The University of Queensland Library
Your Partner in Scholarship

TECHNOLOGY STRATEGY 2014-2017

THE UNIVERSITY OF QUEENSLAND
AUSTRALIA

LIBRARY
Your partner in scholarship

INTRODUCTION

This Technology Strategy sets out the priorities that will enable the Library to achieve the goals of its Strategic Plan 2013-2017.

Technology continues to evolve rapidly and the Library is well placed to take advantage of the trends. Technology underpins the discovery and delivery of library resources. It helps academics and students interact and collaborate with the Library. It is a platform for the Library to partner with other areas of the University and the broader community. It provides information about the diverse interactions of our users with our services and resources. It plays a major role in preserving and exposing the research and other intellectual outputs of the University. It enables efficient workflows for Library staff.

The Library will develop operational plans to deliver the strategy. Agility and flexibility will be built into these plans to meet the challenges of an ever-changing environment.

Technology is critical to the success of The University of Queensland Library to continue to deliver world-class information resources and services

TECHNOLOGY TRENDS

Changes in technology will influence and shape much of the development of Library's technology. The changes may even be disruptive. Trends that will affect the Library and its services include:

1. Data-driven development

Analysis of 'big' data to create actionable insights is developing rapidly in the education and library sectors. This offers new opportunities to create a deep understanding of users, the user experience, and use of services and content. It opens up new ways to develop services, model alternative scenarios, measure performance, and evaluate content. Examples of this trend include the delivery of services and content based on a user's current need, personalising the learning experience, tracking 'journeys' across multiple University systems to identify causes of dissatisfaction, confusion and roadblocks, and sophisticated content analysis.

2. Expansion of devices

Devices are evolving constantly and expanding their ability to connect, create, and collaborate. The ability to receive information and services is expanding as is the ability to provide information on use and its context. Personal and mobile devices are becoming ubiquitous, and the range of other devices that are connected to the internet is multiplying (the Internet of things). Examples of this trend include bring-your-own-device for study or work, wearable technology, biometrics for authentication, near field communication, and self-reporting equipment. Businesses are ensuring their services are positioned to take advantage of these developments.

3. Access over ownership

The business environment is moving from ownership to access for infrastructure, applications and key areas of content. Examples of this trend include Software-as-a-Service, Data-as-a-Service, cloud computing, and e-book platforms. Businesses are focussing on customer service and risk management to distinguish their services, and adapting to service providers managing change.

4. Social media

Social media will become a primary media to connect, engage, inform and understand customers. Online social interaction will become a standard method to collaborate, support users, and provide services. Turnover and change in the dominant social media platforms requires businesses to regularly assess how services and content are provided.

5. Online content creation

The education and library sectors are increasingly creating online content. Examples of this trend include libraries digitising unique collections, students making and creating content, lecturers creating content for online courses, digital scholarship, open research and open data, universities creating e-textbooks, and content to support MOOCs. Support is increasingly required for the creation of content and development of the skills of staff and students, as is the ability to manage and curate the content and discover, provide access, and deliver the content.
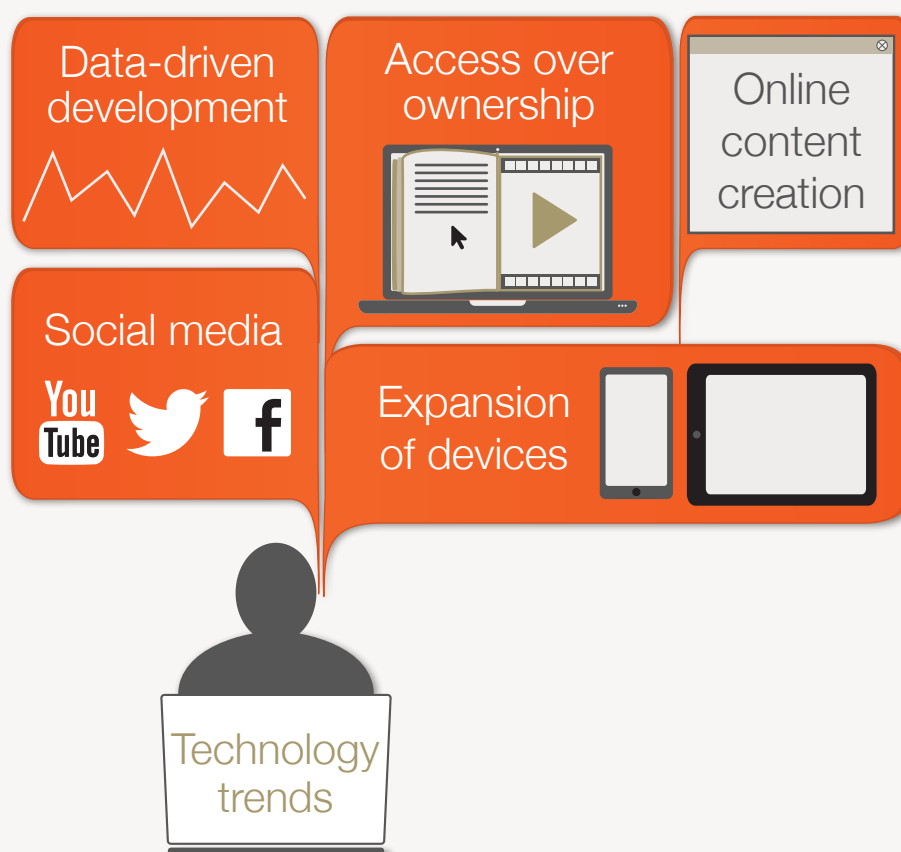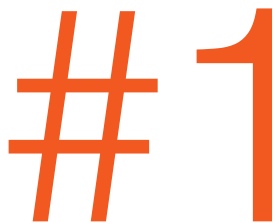
THE LIBRARY'S TECHNOLOGY STRATEGIES

The Technology Strategies are listed against the priorities in the Library's Strategic Plan 2013-2017.

#1 The User Experience:

Understand library users' research and library experiences, and use that information to shape collections, spaces and services

Library's strategic priority	Library technology strategy
Maximise the Library's value by understanding and meeting user needs	Develop capability to record, integrate, and share vast amounts of internal and external data, undertake advanced analytics of user behaviour, and develop profiles
Ensure users can access the highest quality resources to support learning, discovery and engagement	Provide capability to analyse content and its use to shape collection development Expand opportunities for users to drive development of services and selection of content Continue to develop strategies that support access to evolving publishing/dissemination channels, particularly open access and e-books
Enhance the user experience by enabling easy and effective access to physical and online Library spaces	Concentrate development on services, applications, and content that are the unique contribution of the Library to UQ Deliver highly personalised services and content, based on the user's current need using information on user behaviour, user workflows, and profile information Develop multiple ways for users to access and use services and content for ease of use, convenience, and accessibility with a minimum requirement of delivery on personal mobile devices Provide multiple ways to access services and content so they can be used in a way and on a device that is convenient for the user, with at least one way being via personal mobile devices Embed accessibility for users with diverse abilities and technologies into the selection, development, and quality control of technology solutions Expose services at a granular level and provide deep linking to content so users and UQ services can combine Library services and content as appropriate, such as having a link to room bookings on a group assignment page in Blackboard, sharing a link to a journal article on Facebook, and the selection of services that are in the UQ mobile app Provide and support technology that enables students and academics to excel in their learning and research endeavours Maximise self-service opportunities for routine matters that allow users to access services 24/7 and allow Library staff to focus on higher value-added activities such as relationship building and personal customer engagement Choose technology that enables the Library to concentrate efforts on exposing services and managing interoperability by: • consolidating to a core set of products • preferring centrally provided and vendor products • choosing systems where development of the user-facing component and Library processes are separated in order to minimise the impact of development of one on the other

#2 Content, Tools & Services:

Provide services and scholarly resources in formats that best fit user needs

Library's strategic priority	Library technology strategy
Evaluate and develop our suite of e-learning tools	Ensure platforms are available to support the creation and delivery of e-learning tools for Library services and content
Develop research infrastructure to support digital scholarship, and to maximise the use and impact of UQ's unique collections and capabilities	Invest in appropriate infrastructure and service development to significantly expand the digitisation program (creation, curation, preservation, and sharing of digital library material, including theses, Fryer Library born-digital and digitised material, acquired e-books, UQ journals, course material, e-textbooks, and UQ open access material)
	Explore and exploit crowdsourcing opportunities for digitised special collections such as tagging historical photographs and correcting auto-OCR'ed text
Develop a Library-wide structure for data capture and analysis to inform decisions on resource allocation	Undertake deep analytics of big data about library use to produce performance information, demonstrate where value is (and is not) being provided to UQ, and model collection development
Partner with key organisations to explore and develop innovative services	Partner with vendors, UQ central services, and UQ organisational units to develop products
	Explore partnerships with libraries, cultural institutions, other organisations, and within UQ to create shared content and develop shared services

#3 Learning & Discovery Partnerships:

Ensure that the Library provides the best possible support for learning, teaching and research by developing new strategies for working with users, through collaborations and partnerships

Library's strategic priority	Library technology strategy
Expand and develop services and systems that promote quality outcomes in a globally competitive research environment	Share data, bibliometrics, and analyses with other UQ services undertaking analytics including areas in learning, student experience, research performance, academic development, and engagement Deliver highly personalised services and content, based on the user's current need using information on user behaviour, user workflows, and profile information
Collaborate with our academic partners to leverage e-learning developments	Partner with innovators at UQ and externally in online, hybrid, and collaborative learning to incorporate library resources at point of need, and provide labs and makerspaces for academics and students to develop skills and create content
Integrate Library teaching support with academic programs	Expand the delivery of Library services and content in e-learning tools
Champion open research and other emerging scholarly trends and initiatives	Provide campus leadership on research data storage, curation, preservation, and sharing Partner with emerging areas of digital scholarship in the humanities at UQ and externally to develop tools and access to resources, and collaboration tools
Partner with researchers and RHD students throughout the research cycle to maximise high-quality outcomes and impacts	Provide campus leadership on research data storage, curation, preservation, and sharing Deliver highly personalised services and content, based on the user's current need using information on user behaviour, user workflows, and profile information Ensure information management tools are available for researchers and RHD students, such as EndNote

#4 UQ Engagement:

Articulate how the Library's collections, services, and initiatives support the University's engagement activities

Library's strategic priority	Library technology strategy
Engage with Industry, Government, Alumni and Community through communication strategies that make Library resources, services, and facilities more visible, utilised and valued	Ensure effective and efficient engagement and business operation tools are available Examine options to improve access by Alumni and the Community to online content Promote development undertaken by the Library to the wider community through active participation in appropriate fora, conferences, and events
Create cultural experiences and resources for the local, national, and international community	Invest in appropriate infrastructure and service development to significantly expand the digitisation program (creation, curation, preservation, and sharing of digital library material, including theses, Fryer Library born-digital and digitised material, acquired e-books, UQ journals, course material, e-textbooks, UQ open access material) Explore and exploit crowdsourcing opportunities for digitised special collections such as tagging historical photographs and correcting auto-OCR'ed text Provide mechanisms to create engaging online and digital experiences including hybrid digital/physical experiences
Build Library capacity and capability for fundraising and engagement	Ensure tools are available that support fundraising and engagement

#5 People & Culture:

Maximise the value of the Library culture and human resources

Library's strategic priority	Library technology strategy
Foster a Library culture that promotes a whole of UQ approach	Ensure communication and collaboration tools are available that enable Library staff to work seamlessly across organisational and geographic boundaries
Ensure staffing models are responsive and flexible	Provide ability for Library staff to manage systems that support their business needs
Empower our staff to succeed and thrive in a changing environment	Ensure technology is available to Library staff to succeed and thrive in their achieving their business requirements Ensure development processes and technology change management processes support a changing environment including understanding users, continual iteration, rapid prototyping, and pilot testing
Sustain and develop a capable and committed staff through recruitment, development, support and recognition	Identify new skills and expertise that are needed to be brought into the Library Ensure technology is available to support online staff training and self-education