Central Web Unit Update

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Issue
Central Web Unit update including an outline of proposed services to be offered by the Unit from 2010.

Background
This paper builds upon the VCAC paper of the 25th Feb 09, _Governance of the UNSW Web_. The recommendations of that paper in relation to governance have been implemented, with the establishment of a Web Steering Committee and two Web Reference Groups. In addition, work on policy development and an enterprise- wide web strategy for UNSW is now underway.

The paper also referred to the need to properly resource the newly established Central Web Unit, attached to the Office of Media and Communications. The Unit has been charged with the management and strategic development of the central UNSW Website and for providing leadership in the innovative use of emerging web technologies across the University.

Discussion
Activities of the Central Web Unit since Feb 09 include:
1. Assisting in the development of the Research Gateway due to be delivered by the end of 2009.
2. Building a micro site for O Week
3. Continued updates of the corporate website
4. Assisting in the development with Finance and IT on 'The Giving Gateway' for UNSW Foundation
5. Broad consultation with campus stakeholders on matters relating the UNSW web presence

An options paper and a survey of members of the reference groups have been the basis of consultation and discussion (**see attached discussion paper**). Following this process, the Web Steering Committee is proposing that the Central Web Unit be resourced from 2010 onwards to provide the following services:
o   The development of clear policy, standards and guidelines for the UNSW web environment
o   Assisting in web development across the University, in particular through offering project scoping, project management and vendor matching for large web projects
o   Fostering innovation and the sharing of web resources across the UNSW community

With explicit service delivery in the areas of:
o   Brokering and supporting the provision of authoritative data via appropriate technical means for use across the UNSW Web presence
o   Providing Analytics and reporting for the UNSW community on the Web Presence
o   Providing archival and compliance services around web, underpinned by IT and the Records Management Office
o   Supporting the open sharing of resources, and providing training and other related materials that can be broadly shared across the institution
o   Engaging in External partnerships where appropriate with development houses and service providers

Recommendation
For noting

Neil Morris
Executive Director, University Services
20 August 2009

THE UNIVERSITY OF
NEW SOUTH WALES

Web Strategy and Web Unit Services

Discussion Paper for Web Steering Committee – April 2009

Version   1.6

Last Updated   16th April 2009

Authors   Patrick Stoddart, Judy Brookman, Jane
        Hunter

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Contents

INTRODUCTION

The aim of this discussion paper is to provide a starting point for developing a UNSW Web Strategy. Central to this Strategy will be agreed objectives, the role and resourcing of the new Central Web Unit and priorities for redevelopment of the UNSW web environment.

BACKGROUND

The Office of Media and Communications was charged in 2007 with investigating the current state of the UNSW web environment (the Web@UNSW)and with making recommendations for the creation of a dynamic, more effectively managed web environment for the University. The project report identified the need for a radical overhaul of the central UNSW website and made a number of recommendations relating to the wider University web environment - the result of extensive consultation across the University and with external experts, as well as extensive useability testing. Key recommendations included instituting a governance framework and clear policy guidelines; establishing a properly resourced Central Web Unit and developing user-oriented gateways, utilizing up to date web technology, for our prime audiences (prospective students, research, alumni).

The Web Project Report and a resulting Business Plan failed to gain endorsement under the 2008 IT Investment Plan and did not reach the Executive Team for consideration. However it was decided in late 2008 by the then Chief Operating Officer that a start should at least be made on creating a central web unit. Patrick Stoddart was appointed to the new position of Manager, UNSW Web and Innovation reporting to the Director of Communications, effective Jan 2009. The position heads a new Central Web Unit, responsible for the management and strategic development of the central UNSW Website and for providing leadership in the innovative use of emergent technologies across the UNSW web environment. A small team (one and a half existing web related positions transferred from the Media Office) has been put in place.

The Executive Team on 9 Feb 2009 approved a governance framework for the Web@UNSW, the basis for instituting this Web Steering Committee. Progress has also been made on another front -the office of the DVC Research is currently funding the development of a Research Gateway, in line with the Web project recommendation. It is due to go live by the end of May 2009 and is proving to be a valuable prototype for the development of other Gateways. (See page 6 of this paper for further details.)

STRATEGIC OBJECTIVES

The web is critically important to student recruitment, the profile and reputation of the University, learning and teaching, external and internal communication, research partnerships and

community building, and to fulfilling the University's legal responsibility to provide accurate and up to date information to prospective and current students.

The web is also therefore critically important to the University achieving its aspirations and strategic objectives, as set out in B2B, and this would be reflected in a Web Strategy for UNSW.

PHILOSOPHY

To achieve strategic objectives, there should be a philosophy driving future web strategy and development.

It is proposed that this be the philosophy outlined in two papers co-authored by Prof Ross Harley and futures expert Mark Pesce. These papers formed the basis of a presentation to VCAC by Harley and Pesce in 2008, and helped to inform consultation around, and the major recommendations of, the Web Project.

The first paper, *Out of the Garden: UNSW and its Web Discontents*, highlighted the fact that staff, students and alumni are, in increasing numbers, going "off the farm" to communicate and network, share knowledge and collaborate. To do this they are using tools most often associated with "Web 2.0", such as wikis, blogs, RSS feeds, and social networking applications. Not only does this trend have consequences for the University, with its knowledge capital being trapped in web systems "beyond UNSW", but it also jeopardises UNSW's ability to effectively engage with its audiences.

To reverse this trend, the University must transform itself into a flexible service-oriented institution by moving away from the static practices associated with the "read-only" web. It needs to "embrace the full capabilities of the Read-Write Web in order to transform institutional practices" in a way that is contemporary and dynamic. Doing so would distinguish the University as a leader and raise its reputation as an innovative and world class institution.

Pesce and Harley's second paper, *Consistent Flexibility: Designing for the Use in UNSW Web Services*, addresses the problem of duplication of the University's core corporate content across numerous websites. The paper addresses the implications of mi-use of this legally mandated information and explores and recommends flexible alternatives for use of this data that provides "dynamic" connections to authoritative data sources.

The paper proposes a solution that allows a staff or student user to "combine" user-generated content (wikis, blogs, web pages, tagging, RSS feed, etc.) with protected corporate content to produce new and inventive wholes: "it effectively enables each member of the UNSW community to become an information architect, as they create, publish and share a rich mixture of authoritative and personal information in the form most meaningful to them".

Primary Functions of the Web

To assist the University to achieve its strategic objectives, the web must function to effectively deliver information and services to critical audiences. Its primary functions could be described as **communication** and **access to resources/services**. Within these broad categories are more specific functions, relevant to specific cohorts:

Communication	
Discrete Function	**Cohort**
Building and maintaining reputation	Wider community and all specific cohorts
Direct recruitment	Prospective students – UG and PG coursework and Higher Degree Research (HDR)
Research collaboration	Staff and external researchers
Learning & teaching (TELT)	Current students
Community Engagement	Alumni, industry, government, business, broader community
Access to Resources/Services	
Discrete Resource/Service	**Cohort**
TELT (Technology Enabled Learning & Teaching)	Current UG and PG Coursework students Academic staff & HDR students P&T Staff
Library	Current UG and PG Coursework students Academic staff & HDR students P&T Staff
Administration	Current UG and PG Coursework students Academic staff & HDR students P&T Staff
Student and other uni services	Current UG and PG Coursework students Academic staff & HDR students P&T Staff
Research	Academic staff & HDR students P&T Staff

The objective of a Web Strategy must be to **continuously improve the delivery of communication and resource access to the identified cohorts.**

IMPLEMENTATION STRATEGIES

The following broad strategies are proposed.

Communications should be targeted and tailored to identified cohorts where appropriate, and the communication to these cohorts should be considered holistically, taking into account common workflows. [1]

Following from this, it is proposed that the **University Web presences aggregate at a presentation level around core areas, moving towards Gateway sites and an Internal Portal/Intranet where appropriate.** [2]

The first release of the Research Gateway is under development, and illustrates this strategy in action. The Gateway replaces four existing web sites that matched the organisation structure of the university. The problem for the research cohorts was that workflows and information pathways are currently fractured across these four sites. The new gateway addresses this issue by hiding the underlying organisation structure which is largely meaningless to the end user, and providing new unified workflows and information pathways that in turn are further tailored to the individual cohorts.

A core strategic issue that must be addressed is the proliferation of incorrect information across the University web presence. This has been largely due to the issue that the gateway proposal seeks to address - that in reality most workflows cut across organisational boundaries. Many organisations recognising this issue have sought to make things easier for their end users by providing some contextual information in their own web sites around these elements that they do not control. This however has been largely done via 'Cut and Paste' of selected information from the authoritative organisation's web site, but of course this kind of contextualising information is static and is orphaned from the authoritative source, and quickly out of date. Consequently, in seeking to make things easier for their cohorts, the situation has in fact been made much worse.

The gateway sites will address this issue largely by unifying core workflows and information pathways. However exceptions will continue to exist, particularly in regards to central and faculty web presences. It is proposed that the strategy to redress this is to **make core information available via a 'publish and subscribe' model, and ensure these are maintained by the authoritative source.** [3] For example, the information for student enrolments could be provided as a feed, and the faculties would contextualise this information with local examples and tailored text for their cohorts. If academic administration added an extra step to the student enrolment process, and they then change this on their own site/gateway, the change is also reflected in the feed information, and the contextualised pages on faculty sites is dynamically updated in turn from the authority.

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[1] Pp 7-8, 10-13 *Ibid.*
[2] Pp14-15, Recommendation 1, Recommendation 4 *Ibid.*
[3] Recommendations 5 and 6, *Ibid.*

Again, using the pending research gateway as an example, the faculties, who are the authoritative units over their local research key dates and events, will provide a feed to the research gateway for the events and key dates area of the site. This means that the research gateway feed will be an aggregate of the key dates and events for the whole community with all faculty and divisional information available from a single place, but with the data maintained by the appropriate authorities.

In both examples, it can be seen how the authoritative unit has published the information, and other units (including individuals) can subscribe to that information. The usage of RSS feeds in these examples is just an illustration of how this model could work with current technologies today.

THE CENTRAL WEB UNIT

The Web Unit needs to be given the necessary mandate and authority to act where needed, and be structured and resourced appropriately. It is proposed that the role of the Unit would cover five major areas:

GOVERNANCE
- The Web Unit, under the auspices of the UNSW Web Governance Policy, to be the authoritative unit for maintaining Web policy, standards and guidelines for the university, and the approval process of any exceptions requested.
- The Web Unit to report to senior management through the Executive Director University Services and provides reports and proposals to the Web Steering Committee.
- The Web Unit to be responsible for approval of University Websites (excluding those within the faculty domains) and domain name approval for web presences is formally delegated to the Web Unit.
- The Web Unit to have an advisory function in relation to Faculty web development projects, through representation on faculty web committees

COMMUNITY SUPPORT
- The Web Unit to provide support for the UNSW community in developing, maintaining and assessing Web presences.
- This support to be delivered via the Web Unit acting as a 'plexus' for the network of web developers, media and marketing managers, and other interested parties such as management and faculty
- The Web Unit would work closely with the Web Reference Group, which is a mechanism for consultation with major stakeholders across the university and for helping to disseminate strategy, policy, guidelines and resources to the web community on campus.

Compliance testing and methodologies, sustainable editorial workflows, and project plans are resources that should be shared across the whole community, leveraging the investment the

divisions and the faculties make in such activities and development. The Web Unit can also help to coordinate and share web development activity across Divisions and Faculties, such as User Acceptance Testing, accessibility assessments, workflows and information pathways.

INNOVATION

The Web Unit would:

- have a cross over role with Learning & Teaching in the research and innovation of the TELT platform
- Explore and advise the UNSW community on current and emergent web related technologies and lead UNSW initiatives, or work closely with other units taking the lead, as appropriate
- Ensure that projects that will benefit the UNSW web community are coordinated with relevant funding cycles (both internal and external.)

DEVELOPMENT SUPPORT

The Web Unit would

- offer project scoping, project management and vendor matching for large web projects
- include a small development team that can act as subject matter experts in project and consultation activities, co-ordinate changes to gateway sites, undertake small site developments where needed, and service the Corporate Web Site (CWS) needs in particular.
- include at least one copy writer who can be used across the UNSW community. (Part of the difficulty in communication to the cohorts arises out of organisational and domain nomenclature, acronyms and presumed knowledge, especially for prospective cohorts or new members of cohorts, such as junior academics and new Higher Degree Research Students.)
- Provide technical resources (eg. style sheets, templates, etc) and advice to assist units within the university to develop and maintain sites in line with branding guidelines and web policy.

See Appendix for specific services that would be appropriately provided through the auspices of the Central Web Unit.

RELATIONSHIP OF THE WEB UNIT WITH MEDIA, MARKETING AND IT SERVICES

As previously identified, one of the primary functions of the web is communication. Consequently it is appropriate the web unit is situated within the Media and Communications Office.

Given the importance of the web to marketing and student recruitment, the Web Unit will work closely with the marketing arm of the University – particularly in relation to branding guidelines and the look and feel of the university's web presence.

The Web Unit is the business owner of the web presence of the University, in the same way that L&T owns the TELT platform, Finance owns the financial systems and Academic Administration owns the administration systems. IT is the underlying service provider to these business departments, and the same is envisioned for the Web Unit. The Web Unit as business owner has the responsibility to propose, define and refine web service requirements over time, and coordinate and liaise with the information owning business units in a broker capacity. IT provides the hosting of the physical infrastructure for the Web Services as a service to the Web Unit, and change requests to the underlying IT service are managed by the IT Operations Portfolio.

APPENDIX - SPECIFIC SERVICES

There are several specific services that it is appropriate for the central Web Unit to provide to the UNSW Community.

- **Web Services** - part of the core Web Strategy is the delivery and presentation of authoritative data, direct from the authoritative source. Web Services provided by the Web Unit offering programmatic access to central data is a key component of delivering to that goal. The Web Unit would act as an information broker working with the authoritative data owning units around issues of access control, data aggregation and all related issues with IT and IARO as the underlying service providers.

- **Analytics** - As per strategy, the primary reason for a web presence is communication in one of the four principle modes, or to provide access to resources. A web presence may fall into a number of these modes. The analytics of measuring success in communicating to these four areas is however different, and needs to be handled accordingly. The measurement of TELT success is the purview of Learning & Teaching and teaching staff, and is out of scope for the Web Unit. Analysis of the other three is in scope. To have a full data set to draw reporting from, there is a need for a unified analytics set of data. To this end a Policy needs to be established to mandate inclusion of page code that facilities this universal collection. Regular reporting of statistics and analytic commentary will be provided to major web presence stakeholders as a standing service, the same available to smaller sites on arrangement. Overall presence reporting and analytic commentary, including how cohorts move across the entire UNSW domain and external presences, to be provided openly to the UNSW community and reported to the Web Steering Committee and Executive when required. The area of analytics also involves Search Engine Optimisation (SEO) and addressing the needs of Global Search across the entire UNSW web presence. These go hand in hand with web analytics in terms of improving the success rate of the end user cohorts finding the information they are seeking, and in exploring broader recommendations around Business Intelligence opportunities.

- **Archival & compliance** - Under the State Records Act UNSW is required to maintain a history of its web presence. This difficulty of this is further compounded by the need to be able to retrieve these archives in the future, while storage mediums, computing hardware and software move rapidly on. Together with the Records Management Office, it is proposed that the Web Unit maintain two methodologies for meeting this requirement. The first is the embedding and usage of the 'XENA' system in major projects and sites. 'XENA' is maintained by the National Archives of Australia as an Open Source Project, with the concept that the Federal Australian Government via the National Archives will maintain and continue to evolve this system to provide for archival retrieval in the future. The second is the usage of the Internet Archives technologies 'Heretrix' and 'The Wayback' machine, via the 'Web Curator' project. Smaller presences and broader Internet presences can be 'spidered' by the Web Curator, where XENA for whatever reason cannot be deployed. Both of these are agnostic as to the technology been used for the provision of the web presence.

- **External Partnerships** - The need for archiving also highlights the importance of partnership arrangements where possible and appropriate. Such partnerships properly managed can allow for the archiving of UNSW material whilst still availing the community of desired technologies and a presence in the broader Internet realm. Addressing the competing needs of archival with the 'university without walls' philosophy. Partnerships usually also allow for superior presences in these broader realms, such as no advertising agreements, larger usage quotas, and automation and programmatic access.
- **Shared Resources** - There are shared resources that it is appropriate be acquired centrally from the web unit. These would then be provided to the community. These would include institutional usage licenses of common web elements, such as embedded players and editors, and licensing and resource agreements around external consultation and assessment services. Shared business systems, such as the possibility of a central forms server or a global search appliance or suite are also deemed appropriate as potential shared resources.
- **Training Materials** - As with shared licensing and the discounts that apply, there is the same opportunity for training and self help resources around web development tools and software. It is proposed that training materials be provisioned from the web unit where the reference group votes upon the request, thus ensuring that the materials are of value to a majority of the community and that is appropriate they be provisioned centrally