



***ICT Strategic Plan
2005-2007***

Approved by University Council
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Version 1.2

Introduction

The University of Tasmania (UTAS) Information Communication Technology (ICT) Strategic Plan 2005-2007 provides a context for the use of ICT to support and enhance the ambition, mission, and goals of the organisation espoused in the University Plan 2005-2007. Excellence, Distinctiveness, Growth, and Engagement (EDGE) have been identified as cornerstones of University planning, and it is within these challenges that this ICT Plan has been developed and will be administered.

The ICT Plan identifies the strategies and initiatives that overarch decision-making, planning, and deployment of ICT services and systems across the University community. It is an outline of our future aspirations for the use of ICT, to sustain and grow our organisation as technology continues to evolve and the conditions and needs of the University change. This plan is reviewed annually under the governance of the University ICT Committee.

A University by its nature is built around information, production, translation and transmission, to create knowledge through research and education. The dynamic role of ICT as an education and research enabler continues to evolve at a somewhat rapid pace. The changes in technology will continue to reshape how institutions utilise ICT to support and enhance business operations and directions. The challenge for UTAS is to ensure ICT developments and operations optimally support these business operations and directions.

Many of the challenges faced by UTAS involve the use of ICT, include isolation, client demands, and a distributed campus and client base. Some of these challenges are common across the higher education, whilst others are more relevant to UTAS. Through this ICT Plan, UTAS seeks to ensure, from an ICT perspective, that these challenges are recognized and addressed through the strategies and initiatives.

Scope

ICT activities and services are now ubiquitous across UTAS, and whilst a number of organisational units are either focused on providing ICT services, ICT research, or ICT education, this plan focuses on information technology planning for the whole of UTAS. It also extends to the inclusion of ICT strategies and initiatives that are progressed through partnerships and external collaborations.

The scope of this ICT plan includes all major information communication technology planning and requirements for the University. This plan identifies the strategic direction, implementation and management of ICT based technologies and services as they relate to University functions. While this plan is intended to be a three year view of the University's ICT technology strategy, it will be

reviewed and updated annually to reflect the changing needs and emerging developments of technology, and the University's directions and business requirements.

Limitations/External Factors

It acknowledged that certain limitations exist which prevent the provision of every ICT technology, service, or efficiency to University processes. These include financial restrictions, personnel and resource limitations, legal obligations, business partnerships, and existing process requirements as well as solutions, ICT technologies, processes and resources that have not yet been presented or realised.

External factors, such as government policy, international events, and economies may influence decision making during the lifetime of this plan. These will be factored into the review process and amendments made when necessary.

ICT – Supporting the EDGE Agenda

The EDGE agenda has been determined as the foundation of UTAS planning, and ICT will be major factor in both strengthening and expanding this foundation. The focus for 2005-2007 is on leveraging ICT to develop strong Teaching and Learning, Research, and Administrative infrastructure and services, as well as improved self service options for students and staff.

Excellence

An innovative and dynamic ICT environment is fundamental to achieving excellence as a hallmark of activities. UTAS is committed to achieving excellence through the ongoing provision and development of high quality user focused ICT services. Similarly service support to clients is, and remains, at the forefront of inspiring toward excellence in service delivery.

Distinctiveness

UTAS seeks to maximize the opportunity to differentiate itself and stamp its own distinctive brand through the prudent deployment of ICT based services and infrastructure that create an identity recognized locally, nationally, and internationally.

Growth

Scalability of ICT systems, services, and applications is, and has to be, a key component of ICT deployments and planning. Planning for growth is not only applicable to increases in staff and student numbers, but also must be factored into service usage growth from an existing client base. To facilitate the development of appropriate strategies and infrastructure, the collection,

transformation, and analysis of ICT service usage is viewed as a key element of support

Engagement

Two approaches to engagement are taken within the ICT Plan. Firstly, in many situations ICT can be seen as threatening, foreign, and complex. Through improved communication and interaction with client groups it is anticipated that these inhibitors to the use of ICT can be dismantled.

The second approach to engagement involves partnerships and collaboration with external organizations. Through innovative use of ICT UTAS actively seeks partners, and expects to be sought as a partner, in initiatives that align with or inform the University's business direction and associated strategies.

University and ICT Goals

Interpretation of the EDGE agenda identifies three common elements that describe the numerous strategic and operational business goals, developed within UTAS. These are Reputation, People, and Position, and the following longer term goals articulate the vision for UTAS

Reputation

"To be in the top echelon of research universities in Australia, producing research and scholarship that are renowned nationally and internationally. [Ex]"

"To enhance its teaching so that it is ranked in the top ten Australian universities with respect to teaching performance. [Ex]"

ICT underpins many of the activities that support these goals, with particular emphasis on the provision of infrastructure that enables research and scholarship and Teaching and Learning. Infrastructure, through network connectivity and access to associated systems and services, at UTAS must be commensurate with those at other national and international organisations to attract high calibre research activities and facilitate collaborative opportunities. Similarly, infrastructure and services must be provided, and supported, to ensure a high quality teaching and learning environment that provides students and staff with a distinctive and supportive learning experience.

These ICT goals are drawn from the University's "Reputation" goals.

"To be identified as a leader in the deployment and innovative use of ICT to support research and teaching and learning activities."

“To be recognized by potential, current, and past students as an institution of choice for its ICT based services to support flexible delivery of program/unit content and effective electronic administrative systems and procedures.”

People

“To provide a quality, distinctive and energizing student experience that derives from the unique Tasmanian character. The University of Tasmania experience will develop lifelong learning skills, generic graduate attributes and a global perspective that lead to high satisfying and rewarding employment, career, and personal development outcomes for students. [Ex, D]”

Students come from many different backgrounds, have differing technology understanding, differing study demands, or may reside within or outside Tasmania. Overall UTAS seeks to provide a student experience that achieves the outcomes stated above for each individual. ICT will therefore, provide the flexibility and impetus for innovative research and transformational Teaching and Learning services. Students and staff will be able to operate in an electronic form that optimizes individual learning styles and capacities.

ICT goals relating to “people” are:

“Develop within all students an understanding of ICT and how it can be leveraged to facilitate lifelong learning experiences.”

Position

“To grow and develop to around 15,000 EFTSU, with a strategically balanced and distinctive enrolment and campus profile with the following indicative targets by 2010: UG 12,400; PG 1,500; RHD 1,100. [G]”

Growth in student enrolments places increasing pressures on ICT services and infrastructure. Consequently, through prudent planning, UTAS seeks to ensure deployments of ICT services and infrastructure are scalable to levels that cater for growth in enrolments, and importantly, provision capacity for the increased utilizing of ICT services by existing students.

ICT goals applicable to the University’s position goals are:

“Provide scalable ICT based services that deliver consistent and effective service and support”.

“Ensure access levels to ICT facilities and services are maintained, or improved, as growth in student numbers occurs through prudent planning and a proactive approach to service provision.”

'To resource and manage its operations in a financially efficient, productive and coordinated manner, affording students and staff an effective environment for teaching and learning and research, while innovatively but prudently managing its infrastructure and resources on a 'best practice' basis.'

The provision of ICT services and infrastructure is an expensive activity, in both financial and human resource terms. Through the ICT Strategic Plan and ICT Investment Plan, UTAS seeks to ensure strong financial management of ICT activities, planning that is aligned with university plans, and service deployment that is based upon around 'best practice' models.

ICT goals related to resource management are:

"Action an ICT Strategic Planning Framework, including planning and financial investment, that ensures ICT based services can be maintained and enhanced with evolving client demands and content delivery strategies."

"Ensure an ICT skills base within the University that facilitates innovative development and progression of services and infrastructure."

"Ensure ICT services and systems operate within a compliance framework that addresses risk areas, business continuity, and a service charter that is recognized by the University community as a major enabler toward individual learning experiences."

ICT Strategies and Initiatives

The University and ICT goals, identified above, inform the development of both University and ICT strategies and associated initiatives. Some initiatives may be common to a number of University plans, as their outcomes, not unexpectedly, are directly related to the core activities of Teaching and Learning and Research.

The initiatives can be considered dynamic in nature, as existing initiatives will evolve as related projects are defined, approved, progressed, and completed. New initiatives will also be added as business requirements and technology evolve over the lifetime of this plan. Hence an ongoing review will occur.

The University operates with a Quality Assurance Framework based upon PIRI: Planning, Implementation, Review, and Improvement. Initiatives within this plan are conducted within this framework, and identified at a phase of the PIRI framework.

Reputation

University Strategy

- 6 **Broaden and strengthen existing distinctive research and teaching themes by providing incentives and structures to support interdisciplinary and inter-organisational research, teaching and course development in the theme area. [D]**

ICT Strategies

- I. Introduce new ICT based services and infrastructure that will facilitate research and teaching and learning collaboration.
- II. Enable advancements in research techniques and collaborations through improvements to infrastructure.

No.	Outcome	Initiative	Responsibility	ICTIP Status	Compl. Date	PIRI Phase
6.1	Research compute infrastructure that facilitates high-end computational analysis in thematic areas.	Upgrade High Performance Computing Facility.	Director, ITR /TPAC	Feasibility	12/2006	Planning
6.2	Major contributor to the Australian Compute Grid environment.	Establish a node of the Australian Compute Grid.	Director, ITR /TPAC	Proposed	3/2007	Planning
6.3	Active participation and collaboration with national and international researchers through the use of virtual communication technologies.	Pilot Access Grid technology in conjunction with TPAC/School of Information Systems.	Director, ITR/TPAC	Approved	12/2005	Planning
6.4	Modern and contemporary ICT infrastructure that provides equity of access locally, nationally, and internationally.	In collaboration with key stakeholders, establish a Tasmanian Research and Education Network (TREN) within Tasmania, with high capacity bandwidth to the AREN.	Director, ITR	Approved	3/2007	Impleme
6.5	Participation and leadership in national and international initiatives, leveraging institutional research instruments.	Provide high bandwidth connectivity between UTAS's radio telescope and other research instruments connected to the national grid.	Director, ITR /School Maths and Physics	Approved	1/2006	Impleme

University Strategy

- 13 Develop distinctive, flexible, and innovative learning opportunities, especially programs that increase access for students in regional areas, and streamline articulation with TAFE. [D, Ex]**

ICT Strategies

- I. Investigate and deploy new technologies that facilitate new or revised approaches to flexible program/unit content delivery.
- II. Review and develop sustainable support strategies for the use of ICT in Teaching and Learning.
- III. Develop a business continuity framework for service and program delivery that addresses on-campus, off-campus, and off-shore delivery challenges.

No.	Outcome	Initiative	Responsibility	ICTIP Status	Compl. Date	PIRI Phase
13.1	A seamless environment for flexible delivery utilising an array of interoperable technologies and services.	Pilot the introduction of E-Learning Media Services (ELMS) for digital capture and playback of lectures on demand from on-campus locations. Integrate with WebCT Vista.	Director(s), ITR/FEU	Approved	12/2005 12/2006	Planning
13.2	Business continuity strategies for services and programs delivered to remote users – both on and off shore.	Develop business continuity strategies for programs that rely on delivery to remote users.	Directors, ITR/FEU	N/A	12/2005	Planning
13.3	Integration of e-pedagogies in course design and online delivery in a multi-campus environment.	Upgrade of the UTAS Learning Management System – WebCT/Vista – to provide 'start of art' functionality.	Director, FEU	Approved	9/2005	Impleme
13.4	E-repositories that are independent of proprietary systems and interoperable with each other and key enterprise systems.	Investigate the enhancement and extension of existing digital repositories into an Electronic Repository.	University Librarian, Directors, ITR/FEU	Feasibility	12/2006	Review

People

University Strategy

17 Integrate student learning and lifestyle in vibrant campus environments, including enhanced infrastructure for student learning and 'island experience' opportunities. [D]

ICT Strategies

- I. Provide flexible access options to ICT services on-campus, and within University precincts for University and privately owned devices.
- II. Integrate technologies associated with flexible delivery.
- III. Leverage ICT based services to provide more flexible spaces for student learning opportunities.

No.	Outcome	Initiative	Responsibility	ICTIP Status	Compl.D ate	PIRI Phase
17.1	Extension of teaching and learning infrastructure.	Development of a resource plan for integration of WebCT/Vista with Video Conferencing and ELMS technologies.	Director, FEU	Feasibility	12/2007	Planning
		Upgrade Video Conferencing infrastructure to provide improved integration.	Director, ITR	Approved	12/2006	Impleme
17.2	Flexible on-campus access to ICT based services.	Deployment of wireless and wired infrastructure for on campus roaming with devices such as personal computers and PDAs.	Director, ITR	Approved	12/2005	Impleme
17.3	Credit card technology for access to a range of ICT based services.	Extend the range of services available through the UTAS Card to provide more flexibility for staff and students.	Director, ITR	Approved	6/2006	Impleme
17.4	Designed spaces to support approaches to student centred learning, which are configurable, flexible and supported with appropriate technology.	Develop "showcase" Flexible Learning Spaces.	Directors ITR/AMS/FEU	Approved	12/2007	Impleme

University Strategy

19 Create administrative processes that are efficient and effective for all stakeholders, with a particular focus on student needs. [Ex]

ICT Strategies

- I. Improve operating conditions and service access through clear and concise policy and procedures, available to the University community.
- II. Provide seamless access to ICT services through a personalised interface commensurate with individual learning and administrative needs.

No.	Outcome	Initiative	Responsibility	ICTIP Status	Compl. Date	PIRI Phase
19.1	Management of electronic content and digital learning objects via structured approaches that protect and enhance the University's reputation and position.	Develop strategies and a proposal for the management of digital learning objects. Review the Content Management System (CMS) marketplace to determine an appropriate CMS implementation strategy for the University.	Director, FEU	Feasibility Feasibility Approved	12/2006 12/2007	Planning Review
19.2	Realisation of efficiencies and productivity improvements for staff through the enhancement of electronic workflows.	Extend workflow capabilities to HR system to include online leave approvals.	Directors, ITR /HR	Approved	12/2005	Implemente
19.3	Flexibility of processes surrounding financial transactions.	Expand payment options, via an e-commerce system that allows bundling of payments acceptable to the University and clients.	Director, F&BS	Approved	12/2006	Implemente
19.4	Provision of scaleable and integrated messaging and collaboration infrastructure for both students and staff.	Investigate, and where possible implement, communication and scheduling services (email and calendar) for students and staff.	Director, ITR	Feasibility	12/2006	Review & Improve
19.5	Framework that ensures University members have a clear and concise understanding of service use.	Develop, maintain and promulgate ICT policy and procedures as part of service usage to University members.	Director, ITR	N/A	Ongoing	Review & Improve

Position

University Strategy

33 Review all administrative areas to look at how current systems and processes will support quality, growth, internationalisation and compliance strategies; and be accountable to, and efficient for, users. In particular, review the service needs of students in the light of projected growth. [Ex]

ICT Strategies

- I. Identify emerging business needs, and review ICT systems, to ensure they have the capability and capacity to meet these needs.
- II. Deploy a compliance framework for ICT systems that addresses business risk and business continuity in local, national, and international contexts.

No.	Outcome	Initiative	Responsibility	ICTIP Status	Compl. Date	PIRI Phase
33.1	A Student Information Management System (SIMS) that delivers an array of existing and emerging administrative services to students that align with the University's business goals and objectives.	Modernise the University's Student Information System (SIMS) to support a range of new and innovative services, including flexible enrolments, self service options, and integration with other ICT services.	Director, ITR/Academic Registrar	Proposed	10/2008	Planning & Review
33.2	Efficiency and productivity improvements from improvements to workflow capabilities.	Implement electronic approvals for a range of financial transactions.	Directors, ITR /F&BS	Proposed	12/2006	Planning
33.3	Compliance with HESA requirements.	Implement changes to the University's student system to ensure compliance with regulatory requirements for the collection and financial management of fee information for students.	Academic Registrar	Approved	7/2005	Implement
33.4	Compliance with reporting requirements for the Australian Government's Higher Education Information Management System (HEIMS).	Implement changes to the University's student system to comply with the business requirements for HEIMS.	Academic Registrar	Approved	3/2005	Implement
33.5	Improvement of Records and Document Management.	Extend the use of TRIM for document and records management activities across Accommodation Services, Faculty of Commerce, and the Flexible Education Unit.	Director, ITR /University Secretary	Approved	4/2006	Implement

University Strategy

34 Create index-driven performance planning and management systems. [Ex]

ICT Strategies

- I. Ensure index driven performance planning and management functionality is a component of future system developments or purchases.

- II. Transform existing information structures and reporting capabilities to align with index driven performance planning and management requirements of the University.

No.	Outcome	Initiative	Responsibility	ICTIP Status	Compl. Date	PIRI Phase
34.1	An integrated financial performance management system linking budget processes with annual expenditure.	Implement a performance management system to provide more accurate financial management.	Directors, ITR /F&BS	Proposed	12/2006	Planning

University Strategy

37 *Ensure that infrastructure plans (e.g. Capital Development and Asset Management, Information Technology) are developed in a strategic and co-ordinated manner to support the University's teaching, research and community service goals. [Ex]*

ICT Strategies

- I. Provide ICT infrastructure planning and investment information, though information exchanges with other planning activities, that is consistent and aligned with other capital planning information to the University.*
- II. Provide informed and expert advice, through a collaborative planning approach with stakeholders, to the University on technical and financial options for strategic planning of replacement or upgrade of ICT infrastructure.*
- III. Monitor and publicise the emergence of innovative ICT developments and initiatives that will inform strategic planning in support of the University's strategic goals.*

No	Outcome	Initiative	Responsibility	ICTIP Status	Compl. Date	PIRI Phase
37.1	Identification of emerging trends and technologies that align with and support the University's evolving business strategies and needs.	Perform environmental scans of emerging technologies and trends and their application to University activities. Participate in and conduct workshops focussing on new technologies.	Section Heads	N/A	Ongoing	Planning
37.2	Alignment and integration of ICT planning with associated University planning activities.	Publicise ICT Plan across the University. Review and participate in planning activities at appropriate levels across the University. Ensure ICT plans inform and are integrated with other plans.	Director, ITR	N/A	Ongoing	Planning
37.3	Benchmarking of ICT services and investment at the University to ensure investment levels are commensurate against comparator organisations.	Identify and develop a range of ICT benchmarks that inform planning and decision making.	Director, ITR	N/A	4/2006	Review
37.4	Consolidated procurement processes from within all areas to maximise the University's	Investigate and implement bulk licensing and purchasing contracts with ICT vendors for the	Director, ITR	N/A	12/2006	Improve

No	Outcome	Initiative	Responsibility	ICTIP Status	Compl. Date	PIRI Phase
	ICT investment.	provision of services that realise and economy of scale to the University.				

Performance Indicators

The achievement of UTAS's goals and strategies are monitored through a range of headline and operational performance indicators defined within the University Plan 2005-2007. A number of these performance indicators have direct implications for ICT planning, and inform the generation of ICT related performance indicators.

The ICT performance indicators are utilised to assess progress against the ICT strategic plan, which also assists with measurement of performance against the University Plan 2005-2007.

Headline Performance Indicators

HPI:2 Increasing higher education participation of Tasmanians in Tasmania (to at least the national average). [G,En]

ICTHPI:1 Enhance ICT based services to support additional flexibility for the delivery of content to students.

ICTHPI:2 Enhance on-campus and off-campus access to ICT based services for students.

HPI:7 Achieving top ten status and improving rankings in all of the recognised research performance indicators. [Ex]

ICTHPI:3 Prudently deploy innovative ICT services that support and enhance the University's reputation and position as a leading research organisation.

ICTHPI:4 In conjunction with UTAS researchers, support and develop ICT services and infrastructure that facilitate collaboration between researchers, locally, nationally, and internationally.

Operational Performance Indicators

OPI:1 Performance against enrolment load targets by campuses, faculties, and programs. (G)

ICTOPI:1 Benchmark on-campus and off-campus access to ICT services and on—campus access to facilities.

ICTOPI:2 Benchmark range of ICT services and service access against comparator institutions.

OPI:2 Number of programs/units delivered by flexible means and in a form acceptable to students. [D]

ICTOPI:3 Number of programs/units available through the University's Learning Management System (LMS).

ICTOPI:4 Number of programs/units utilising Electronic Learning Media Services (ELMS).

ICTOPI:5 Number of programs/units that include a mix of integrated technologies for flexible delivery.

OPI:4 Number of Tasmanian students studying in Tasmania. [En]

ICTOPI:6 Access to ICT based services from all UTAS points of presence within Tasmania.

ICTOPI:7 Availability of ICT based services off-campus.

OPI:11 Extent to which development, timing, and financial plans for major capital projects are achieved. [Ex]

ICTOPI:8 Alignment of ICT Investment Planning with UTAS capital management planning cycles.

OPI:13 Extent of compliance indicated by internal and external audit reports[Ex]

ICTOPI:9 Compliance reporting on risk, business continuity, security, purchase, and expenditure.

ICTOPI:10 Benchmark range of ICT services, for availability, access, utilisation, and investment.

OPI18: Community engagement indicators including resources used, sharing of facilities and number and effectiveness of community events; annual highlights; summary of media reporting. [En]

ICTOPI:11 Level of engagement with external partners, collaborators, and usage of services and infrastructure within the community.