	Utility	Critical
PeopleSoft Upgrades (7.2.14)	Leverage greater value from PeopleSoft, improved business processes	Streamlining	Critical
Macintosh and Linux support (7.2.12)	Comparable service levels as to those provided for Windows users	Utility	Critical
Staff Portal + enhancements to Student Portal (7.2.22)	Improved staff and student experience, streamlined processes	Streamlining	Critical
VIP Service (7.2.26)	Improved service levels for key Executives	Utility	Highly desirable
Central Desktop Fleet Purchasing and Management feasibility study (7.2.3)	Leveraged purchasing power and streamlined management	Utility	Highly desirable
Enterprise-wide Foundation Service Provision - ECMS & Physics (7.2.8)	Extension of utility services to key Faculty, enabling Faculty to focus on core business	Utility	Highly desirable
Recurrent Funding/Cost Pressures (7.2.16)	Improved ICT management capabilities (servers, testing, integration)	Utility	Highly desirable
Self Service IT (7.2.19)	Improved resolution of simple problems and reduced IT Service Desk costs	Utility	Highly desirable

Programs and Roadmap

The outcomes sought in pursuing these strategies will be realised through six key programs, as outlined in the following table.

Program	Description
ICT Business Reform	Transforming the ICT engagement model
Universal	Providing universal improvements, enhancing the staff and student experiences
Research	Enhancing research capabilities
Teaching & Learning	Strengthening teaching & learning, supporting alternate delivery models
Corporate	Supporting improved corporate business processes and systems
Utility & Support	Consolidating services and support to provide robust, reliable basic services

The ICT Business Reform program will establish the capabilities and culture required to support the Partnership and subsequent Enabling Services. The Universal, Research and Teaching & Learning Programs will be progressively expanded and deliver the core value adding services envisaged within the Partnership and Enabling Service components of the framework. The Corporate and Utility & Support programs contribute to the strengthening and extension of the Utility Service component of the framework.

The initiatives encompassed within each program, their timing and the required investment is summarised in the following figure. The initiatives are ranked in priority order within each program.

As the Support for Partnerships phase develops, this will lead to identification of further initiatives, particularly in the Research and Teaching & Learning programs. Identification of initiatives in these areas at present would be contrary to the establishment of a strong, balanced partnership model.

Program	2010				2011				2012			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
ICT Business Reform												
Support for Partnerships	[Recurrent funded]				[Recurrent funded]				[Recurrent funded]			
Universal												
Staff Collaboration (email, calendar)	[Requirements]	[Development]										
Staff Portal	[Requirements]	[Development]										
Student Portal Enhancements		[Requirements]	[Development]									
Research												
Data Storage (incl Research Data)	[Requirements]	[Development]										
Research Toolkit & Digital Research Laboratory				[Requirements]	[Development]							
Future Projects (identified through Partnerships)					[Future Projects]				[Future Projects]			
Teaching & Learning												
Learning Hub	[Development]											
Printing Improvements	[Development]											
Digital Delivery - Enhanced Online Teaching & Learning		[Requirements]	[Development]									
Virtualisation of Student Computing Suites		[Requirements]	[Development]		[Development]							
Audio Visual Sandpit					[Requirements]	[Development]	[Development]	[Development]				
Collaborative Teaching Spaces					[Requirements]	[Development]	[Development]	[Development]	[Development]			
Singapore Campus					[Requirements]	[Development]	[Development]	[Development]	[Development]	[Development]		
Future Projects (identified through Partnerships)					[Future Projects]				[Future Projects]			
Corporate												
PeopleSoft Upgrades			[Requirements]	[Development]	[Development]	[Development]	[Development]	[Development]				
Library				[Requirements]	[Development]	[Development]	[Development]	[Development]	[Development]	[Development]		
Utility & Support												
Macintosh and Linux Support	[Requirements]	[Development]										
VOIP & Unified Comms					[Requirements]	[Development]	[Development]	[Development]	[Development]	[Development]	[Development]	[Development]
VIP Service	[Recurrent funded]				[Recurrent funded]				[Recurrent funded]			
Central Desktop Fleet (Feasibility)	[Requirements]	[Development]										
Foundation Service - ECMS & Physics	[Development]				[Development]							
Recurrent Funding / Cost Pressures	[Recurrent funded]				[Recurrent funded]				[Recurrent funded]			
Self-Service IT	[Requirements]	[Development]										
Support for Mobile Devices					[Requirements]	[Development]	[Development]	[Development]				
Total Capital (Annual)												
Total Recurrent (Annual)												
Legend												
Requirements and Business Case phase	[Green]											
Development and Implementation project	[Yellow]											
Future Projects (identified through Partnerships)	[Pink]											
Recurrent funded (only)	[Blue]											

These initiatives will enable the University to achieve the following transition.

From	To
ICT determined priorities	Client / faculty influenced priorities
Rigid centralised service	Flexible service, transitioning innovative trials into enabling services
Basic ICT service	Enabling ICT services, supporting changing models of research and teaching & learning
ICT organisation focussed on current problems and issues	Delivery of value-adding services which provide a competitive advantage to Faculties and Schools
Majority of resources directed to utility services	Increased proportion of resources supporting key business strategies

Conclusion

This plan entails a range of imperatives:

- Ensure existing services are sustainable
- Consolidate basic services as utility services
- Engage with Faculties and Schools to direct future investment towards capabilities critical to research and teaching & learning
- Establish approaches which foster and leverage innovation into enabling services

Both education and research will be challenged by and benefit from technological advances and hence the University faces a stark choice of “embrace it or perish”. This Technology Transformation Strategic Plan provides a strategic framework and direction and an opportunity to invest in technology to achieve competitive edge.