

## **ALISON JONES**

### **Charting the progress of a custom-built library: Designing, building and implementing library and knowledge management applications in SharePoint**

Three years ago almost to the day, I opened my library catalogue which I had worked on for much of the previous afternoon.

I was in my third week of work as the inaugural library manager at Meyer Vandenberg, a medium size, Canberra based law firm, so I was keen to convince the firm – and myself – that I knew what I was doing.

For a firm that had not previously employed any type of library professional, there was already quite a library infrastructure. Along with a physical library, there was an Intranet, built on something called SharePoint. The library already had its own webpage on the Intranet, where people came to access the existing online electronic subscriptions and documents such as this library catalogue.

As can be seen, the catalogue was based in Excel, which I knew was not an ideal basis for a catalogue, to say the least. But I was thinking of tackling other issues first – perhaps some gentle shelf labelling in the library or some easy adjustments to the website, such as checking the currency of the external links.

This was about to change. I opened the catalogue to find a bit of a problem. All software has its particular weak points and it is dangerous to sort data in Excel. It is all too easy in a list like this to sort the title

column into alphabetical order, leaving behind in the old order all the other columns such as the author, the subject and so forth. Once such a mess is saved, it is time to recreate the lot.

A print out taken the day before was the one saving grace but I had plenty of time to reflect on my priorities while recreating the catalogue. During that time, finding the right IT basis for my library shifted dramatically up my list of priorities.

Today, I manage a library where the online tools for the library have been designed and implemented by me in my role as library manager. These tools include:

- A news and current awareness service;
- A library catalogue; and
- A knowledge management repository for the firm;

This has been possible through the Intranet at Meyer Vandenberg being within the SharePoint environment. SharePoint enables me to design, build and implement my own library tools. Perhaps more significantly, it enables me to collaborate with the rest of the staff to create a library service customised to their needs.

The objective of this paper is to explore the model I have used within Meyer Vandenberg for working with my clients to create together a custom built library which meets their needs.

The paper will also examine how SharePoint has been used to build a range of library tools, balancing both the advantages of SharePoint with some of the limitations encountered along the way.

There are three elements present within my work environment that I believe together are the key to being able to develop a fully customised library service, run by the librarian. The three elements are:

1. Firstly, access to SharePoint or a similar kind of software;
2. Next, a workplace environment that encourages innovation; and
3. Finally, the ability to truly collaborate with the library's clients to ensure the library is designed around meeting their real needs.

A customised library responsive to the needs of your clients becomes a reality when all three elements come together.

The first element required is SharePoint or similar software which will enable the librarian to control the library's Intranet space, giving the librarian the ability and permission to design proper library tools.

SharePoint is defined by Microsoft as “the business collaboration platform for the Enterprise and the Internet.”<sup>1</sup> But what does this practically mean?

For my purposes, SharePoint principally provides a platform on which a dynamic Intranet can be built, enabling the users of that Intranet to easily add content, including uploading documents to the Intranet. SharePoint builds Intranets based on templates. Each template performs a different function and can be used in combination with other templates.

I should emphasise that SharePoint is not the only software out there that purports to have this capability. However, if you think SharePoint would work for you, the software itself is not expensive. Indeed, the version that we use at Meyer Vandenberg, SharePoint Services 3.0, is free. No matter

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<sup>1</sup> Microsoft *SharePoint 2010 Overview Evaluation Guide*

which software is used, it is also essential to have the requisite server space and on-site IT staff are useful as well – and neither come cheaply. At Meyer Vandenberg, SharePoint was literally introduced overnight in 2006. By the next evening, the Intranet site had expanded markedly and our firm's Intranet site has grown organically ever since.

Before I began using SharePoint, I did not have access to formal training and also was unaware of the documentation available on SharePoint. In hindsight, this was probably an advantage, as the content management aspect of SharePoint strongly promoted in the literature might have led me to dismiss its uses in a library setting.<sup>2</sup>

The whole basis for our library on SharePoint is this library home page. This home page, directly accessed off the Meyer Vandenberg Intranet home page, is the central point for every library service, both internally created and externally purchased. The home page is the hub of my library service, much more so than the room containing our hard copy collection on bookshelves.

My first SharePoint project was a very simple, but effective, dabble. One of the first tools I discovered on the library website was a list that announced the arrival of new legal bulletins – this list template was easily adapted into a full news and current awareness service very soon after my commencement at Meyer Vandenberg.

This is the front page of the news and current awareness service as you see it on the Intranet site. It is a simple but very effective service. I commenced the service just monitoring the free CCH news updates. I

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<sup>2</sup> Microsoft *Microsoft SharePoint 2010*

now track updates from the three major legal publishers along with relevant ABC news online items, news from various federal and state government departments, legislation registers from various Australian jurisdictions and private news services, such as Business Spectator, amongst many others. I also regularly include library news, so this also acts as my library bulletin.

The title, source, date and a short précis of each story, with a link to full text, is uploaded onto this list via this simple form. Staff receive new items as e-mails, so they do not need to come to this list to see what is new.

The service is one of the best known library tools in the firm, with regular feedback from staff wanting follow up research work on a news item or suggesting sources of news that they would like monitored.

Developing the news service was an excellent introduction to using SharePoint. It convinced me that SharePoint was easy to use, difficult to break and could be used for all kinds of library tools.

I was also rapidly discovering that I am located in a workplace that encouraged innovation – an attribute all too rare amongst employers but vital to what I have achieved with SharePoint. The firm almost immediately gave me the IT permissions I required to be able to add content and to build new content on SharePoint. I was encouraged in my experimentation with the old bulletin service and the resulting news service could be almost immediately implemented once built. Staff adopted this news service relatively quickly. I would venture to say that what I have been able to achieve within my library service has as much to

do with a workplace which encourages innovative practice as it has with SharePoint or any abilities I may have in envisaging how to use SharePoint.

So when I was confronted in my third week by the need to find an appropriate IT basis for the library, I already had a feel for both SharePoint and the knowledge that my workplace would encourage the development of new and innovative tools within the library.

Admittedly, I considered a lot of alternatives before I even thought of using SharePoint for a catalogue, mainly because there was - and continues to be - nothing in the literature about using SharePoint as the basis for a library catalogue.

Alternatives I considered included:

- some of the simpler Library Management Systems, but even the simplest had many more modules than I needed, such as circulation modules and acquisition management modules; and
- Databases such as Access, a popular option for smaller libraries in 2007.<sup>3</sup> I liked the concept of being able to entirely control the fields of a catalogue built in Access. However, there were questions about whether we could use Access directly within our Intranet.

I concluded that what I required was a simple tool which I had the permission and capability to develop and which integrated with our Intranet.

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<sup>3</sup> For example, Richardson "Can't afford a big database application?", p.35

It was the IT manager who first suggested that SharePoint itself could be a good basis for my catalogue. She built the first version of the catalogue with a limited number of fields within a list template. Ever since then, it has been entirely up to me to adapt it according to the firm's needs.

The catalogue has been running on this platform since around February 2008. Behind this list is a detailed bibliographic record for each item, including a direct link to items retained electronically. When the catalogue commenced, it only contained hard copy items. It now also contains electronic services to which we subscribe from external providers and all documents within our knowledge management repository. We now use the *Enterprise Legal & business thesaurus*<sup>4</sup> to standardise subject headings and conform to an in-house standard to standardise the entries. And it works very well – except in one aspect, which is that there is only a very basic search mechanism available for this catalogue – and indeed for any of our tools.

There is the capability to search via the simple dialogue box up in the top right corner of this screen shot. A single word or series of words can be entered in here, as in this example, where the name “Flint” has been entered. This will then locate any record containing all the words entered in the search box, with results displayed in relevance order. But this is absolutely all it can do.

This experience of limited searching in SharePoint has been documented in articles on SharePoint. In early 2008, I was relieved to see my estimation of SharePoint's searching capability confirmed in no less a

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<sup>4</sup> Enterprise Information Management Pty Ltd., 2007

journal than *Legal Information Management*, when Chris Wallis identified SharePoint's enterprise search capabilities as "its biggest shortcoming."<sup>5</sup>

The journey to finding a search engine that works well for us has not yet been successful. We reached the point at one stage of trialling a flexible enterprise search engine identified by myself and the IT manager but the staff did not buy into the trial. In hindsight, they did not feel ownership of the proffered searching solution. I now believe the way to find the best solution to the probable need for a new search engine lies in collaborating with the staff throughout the process of finding a new search engine.

To this end, I am meeting with interested members of staff to get them to define what they require in a search engine. Through this process, I am discovering how the end users view the problem – whether they see the need for Boolean searching, for the ability to refine results better or to search in specific fields of a database. This process might also turn up the need for more training of staff and may give me the chance to inform them further on what a good search system might be able to achieve for them. Together, we are working through potential solutions to find the solution that best fits the needs of the end users.

The reason I have confidence that such an approach to finding a search solution for our firm is going to be more successful is that I have used a similar model in developing our knowledge management repository – and this has been much more successful than I ever envisaged.

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<sup>5</sup> Wallis, 'What's the Point? Next-Generation Legal Information Systems and Microsoft SharePoint: Contender or Pretender?' See also Solomon, 'SharePoint in Practice' p. 14 for a discussion on the need to build or adapt other tools to obtain satisfactory searching in SharePoint.

In a library survey of staff at Meyer Vandenberg in late 2008, incidentally run on a SharePoint survey template, the need for a knowledge management repository to store the firm's internally created documents was clearly identified.

I knew from the beginning that we could build this repository in SharePoint ourselves and therefore wanted to develop it according to the needs and expectations of staff. However, I needed a way to collaborate with staff throughout the development of the repository, and beyond, to ensure that the repository met their needs. They could also assist in considering how the repository might fit within the broader knowledge management landscape for the firm.

In the library survey, I had asked whether respondents were interested in being part of further discussions on the library service, and gained a group of interested staff from across the firm, including everyone from partners to administrative assistants. So I just needed to find an effective model of operation to enable this group to collaborate on the development of the repository.

A colleague, wiser in the ways of management than I, told me about reference groups. The reference group gathers together end users and experts around a particular problem or project. The expert collaborates with the group to understand the problem for end users and together the group finds a solution that fits the needs of end users.<sup>6</sup>

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<sup>6</sup> Lif *et. al.* "Buying usable – the user-centred procurement process" p.45

The model of a reference group is extensively used with the information technology sector and the health sector.<sup>7</sup> There is no literature I have located on such reference groups being used within the library and information sector. I suspect the reason this model has not been widely used in our sector is integrally linked to librarians not usually being in a position of being able to offer full customisation of the tools we make available to our clients. A more usual experience in our sector is to receive a tool – for example, a legal online information service – out of the box and to train our end users to adapt their information behaviours to the requirements of these products.

At Meyer Vandenberg, our reference group is deliberately a very informal gathering. I send out some points for discussion, which the group sometimes sticks to. The meeting is more like an informal conversation but the next actions which need to be taken somehow always emerge clearly by the end of the meeting. It was this group, in collaboration with me, who built and continues to improve our repository, which is fondly known within the firm as Kermit.

Building Kermit took about eight months from the need for a repository being identified in the library survey of staff to it receiving its first document.

Initially the reference group set out three main specifications for Kermit:

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<sup>7</sup> See NSW Health *Knowledge management reference group* for the only other example I have found of a reference group being used in the context of knowledge management.

- Firstly, Kermit needed to be logically organised in a flexible manner which could be readily subdivided – it is now based on Moys<sup>8</sup>;
- It needed to be both browsable and searchable; and
- Each document needed to be uploaded only once but then linked from all relevant subject areas, so a document relating to both employment law and dispute resolution needed to be found in both subject areas by lawyers when browsing.

Members of the group also strongly encouraged me to actually build the repository myself and to keep it as simple as possible.

I was inspired to consider using a wiki template as the basis for Kermit by Mary Moar's paper given at the ALLA 2008 conference, outlining how her firm had used a wiki in a very organic manner to assist with knowledge management in that firm.<sup>9</sup>

This front page, which uses a wiki template, is “information central” for Kermit. It guides staff on how to use Kermit, how to upload a document, how to search for documents in Kermit and provides FAQs on Kermit.

To browse Kermit, staff refer to these virtual bookshelves which are listed on the front page of Kermit. Each bookshelf itself is in the wiki template. There is one page for each subject, containing very basic bibliographic information for each document, including a direct link to the document, and also further relevant subject subdivisions. Documents and indeed whole wiki pages can be linked from multiple relevant points within the wiki.

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<sup>8</sup> Moys, *Moys classification and thesaurus for legal materials*.

<sup>9</sup> Moar “Wikis for KM: lessons learned along the way”

Uploading documents to SharePoint requires a template called a document library, so this document library for uploading documents to Kermit is accessed from the front page of Kermit.

One considerable advantage of a document library, which no one had anticipated, is that a form can be created by the builder of the document library to seek further information on the document as it is uploaded. This form is entirely flexible and can be adapted to ask anything about the document being uploaded.

Because we wanted to enable searching of Kermit in a controlled language environment, we always intended to create a record for each Kermit document in our catalogue.

I suggested to the reference group that we seek just enough information through the uploading form to create a basic bibliographic record in the catalogue.

They challenged me to seek out more information on each document, because if we asked for it, the person uploading the document just might give us such information!

So we added many more fields to this form, including case law and legislation associated with the document and even a matter name and number, all of which the lawyer submitting the document can easily tell us.

The lawyers are required to complete this uploading form whenever one of their documents is uploaded to Kermit. And generally, as can be seen in this example, they give a lot of detail, presumably because they want to be able to relocate their documents easily if required and because by completing the form, they are able to tell the firm more about the fabulous document that they have created and are now contributing to Kermit.

The unforeseen benefit is that through this simple process of seeking information when the document is being uploaded to Kermit, lawyers are giving us the “know-how” around each document – how it was used and how it fits into the broader legal landscape. All this information is recorded in detail in a standardised manner within the catalogue and can be searched through the catalogue.

Kermit has been operating for a little over a year and I think is relatively successful. One measurement of how well a knowledge management repository is integrating with the work of an organisation is how many documents are being uploaded to the repository. Before Kermit commenced, I read that the development of a repository was the easy part. The greater challenge was changing the organisational culture so that contributing to the repository – and then using it - became part of everyday work in an organisation.<sup>10</sup>

Kermit commenced operation in June 2009. One year later, Kermit had 154 documents uploaded, so around three documents are being submitted each week. These contributions have been made by every team in the

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<sup>10</sup> For an example of the extreme lengths organisations will go to in order to get their staff to contribute to a knowledge management repository, see, Ravishankar “Rewarding end-users for participating in organizational KM : A case study” p.35

firm and from all levels of professional and paraprofessional staff. The staff generally display remarkable goodwill towards Kermit. While their commitment to knowledge management in the firm is a common Key Performance Indicator on everyone's performance review, staff still need to find the time and use their initiative to contribute to Kermit. I believe that involving the firm's staff in building Kermit has been the key to this goodwill amongst staff – they feel that Kermit is theirs, they want to be able to find information on Kermit and therefore they also want to contribute to Kermit to make it as good a tool as they envisaged.

I am now in the fortunate position of having a fairly comprehensive library service which I have developed in consultation with the end users. The service continually develops in response to the ever changing information needs of the staff.

Along with continuing to develop the library service along such lines, the next big project for our firm is considering how our entire Intranet environment might be optimised to enable easier location of information not only in the library service but across the firm's Intranet.

The Intranet has grown very organically, which is good because it is owned by the staff and is actually used in their everyday work.

However, until now, little thought has been given to the architecture or governance of the Intranet, with the result that the information on the Intranet tends to appear in silos.

Staff know their own areas of the Intranet well but perhaps we could make even better use of the Intranet if it were more of an integrated

whole, and if it worked more closely in conjunction with some of our other tools, such as our matter management system. The firm has recently implemented a forum which gathers together staff who are major providers of content on the Intranet, including myself, the IT manager and the practice manager, to consider these ideas.

Overall, SharePoint is a great tool for my library. I have the ability to shape library tools according to the changing needs of the firm. This has enabled me to work with my end users on a very different level.

When I work with tools provided by external vendors, I can only train the end users in how to adapt their behaviour to use these tools effectively. But with the tools developed in house, the end users and I can develop these together and then continue to improve these tools to continue to meet the changing needs of the staff at Meyer Vandenberg.

Finally, with SharePoint, the library and knowledge management service is a particularly dynamic service. Especially in the innovative work environment in which I am located, the library service can always create new tools and adapt existing tools in order to meet the constantly changing information environment facing our lawyers and staff.

**Endnotes:**

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