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Everybody's talking but who's listening? Hearing the user's voice above the noise, with content strategy and design thinking

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Disciplines

Arts and Humanities | Social and Behavioral Sciences

Everybody's talking but who's listening? Hearing the user's voice above the noise, with content strategy and design thinking

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Abstract
Targeted, consistent content encourages library users to engage with services and resources. As the user experience, particularly offshore, is largely defined by interactions with virtual services, it is more important than ever to listen to the user and craft content that forms part of an ongoing conversation. This paper shares the University of Wollongong Library's experience of developing a content strategy and using personas with design thinking to firmly place user experience at the heart of content and service delivery.

The user experience at University of Wollongong Library

In many organisations, content, or "what the user came to read, learn, see or experience", is considered part of everyday business, rather than an asset that has strategic importance (Halvorson & Rach 2012, p. 28). Continually creating content without a core content strategy leads to duplication, inconsistency, inaccuracy and disconnected pathways. Further, the increasing volume and fragmentation of content becomes difficult to manage. As a result, user experience suffers; internally, this practice also leads to staff inefficiencies. Libraries are not immune; having rushed to make more content available online, they are now responsible for an abundance of content (Blakiston 2013, p. 176). This approach to content appears to be at odds with the role of librarians as leaders in information management practices and in supporting users to find, filter and critically evaluate information.

The University of Wollongong (UOW) Library already had a longstanding commitment to exceptional client service and quality through its *Quality, Service, Excellence* program (McGregor 2004). As it became easier to publish information online and provide unmediated access to services and expertise, librarians enthusiastically began creating content and experimenting with new methods of delivery. The rapid rate of change did not provide opportunities to develop robust mechanisms for managing the growing volume of content. The restrictions of early iterations of the enterprise Content Management System made it difficult for librarians to readily produce responsive content, so many turned to external systems to build and deliver the content that was needed. Even after the enterprise systems improved, this practice continued, leaving more content sitting outside the enterprise system than within it. The UOW Library Communications Toolkit, originally developed to assist staff in creating consistent outward-facing content, had not been updated in many years, and staff had stopped using it beyond its capacity to provide templates for PowerPoint presentations and reports. Since the Toolkit had been created, the Library had begun using social media such as Twitter and Facebook to engage with users, but there were no guidelines for doing this effectively.

In 2012, the Educational Technology Librarians at UOW Library were charged with exploring technological capabilities and how they might be applied in the higher education context. The role afforded opportunities to think about possibilities, rather than delivering quick solutions. The team came to appreciate learner-centred design approaches and its potential to address the bewildering volume of content being produced across multiple communication channels. When the new Business Solutions team was formed in 2014, incorporating additional expertise in web design, computer systems, and content management systems, the need for user-centred design approaches to the online experience was clear. The defined purpose of this new team was to innovate and deliver technology-enriched solutions to improve business operations. The team was charged with improving the online experience through web content, elearning, and hardware and software innovations. User experience was the lynchpin tying these together.

In 2015, a strategic focus on delivering services to our offshore partners brought content to the forefront of creating a targeted and consistent user experience. The Library 2015 Strategic Operational Plan included three main drivers: to transform engagement with information; to augment student and research success; and to

provide global, 24/7 Library services across locations (UOW Library 2015). The diversity of local and international students, staff and community members interacting with the Library meant that their information and service expectations transcended the bounds of our physical opening hours.

At a broader institutional level, UOW was strategically shaping its brand through consistently designed outward-facing content, and conscious use of social media channels to deepen student engagement. Maintaining a multitude of channels presented a challenge for complying with these drivers. Integrating well-designed (and managed) content and resources into the curriculum, and providing 24/7 access via our online spaces, would augment student and research success.

Why content strategy?

Content strategy guides the delivery of content from the initial planning stages, right through to the end of the content life cycle. It shifts the emphasis from the author to the user, as it addresses the content's purpose and target audience from the outset, and asks what the user is going to *do* as a result of engaging with that content. Auditing the Library's content built a better picture of its extent, and demonstrated that a more holistic, strategic approach was necessary. It revealed specific examples of pathways to online resources and services that were not conducive to a smooth user experience. The audit provided a practical way of starting to address the growing volume and complexity of content. Additionally, a content strategy could be used to define a unified Library voice, which would then shape content to reflect user expectations. This, in turn, would support staff to develop "current, compelling and consistent content" (Bloomstein 2012, p. 114).

Why design thinking?

Traditionally, decisions about service and resource design begin from a business perspective, considering operational needs, including staffing and workload capacity, system functions, and established strategic priorities. While these considerations are necessary, this model places the user at the end of the design process, and feedback is typically sought *after* the service or resource has been designed or implemented. Brown states that "along with business and technology considerations, innovation should factor in human behavior, needs, and preferences" and suggests that rather than bringing in a designer to market the end product, the mindset of the designer is valuable right from the outset (Brown 2008, p. 8). Design thinking "enables you to see problems as opportunities and gives you confidence to start creating transformative solutions" (IDEO 2015). The emphasis is transposed from business need to user need, and the user is placed at the heart of the decision-making process.

There are several models of design thinking available in the literature (Razzouk & Shute 2012). Common to all is the human centred perspective: understanding and identifying the needs of users; thinking creatively about possible solutions; and moving through iterations of testing and refining the final solutions. UOW Library primarily used the method offered by Stanford University Institute of Design (2015a; see Figure 1). This particular model was chosen as it delineates clear identifiable steps in the design thinking process: *Empathise*, *Define*, *Ideate*, *Prototype*, and *Test*.

These steps fit well with the project's timeline, and helped to explain the process to team members who were unfamiliar with design thinking.
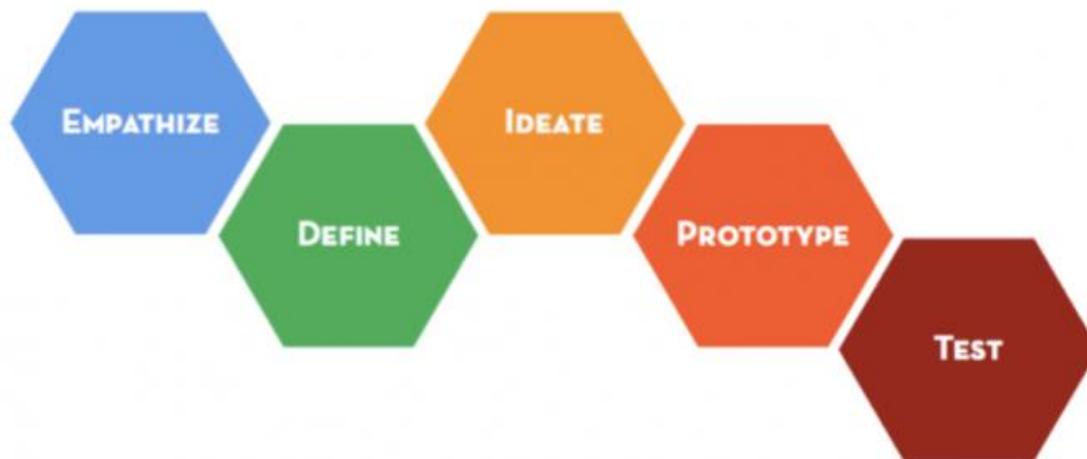
Figure 1. Stanford University Institute of Design - design thinking model

The use of design thinking at UOW Library emerged as a means to challenge legacy practices and beliefs about the Library's users, with the aim of delivering a cohesive and, importantly, relevant service experience. This approach encourages innovation through an iterative process that moves from divergent to convergent thinking, cycling through this process until a solution is reached (Howard 2015). The iterative mindset in design thinking allows service delivery to be treated more as a conversation between the organisation and users, allowing for systematic listening, clarifying and refining. Design thinking enabled the Library to empathise with and understand its users, thus exploring new and better ways of helping them meet their personal, professional and educational goals in a complex online environment.

Bringing together content strategy and design thinking

The Library's focus on user experience and the drive to enhance communication and engagement with its users has taken two primary forms thus far: a content audit, which informed the development of a core content strategy, and a targeted Design Principles project. The content strategy audit began in 2014 and aimed to build a picture of existing content, where it was stored, who owned it, and its effectiveness. The Design Principles project commenced in June 2015 and aimed to apply design thinking methodologies to deeply understand Library users and develop creative solutions for supporting students and staff at UOW campuses, both in Australia and overseas, in a 24/7 environment. Delivering library services in a 24/7 environment is a strategic priority for UOW Library in 2015, and this dovetailed with the broader UOW goal of enhancing its performance as a digital university. The project team saw an immediate synergy with the groundwork that had been laid during the content strategy audit, and aimed to incorporate recommendations from the initial report into this targeted project. This included the development of personas and further analysis of our online content.

What have we got? Content audit and analysis

Guided by Blakiston (2013), and Halvorson and Rach (2012), the Business Solutions team created an inventory of content channels, including the Library website. Each channel was measured according to whether its content was usable, findable, accurate and actionable. The audit highlighted issues with content workflows and governance. In expanding its online presence, the Library had become responsible for a substantial amount of content. The audit also uncovered a lack of understanding of user needs, and demonstrated the need for a clear, unified voice: to align with institutional goals and reflect UOW Library's role in supporting research and scholarship through enhanced, seamless access to information and resources.

Common issues across the channels were determined and each channel was analysed further (Figure 2). The primary target audiences were identified and each channel was ranked on a scale of 1-5 (1 = poor and 5 = excellent). An overall score for each measure was determined by counting the number of main channels ranking 4 or above. *Usability* and *findability* emerged as key problem areas to focus on, as they scored poorly against the criteria.
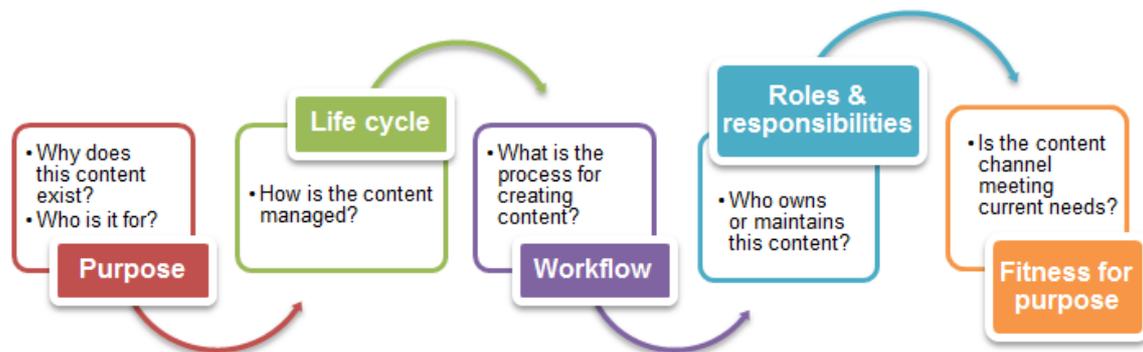

Figure 2. Factors reviewed for each communication channel

The audit report made several recommendations for improving content, which significantly included developing a set of personas. To evaluate content against user needs and expectations, the Library needed a realistic representation of its target audiences (Blakiston 2013, p. 183). Personas provide content creators with a shared understanding of Library users, an understanding that is essential for producing consistent and relevant content across multiple channels. The report also recommended building staff awareness of user experience design approaches when developing content, e.g. conducting regular user interviews and observations of user behaviour.

On the road to content strategy

During the audit, the Business Solutions team was unable to evaluate content for "brand/voice appropriateness" (Halvorson & Rach 2012, p. 55). An internal core content strategy statement had not yet been defined, so there was no clear standard to measure against. Our target audience did not fit neatly with the Strategic Marketing and Communications Unit's focus on *potential* students and staff, as the Library's primary focus was on *existing* students and staff. The team agreed that the University's brand guidelines needed further interpretation to define the UOW Library

voice, and further analyse existing content. Beginning with a collection of more than 100 adjectives that could be used to describe UOW Library, the team embarked on a card sorting exercise (Bloomstein 2012, pp. 28-34).

The descriptors were sorted into one of three categories:
1. Who UOW Library is
2. Who UOW Library is not
3. Who UOW Library would like to be

For the first category, "Who UOW Library is", the team chose adjectives to describe the current situation, drawing directly from examples uncovered by the audit. To achieve consensus and increase the likelihood of adoption across the Library, adjectives in the final category, "Who UOW Library would like to be", were mapped back to the UOW Library Values (excellence, integrity, courage, collaboration and transformation) and the institutional brand.

The team then analysed the user perspective: what should UOW Library content do for Library users, and how will those users feel as a result of interacting with Library content? This is now expressed in UOW Library's core content strategy statement (Figure 3), derived from a template by Hilary Marsh (2015). Once this was approved, the team had a basis for reviewing existing content and guiding decisions about creating content. The statement can be used to support decisions to reject new content and delete existing content that does not meet the defined purpose, as well as review content for brand/voice appropriateness. It applies to printed materials or static web pages, and informs communications with users, from social media posts to online reference enquiries.
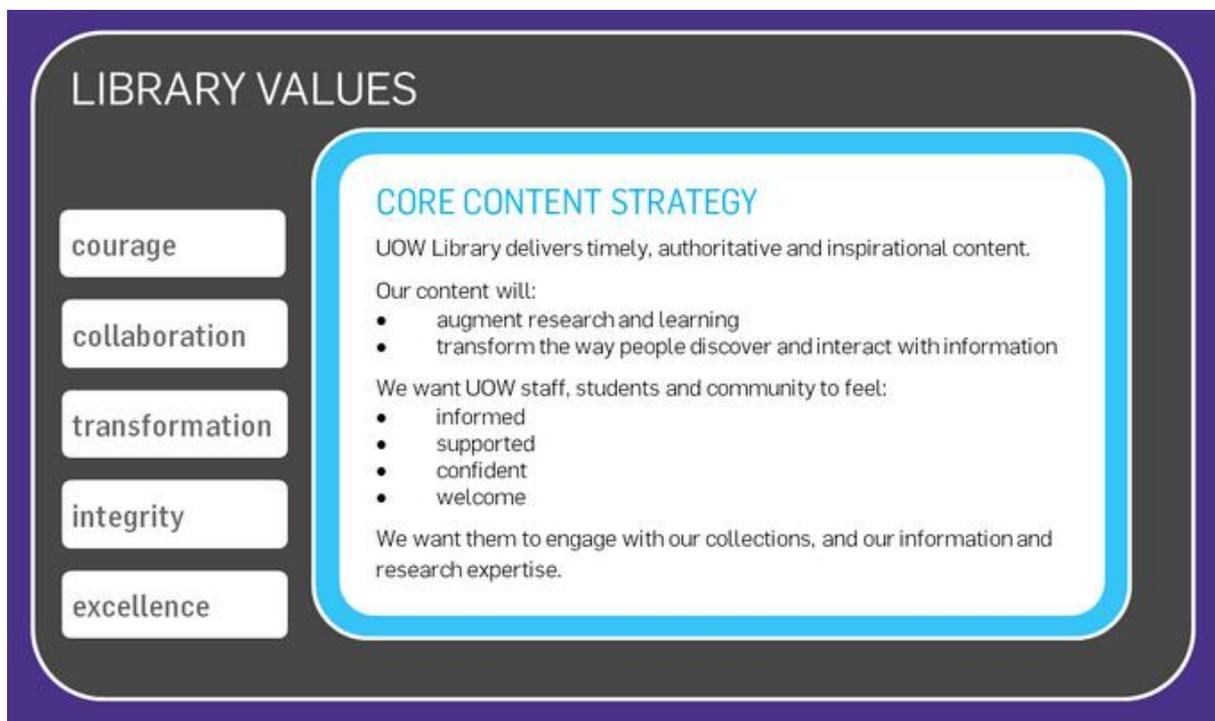
Figure 3. UOW Library core content strategy statement

The next stage of implementation was the distribution of a Google Form, *Developing Library content*, to prompt staff to consider aspects such as audience and purpose, relationship to existing content, navigation and promotional pathways, and governance, revision, and archiving. The form, accessible via the UOW Library Communications Toolkit, is demonstrated to new strategic project leaders to inform their thinking about new content created during the project and how this fits with existing content. To further raise staff awareness and understanding, this form was presented at an all Library staff meeting, along with the core content strategy statement. Staff were also encouraged to discuss any plans for creating content with the Business Solutions team, and to view content strategy not as an additional consideration, but a way of maximising impact and prioritising content development and review. Although the form was originally intended as a template to guide discussion during planning stages, it has extended benefits in that it assists with the ongoing audit process – as new content and content review is captured in a central location.

Who are you and what do you need? Empathising with personas

The Design Principles project team developed a set of user personas, which would be used to evaluate current content, resources, and services from a human centred design perspective. Design thinking principles initiated a fundamental shift in the Library's approach to developing and implementing changes to content, resources and services. UOW Library has a strong history of applying business excellence principles to strategic planning activities, using a variety of tools, including relational datasets, to measure user engagement with resources and services (Jantti & Cox 2011). Central to UOW Library's Vision, Mission and Values is to continually improve and evolve to deliver resources and services that enrich and augment the student experience (UOW Library 2014). While the project was born from an environment that already placed high value on student engagement and experience, the project placed the user, whether they be student, staff, or faculty, at the heart of the design process and asked the question, "What do you need?" As Miaskiewicz states, the benefits of using personas and human centred design methodologies include: "…revealing and challenging long-held organisational assumptions about users and their needs, and focusing service development on user goals" (Miaskiewicz 2011, p. 425 in Goldsworthy et al. 2015).

As the project aimed to support an overseas cohort that was commencing in September 2015, the project team had four months to design personas and provide recommendations for delivering 24/7 services. Due to the tight timeframe, the team chose to develop proto-personas, a method used with some success by usability designers to engage key stakeholders in the adoption of personas (Gothelf 2012). The project team conducted two collaborative workshops with staff from different teams in the Library, including Senior Management, frontline Client Service, Collection Development and Resource Sharing, Technology, and Academic Outreach Librarians. The intention was to involve staff from a cross-section of the Library to gather perspectives on a broad range of library users, and to maximise staff engagement with the personas once they were complete.

In the workshops, each participant, including members of the project team, created multiple draft personas to represent the users they interacted with in the course of

their work. The rest of the group then interrogated each persona, asking clarifying questions and suggesting changes. The draft personas were also mapped against several spectrums, including:

- comfort or skill with technology
- independence
- preference for physical or digital communication
- time commitments
- access to the internet

This process provided rich insights, and participants commented that they enjoyed the process and could see the benefits of applying the personas to their own work. In the weeks immediately following the initial sessions, a persona design session was conducted as part of the UOW Library staff meeting. The benefits were twofold: the perspectives of the entire Library staff base enriched the information the team had to work with, and staff understanding of the project and engagement with the design thinking methodology increased significantly.

After the meeting, the project team reviewed and collated the different personas. The initial scope of the project set a limit of six personas, but the diversity of personas developed through the workshops indicated that this was too limited and left out key user groups. Gothelf (2012) warns against ending the process with more than five personas, and the project team acknowledged that it was important to be selective when the personas were applied to specific content and services, otherwise their validity would be compromised.

After collating the draft personas into eight "types", two composite personas for each type were developed:

- undergraduate students
- higher degree research students
- mature age entry students
- students at regional campuses (in Australia)
- academic staff
- international students studying onshore
- international students studying offshore
- alumni

Using an Xtensio template, the project team developed more sophisticated draft personas (Xtensio 2015; see Figure 4). To make the personas more realistic and increase the potential for evoking empathy during in the design thinking process, each persona had a name and photo, and a section in which they described their experiences, needs, and goals using their own language (Redish 2012, pp. 29-32).
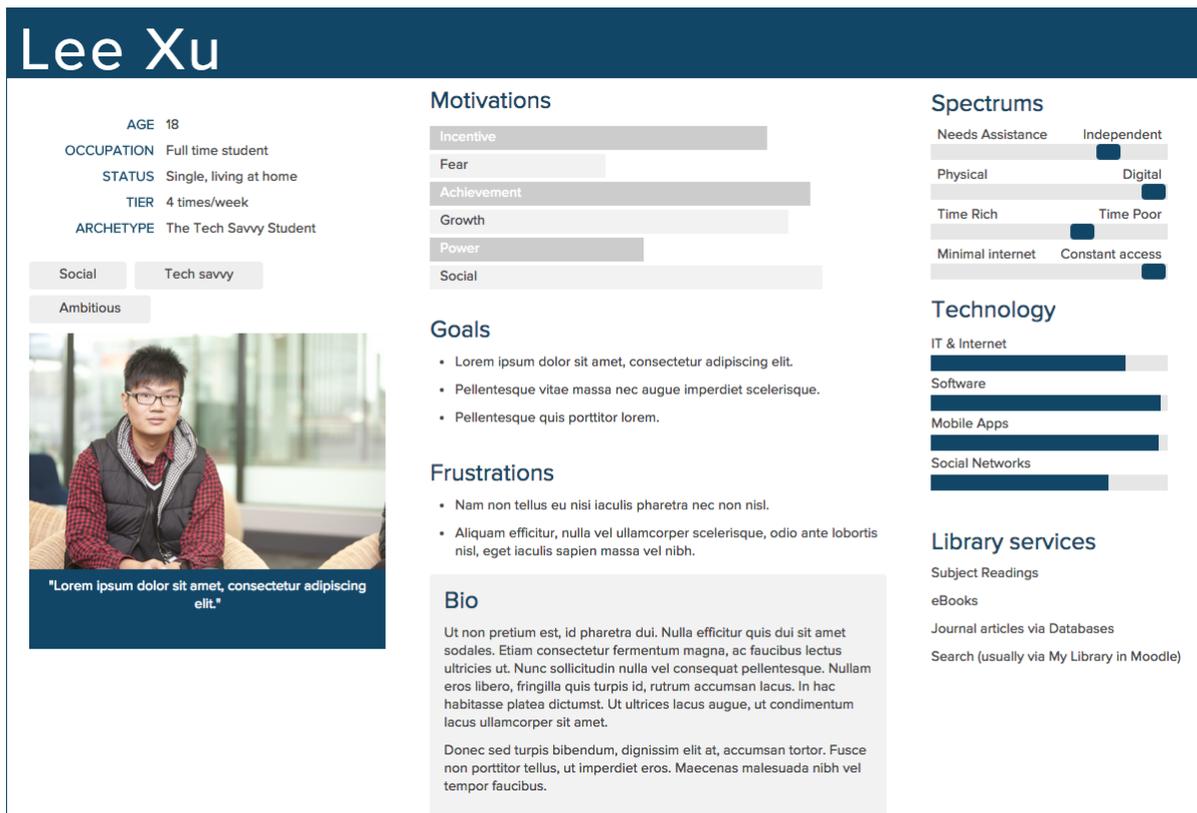
Figure 4. Xtensio template used to develop the personas

Following this, staff who participated in the initial workshops reconvened so the project team could gather feedback on the draft personas and decide which personas were strategically important to UOW Library (Gothelf 2012). This was important not only to ensure the validity of the personas, but also to gain a commitment to these personas from staff at all levels.

It must be acknowledged that personas are an attempt to express the complexities of real people and not to stereotype them (Pruitt 2003, in Goldsworthy et al. 2015). To mitigate the risk of the personas being treated as stereotypes, the project team reinforced the persona development using real data gleaned from existing Library systems, such as the Library's online reference service, in-person reference interviews, enterprise systems for demographic data, and the Library's academic outreach service. While it is impossible to create personas that represent every one of our users, the project team used the data to identify broader trends, including common issues or enquiries made by particular client types. As an example, 20% of online reference enquiries coming from undergraduate students were for assistance in using the Library databases to find journal articles for their assignments, and a further 16% were seeking assistance in referencing, so it was plausible to infer that the undergraduate persona would have similar needs. Similarly, 28% of postgraduate student enquiries centred on assistance with databases, followed by 10% each on research strategy and bibliographic management software, reflecting their deeper level research needs. The project team analysed the data to identify the accuracy of persona characteristics including the representative percentage of students in particular age and faculty groups, time spent using Library resources, and common needs identified in online or face-to-face reference questions. Where

the data indicated that the persona was inaccurate or representative of a small minority, the persona was modified to fit with the available evidence.

After the personas were finalised, the project team used them to dig deeper into the empathise phase of the design thinking process, and identify needs and sources of frustrations. To focus our analysis, the project team used multiple design thinking methods; including brainstorming, creating "Point-of-view madlibs" (Stanford University Institute of Design 2015b), and persona journey mapping; to collect information about the personas and the way they interacted with the Library content, services and resources. As described by Goldsworthy, personas allow organisations to "test how users might operate within the library system/s to achieve their goals, and to conceptualise how features and/or deficiencies in the system/s impacted on their experience" (Goldsworthy et al. 2013).

How might we …? Exploring the possibilities

The project team wanted to avoid influencing the design process with subjective opinions and ideas based on legacy, so we began the Ideation phase with extreme blue-sky scenarios for each persona, asking the question: "If you could build a library from scratch for this person, what would it look like?" Recommendations ranged from in-house baristas to laptop-charging treadmills and on-call librarians who travelled to individual appointments. Amid the more fanciful ideas were some gems: 24/7 study zones, virtual reference interviews, flexible creative zones, and streamlining online content to clarify what UOW Library offers and how people can access it.

Following this, the personas were used to map user journeys as they tried to interact with Library content, and identify pain points that could be incorporated into the exercise to improve the end-user experience. Many of the issues identified in the earlier content strategy audit, including issues around *actionability* and *findability*, resurfaced during this process. In an attempt to serve a diverse population, the Library had created so many access points to services and resources that the personas proved to be confused as to where they would begin to get help, which echoes the human centred design mantra: "The user is not like me" (Murdoch & Hearne 2014, p. 11). This was compounded by the use of Library-centric language and service names that were not intuitive to users.

The pain points centred on space, web navigation, and the need for services after hours. After defining the problem, it is tempting to jump directly into solutions mode, but the project team used design thinking principles to keep an open mind in order to find the best solutions. The team returned to the pivotal design thinking question: "How might we?" to develop a bank of ideas to address the pain points, e.g. "How might we offer more detailed research help to students studying offshore?" From these ideas, the team selected a smaller subset from which to develop prototypes. The personas assisted the team in identifying which of the initiatives to bring into the prototyping phase by keeping the team focused on the primary needs of the persona, analysing the degree to which a potential solution addressed a significant need or pain point and improved the user experience for the majority of personas.

What's possible? Testing and refining

The prototypes included digital initiatives that would support our diverse campuses 24/7, such as reshaping some of our static online content, and introducing an online chat service using LibAnswers, with a longer research consultation available via Adobe Connect. Prototypes for physical services such as a 24/7 computer lab and enhanced creative zones in the Main Library building on the Wollongong campus were also developed.

In September 2015, the project team conducted focus groups with UOW students to ask them how they used the Library, their frustrations, and their thoughts on proposed service changes outlined in prototyped models. The responses highlighted the importance of true user feedback at all stages of the design process. Some suggestions were enthusiastically embraced, while others were less impactful. Some assumptions about user behaviour proved untrue, and other comments reinforced that the proposed changes positively addressed genuine user needs. Above all, the focus groups revealed the importance of seeking feedback early. "Fail early and often" is a mantra oft repeated by designers; to strengthen the design of a product, it is crucial to identify the weaknesses of an idea at the iteration stage. Seeking out this feedback before investing time, energy, and funding to implement change better assures effective alignment of Library services and resources with the needs of Library users.

The Stanford model of design thinking places testing as the last part of the cycle, with the implied condition that this cycle is iterative, and may be repeated several times before reaching a successful conclusion. The project team combined the use of personas and real users to gain the user perspective at different points in the cycle. The personas were used initially in the empathise, define, ideate, prototype, and test phases. The prototype phase focuses on choosing which ideas created in the ideate phase will be taken forward for further development. In this phase, the project team made several decisions based on practical considerations, including software capacity, potential integration with existing systems, and the physical spaces and staffing available.

Once the prototypes were developed, the project team conducted a series of focus groups with real users, providing fresh opportunity to empathise and test. The prototypes were then adjusted in an ideate phase before moving through the prototype phase again, using the feedback from the groups as well as insights about the personas as data. The test phase was completed using the personas, with the project team ensuring that the resulting prototypes continued to meet the needs expressed by the focus group users. As stated previously, design thinking is a non-linear process, and this cycling back and forth between the phases is common. Once the 2016 strategic plan is released, and the recommendations have received endorsement as a strategic action, there is potential for returning to the test phase with real users.

Connections and conversations: What did we learn?

Content strategy

Since the initial audit and implementation of the online form, *Developing Library content*, the Library now has a much clearer picture of its communication channels and the content within those channels. The audit phase is essential, and highlighted specific problem areas and content that existed without a clear purpose, some of which could be removed immediately. Audits also demonstrate the extent of existing content and reveal the complex connections across the user experience. Purpose, life cycle, workflow, roles and responsibilities, and ongoing review are critical aspects to consider, and these are all addressed in the online form. The form helps to continue the audit process and facilitate discussion about all aspects of content strategy, as new content and review of content is captured in early planning stages.

Libraries already bring together content from a diverse array of third-party channels (Murdoch & Hearne 2014, p. 12). Each platform, resource, or database brings its own visual style, terminology, tone and functionality. They are all parts of the library experience, which in turn is one part of the student, research, or teaching experience. An understanding of content strategy is critical if staff are to see the connections between their own content and the rest of the content delivered by the organisation.

Although UOW Library now has a Communications and Content Strategist, the role is only part-time and has broader responsibilities. A comprehensive style guide is in development for the 2016 Communications Toolkit, including specific examples of appropriate text and a focus on plain language. Simple, consistent language reduces confusion and improves user engagement on a personal level. "Content champions" will be recruited from each Library team to aid all staff in applying the style guide in their own teams. In some cases, discussions around content strategy have helped staff to make decisions to remove irrelevant or outdated content. Working with individual staff helps to build understanding of how a strategic approach to content will increase the effectiveness and impact of communications and assists the Communications and Content Strategist in empathising with staff needs.

Aligning content strategy to the Library's strategic priorities was relatively straightforward, and helped maintain momentum for an issue that was too often avoided due to a lack of clarity about how to approach it. During the content audit, internal communication, and how it translates into external content, became an important consideration. Post-audit, regular reporting templates are being reviewed, and teams, project groups and committees have been encouraged to place hyperlinks on the intranet pages to all third-party channels used for internal communication. This will improve the ongoing content audit and build understanding of staff needs regarding document storage, collaboration and sharing.

Personas

Personas help to transform thinking across the organisation. For the project team, the personas provided a shared understanding of user needs, beyond their interactions with the Library. This understanding has far-reaching application beyond the project, and the personas will be released to all staff to use in developing and

reviewing content, services and resources as part of the 2016 Communications Toolkit.

The proto-persona process provided a valuable starting point, not only in developing initial personas, but also in engaging staff with the personas (Gothelf 2012). The process gave the project team insight into the broader institutional goals to which the Library contributes. For example, during the persona design workshops, staff raised issues including student retention, student pressures outside study, and expectations of academics to publish and innovate in teaching. It is still necessary to validate and refine the proto-personas with data, but this is needed on an ongoing basis, irrespective of how the personas are initially derived. Useful data was already being collected for purposes outside the Design Principles project, and exploration of Library and institutional data sources will continue, in order to validate, evaluate, and refine the Library's personas.

Design thinking

Design thinking places user experience at the centre of decision-making and challenges deep-seated assumptions about library users. It allows for imagining a "blue sky" future, and for the pragmatic consideration of the realities of budgets and existing systems. Applying the design thinking methodology to a discrete project with specific deliverables was challenging in that the design question, "How might we provide 24/7 Library services across multiple campuses?" was already defined before the process began. This necessarily shaped the investigation of user needs, causing the design thinking process to cycle between the empathise and define stages in the early weeks of the project. Literature suggests that the design thinking process "… is nonlinear and that designers follow a forward (breaking down) and backward (validating) reasoning strategy" (Goldschmidt & Weil 1998 in Razzouk & Shute 2012, p. 8).

Design thinking can be challenging for non-designers and applying project management principles helps multidisciplinary teams progress through the cycles (Goldsworthy et al. 2015, p. 19). As the project team matched Seidel and Fixson's description of a "novice multidisciplinary team", having structure around the design thinking process kept the project team engaged and confident in achieving a tangible outcome (Seidel & Fixson 2013). Design thinking considers the needs of all people involved in determining what's possible in the prototyping and testing phases. While challenging legacy practices and systems, design thinking respects the staff as individuals in implementing designs. The magic of effective design lies somewhere between what the staff need and what users need, ensuring that the result benefits both the organisation and the user (Howard 2015).

Synergy between content strategy and design thinking: the path to user-centric content and services

Content strategy and design thinking place user experience at the heart of the decision-making process. Content strategy uses journey maps and personas to understand how people interact and engage with content produced by an organisation. The design thinking process begins by empathising with the users so that the design problem can be defined, and uses personas to maintain this empathy

when conceptualising solutions. This guides decision-making from a user-centric, rather than business process, viewpoint.

This is not to imply that either content strategy or design thinking discount the perspective of the business or organisation. In any attempt to use these strategies to improve user experience, it is fundamental to examine the behaviour and experience of staff. The UOW Library senior leadership team are evaluating the recommendations of the Design Principles project for implementation in the 2016 strategic plan. Preliminary discussions with the leadership team have indicated that a set of Library staff personas may be developed to inform strategic planning activities. In addition, there is continued support for the application of content strategy in delivering effective online content. In late 2015, the Library refreshed the staff intranet, using Microsoft SharePoint to create and manage the majority of internal documents. This opened up opportunities for staff to think about content in a new way and embed the principles of content strategy in the organisational workflow.

To address the need for intuitive and responsive content, continued evaluation of UOW Library online content and the structure of the website is pivotal. Objectivity is very important in this process, particularly in decisions about site structure and top-level links. The design thinking process can provide this objectivity by evaluating the site from a user rather than a staff perspective. With personas and a core content strategy in place, user needs are clarified, informing the ongoing development and review of content and the delivery of services. Design thinking finds the user's voice so the content can be crafted to answer the user's questions, not questions that are imagined.

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