

Librarians alert: what is happening with personal information management (PIM), reference management and related issues and how we can we exploit it?

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Abstract

Purpose – This column will explore the potential of personal information management (PIM) and reference management. This contribution focuses on how librarians can stay alert on new developments regarding PIM and related issues such as plagiarism, reference techniques, information literacy and information behaviour. It also tries to stimulate interest in looking for hidden gems that can be of value in their careers as well as those of library users by considering the innovative and creative use of PIM e.g. by also monitoring the potential of mind maps and concept maps.

Design/methodology/approach – The column will be written against the background of research from information behaviour, PIM, information curation, alerts on software development and related issues, and also social bookmarking.

Findings – There are many ways in which librarians can stay abreast of what is happening with PIM, reference management and related issues. There are also many things to note such as improvement of the software, uses of PIM and reference management, teaching skills in PIM and reference management, ways of sharing information, linking to innovation and creativity, and linking to information literacy and information behaviour.

Originality/value – Although much has been published on developments in PIM and reference management, the author is not aware of other attempts to link alerting services on PIM and reference management to go beyond developments in software.

Keywords – Alerting services, Computer software, Information, Information management, Librarians

1. Introduction

Over many decades libraries have offered current awareness services (CAS) which is also known as alerting services or sometimes as selective dissemination of information (SDI). Often they however, seem to neglect their own extensive use of such services or to reflect on their own use (Fourie, 2006; Stenstrom and Tegler, 1988). Staying alert of developments regarding personal information management (PIM), reference management and related issues offers an excellent opportunity to not only note developments in a topic of growing interest to the services offered by libraries and information services (here after only referred to as libraries), but to also actively get involved in the use of PIM and the other issues at stake. These include: organising information so that it can be found again, metadata and tagging, choice of software, information literacy skills (e.g. identifying information needs, selecting appropriate sources to search, evaluating information, analysing and synthesising information), and putting information to use. This brings to the front: reference techniques, avoiding plagiarism (in all its forms), collaborating in publication, sharing information and exploiting information for new opportunities. Using alerting services on PIM and related issues can offer a golden opportunity for librarians to add value to their services, but also to raise awareness of the issues they face in their own information literacy and information behaviour. It can also raise awareness of the complexities as well as the true value of alerting services (Fourie, 2006). On the value of CAS, Wilson (1993) said

“Or one may be interested in a field of activity where nothing is happening – one stays current by continuing to look for something to happen, but nothing does ... Current does not mean better”.

This should not apply to PIM – especially when staying alert to make a difference and when making a definitive effort to put new information and knowledge to use:

“Alert’ means paying full attention to what is happening, being fully aware of something, being ready to deal with anything that may happen and watching out”... “If we move from ‘awareness’ to ‘alertness’ it will require more time, effort and energy to deal with information... the counter-question to ask is whether we can afford not to be alert...” (Fourie, 2006, p. 35).

According to Wilson (1993) the use of CAS can also contribute to a habit of gathering and using information.

In a previous column contribution Fourie (2011) sets the tone for the importance of PIM and the potential role of librarians. Strong support for PIM can also be found in the review chapters of Jones (2007) and Whitaker (2011). For purposes of this contribution PIM will be considered on three levels, namely a practical level, theoretical level and creativity and innovation level. The intention with these levels is to explore opportunities to put information to use and to make a difference. Perhaps this might even be linked to various issues of personal knowledge management (*Online Information Review*, 33(2), 2009 offers a dedicated issue on personal knowledge management under Theme editorship of Dr David Pauleen). The levels are not intended as exhaustive (there may be others); they are discussed in more detail in section 2.3

2. Issues to consider for staying alert

There are many issues librarians need to consider before embarking on staying alert on PIM. A quick title search on databases such as ISI Web of Science, Library and Information Science & Technology Abstracts (LISTA), Library and Information Science Abstracts (LISA), ACM Digital Library, Google Scholar and Delicious can bring many issues to the front that might be considered when embarking on PIM related alerting services. One however, needs to read between the lines to note issues such as target groups, theories and methodologies for studying the use of PIM, document types to include (e.g. emails, blog postings, articles, conference papers, books, reports, websites), organising and structuring information, and the researchers in the field. Only a few selected issues will be addressed here briefly: the reasons for using alerting services, the spectrum of information resources to monitor, the spectrum of issues to monitor, which services to use to keep record of information found, means of collaborating on the use of alerting services, means of sharing information and means of stimulating creativity.

2.1 Reasons for using alerting services

Librarians may have many different reasons for using alerting services on PIM. In collaborative information monitoring, all such reasons can help to get a holistic idea of how they can contribute and share the workload in improving services and support to library users. The following are some reasons:

- To set the trend in offering support for ICT developments affecting the use of PIM such as PIM applets for mobiles or tablets (e.g. iPad).
- To adapt information literacy training programs to integrate the use of PIM in a pedagogical manner and in line with developments in learning theories and collaborative learning practices.

- To note new software features that need to be explained and contextualised for users e.g. London, Gurdal and Gall (2010) on the automatic exporting of PubMed citations to EndNote.
- To develop a habit of aligning research findings e.g. on information behaviour or the use of PIM, with training and support services for users. Barreau, O'Neill and Stevens (2009) e.g. report on research and the practice of teaching about personal information management.

The reasons for using alerting services will determine the selection of information resources to use as well search strategies.

2.2 *Spectrum of information resources to monitor*

There is a very wide spectrum of information resources that can be monitored for PIM and related issues. Search profiles that are run against databases such as ISI Web of Science, Library and Information Science & Technology Abstracts (LISTA), Library and Information Science Abstracts (LISA), and ACM Digital Library can bring reports on research on PIM and related issues, as well as reports on software such as experiments with specific software, evaluation or new initiatives to the front (Beel, Gipp and Muller, 2009; Fitzgibbons and Meert, 2010; London, Gurdal and Gall, 2010).

Alerts on search engines such as Google, Yahoo, and Google Scholar can be used for search profiles on articles and websites, but also for videos of training and lecture sessions that can be useful to supplement a library's own training efforts. It can also track webinars on software related issues e.g. for RefWorks training. There are also many websites worth monitoring or which offer RSS feeds, newsletters, email alerts, and Twitter or Facebook access e.g. the sites of software providers such as EndNote (<http://www.endnote.com/>), Reference Manager (<http://www.refman.com/>), RefWorks (<http://www.refworks.com/>), Citavi (<http://www.citavi.com/>) and WizFolio (<http://wizfolio.com/>). Online book services and publishers can be monitored for new book titles such as Jones and Teevan (2007) on PIM (although dated there may be new books in the same line) and Pauleen and Gorman (2011) on personal knowledge management. In addition Wikipedia already offers useful information on the comparison of PIM and reference management software (http://en.wikipedia.org/wiki/Comparison_of_reference_management_software); thus a site to be monitored. There are also blogs such as PIM4U (<http://pim4u.blogspot.com/>), and others that post on an *ad hoc* bases on PIM such as Gobbledygook by Martin Fenner (<http://blogs.plos.org/mfenner/reference-manager-overview>) that can be monitored.

2.3 *Spectrum of issues to monitor*

Numerous topics and trends can be monitored. Taking the three-level approach these can be divided as follows:

Levels	Possible topics (<i>not intended as exhaustive</i>)
Practical level	Selection, comparison and use of software, dealing with technical difficulties and solutions, practicalities of training in PIM and curation, reference techniques, plagiarism and plagiarism detection, use of specific software and their features. Depending on the library user group, free PIM software might also be important e.g. Connotea (http://www.connotea.org/) which is aimed at researchers, clinicians and scientists. Examples of articles on issues mentioned here include London, Fitzgibbons and Meert (2010), Gurdal and Gall (2010), Mead and Berryman (2010) and Zimmerman (2010). On a practical level Giglia

	(2010) reports on the use of social bookmarking and reference manager tools to collect, manage and cite information sources. There also seems to be a move towards interest in PIM applets for mobiles and tablets.
Theoretical level	Research findings on needs analysis, information behaviour, information literacy (e.g. academic, research, and workplace information literacy), the use of PIM in different contexts and also training <i>per se</i> in terms of learning theories (e.g. constructivism, pedagogics, methods that appeal to the Net Generation, and andragogical teaching approaches for adult users). Examples of articles that have appeared on these issues include Lloyd (2010) on information literacy, Bergman, Beyth-Marom and Nachmias (2008) on the user-subjective approach to PIM and the impact for systems design and implementation, and Elswailer (2009), following Jones and Teevan (2007), on keeping found things found. Monographs such as Case (2007) and review chapters such as Courtright (2007) give good points of departure for research studies on information behaviour including information needs and information seeking. These can include monitoring the availability of training videos available on YouTube on aspects such as choosing reference management software or creating mind maps that can integrate with PDF readers and reference management software.
The creativity and innovation level	Technological means such as mind maps, concept maps, knowledge maps and human input such as brainstorming, lateral thinking and personality and learning styles. These are important for stimulating the creative use of ideas from information organised and kept by means of PIM as well as for information found on PIM as a topic and discipline of study. This can include the integration of mind maps with PDF readers and reference management software such as JabRef or Mendeley, or ideas on combining mind mapping and PIM (http://www.treepad.com/).

2.4 Which PIM to use to keep record of information

Following the words of Jones (2007) and Elswailer (2009) the main issue for librarians will be “keeping found things found”. Depending on the context of the library (e.g. academic, public or government based), they may afford to use popular PIM software such as Endnote or Reference Manager, or they may be forced, for lack of financial support, to exploit software available for free such as Connotea (<http://www.connotea.org/>).

2.5 Means of collaborating on the use of alerting services

The idea is not for individual librarians to monitor all possible facets of PIM and related issues, but to consider the value of collaborative information monitoring (i.e. using alerts). Not only collaborative work, but also collaborative information seeking and information behaviour feature strongly in the library and information science literature (Foster, 2006; Hertzum, 2008); yet hardly anything is available on advice for librarians on collaboratively monitoring information and on understanding their information behaviour in contexts of collaboration.

2.6 Means of sharing information

There are many possibilities for sharing information on PIM such as shared databases (e.g. EndNote), social bookmarking sites such as Delicious, blogs or wikis. Giglia (2010) reports

on combining social bookmarking and reference manager tools to collect, manage and cite information sources. There is certainly more possibilities on these that need to be exploited and monitored.

2.7 Means stimulating creativity

In the field of PIM there are already suggestions for stimulating creativity and benefiting from the effort required to monitor information in the field. Beel, Gipp and Muller (2009) report on SciPlore MindMapping as a tool for creating mind maps combined with pdf and Reference Management, and Coughlan and Johnson (2009) on designing personal information management systems for creative practitioners. Muldrow and Yoder (2009) report on how reference managers are taking research to the next level. They argue:

“Political scientists labor at the peripheries of their given fields to revolutionize current understandings about politics, yet the processes by which they store and share their knowledge remains firmly orthodox. No longer! Today the technology exists to change how we review past literature, how we save and organize our research, and how we share and collaborate on projects with our colleagues. Ready adoption of that technology will move us ever closer to resolving the existing duality between the revolutionary goals of our research, and its bourgeois processes. So, join our revolution comrades; you have nothing to lose but your (paper) chains!”

Apart from considering the use of mind maps in combination with PIM e.g. Treepad (<http://www.treepad.com/>), the use of PIM can also be combined with personal blogs or wiki's that can be run with free software licenses. How to put these to use, and what is available, are, however, issues to be considered in a follow-up column.

3 Conclusion

Librarians can play a very important role in promoting the use of PIM amongst library users and supporting them to fully exploit it for creative and innovative practices. There are many ongoing developments on various levels (technical, theoretical, creative and innovative) that need to be monitored. Various issues need to be considered when embarking on the use of alerting services regarding PIM and related issues. Librarians should not only use alerting services for these, but they should also use PIM to organise, record, share and put such information to use. Collaboration seems very important to cover the vast scope of topics and information resources. And following these... eventually Group Information Management (GIM) as also mentioned by Erickson (2006) and personal knowledge management (Pauleen and Gorman, 2011) might become the main focus.

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