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Commonwealth Government Agency Libraries Review

Literature Review

Prepared by

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1. Introduction

Ongoing financial, administrative, and technological changes present significant challenges and opportunities for government libraries in delivering services to their clients. Determining how government library and information services might best confront these challenges and take advantage of new opportunities is crucial for the future of the sector. The Australian Government Libraries Information Network (AGLIN) has commissioned a review of service delivery models in Commonwealth Government libraries. The goals of the Commonwealth Government Agency Libraries Review (CGALR) are to evaluate the libraries' current service delivery models and to develop an options paper outlining some future models which might better serve needs of clients across government.

As an initial step in the CGALR project, a literature review has been undertaken in order to consider the issues which impact directly on government library service provision today. It will allow government librarians to deepen their understanding of current service trends and provide an evidence-based framework to support the development of the options paper. Accordingly, AGLIN will be in a strong position to make informed decisions about reforming service provision in their organisations and designing future-focused Commonwealth Government library services. The literature review builds on and updates the review prepared for the Queensland Government Agency Libraries Review (QGALR) five years ago (Hallam, 2010).

Libraries are commonly classified into several different types: public, academic, school and special libraries. Vargha (as cited in Ralph & Sibthorpe, 2009) notes that special libraries are usually dedicated to specialised subjects and collections, while O'Connor (2007) states that the users are a correspondingly defined group with very particular requirements. The Special Libraries Association (SLA) defines special librarians as "information resource experts who collect, analyse, evaluate, package, and disseminate information to facilitate accurate decision-making in corporate, academic, and government settings" (SLA, 2010a). As government libraries represent a specific sub-group of special libraries, many issues relating to government libraries are common to special libraries.

In Australia, government libraries operate at federal, state and territory levels. Australian government library and research services underpin important work conducted at the highest levels of public office, including policy development and analysis, provision of tailored advice, and delivery of health and legal services. AGLIN's constituency specifically covers those government libraries which support the work of Commonwealth government agencies. A number of the factors identified in the QGALR continue to impact on library and information service delivery across government, including: changes to public service administrative arrangements; increasing budgetary pressures; increasing availability of electronic resources and reductions in physical collections; the need for improvements in information management expertise; equity of access to information resources; and the rapid development of e-government (Hallam, 2010).

This literature review considers a range of current perspectives on library and information services, focusing on the specific issues and challenges facing contemporary government libraries and librarians. The review incorporates four key areas:

- Directions in government administration
- National and international trends in government library services
- Developments in contemporary special libraries
- Skills and competencies required by special librarians.

Given the extensive coverage of these themes in the published literature, the review does not seek to be exhaustive, but distils the key trends presented in recent professional, government and academic publications, along with commentary made by library and information associations from Australia, New Zealand, the United Kingdom (UK) and the United States (US).

2. Directions in government administration

Issues impacting on government libraries should be viewed within the wider context of government service delivery. Modern governments face many challenges that affect service delivery. Key challenges for the Australian Public Service (APS) discussed throughout the literature include:

- The increasing complexity of problems, solutions and policy development
- The increasing public expectations of government
- Tight fiscal and time pressures
- Technological change
- A tightening labour market.

(Advisory Group on Reform of Australian Government Administration, 2010; Blackman, Buick, O'Donnell, O'Flynn, & West, 2013; Shergold, 2013; Dickinson & Sullivan, 2014).

To ensure the APS addresses these challenges effectively and remains a high performing public service, the Federal government appointed an Advisory Group in 2009 to develop a blueprint for the reform of Australian government administration. While the Group's 2010 report contained no explicit references to library services, a number of its recommendations have direct implications for government libraries and librarians:

- *A whole of government strategy for service delivery*
The blueprint (Advisory Group, 2010, p. 19) noted that there was no whole of government strategy, meaning "agencies risk developing services in isolation which can affect citizens' outcomes and government efficiency." It recommended that federal government services be delivered in closer partnership with state, territory and local governments (Advisory Group, 2010). It also recommended greater information sharing across all levels of government (Advisory Group, 2010). Through their networks, government libraries are well positioned to contribute towards such coordination.
- *Enhancing policy capability*
In a highly contested market for policy ideas, the research undertaken and advice provide by APS staff must be high quality, evidence based and impartial (Advisory Group, 2010). This not only highlights the important role of government libraries to contribute to the development of evidence based policy by managing and providing access to high quality, relevant information resources, but also the need for evidence based management of government libraries themselves. Librarians have the potential to leverage their networks to build stronger partnerships between the APS and the academic sector, another key recommendation to enhance policy capability (Advisory Group, 2010).
- *Addressing skill shortages in the APS*
The blueprint identified a number of skills shortages, including in information and communications technologies (ICT), high level policy and research work, and project management (Advisory Group, 2010). It argued that the pace of technological change demands improvements in knowledge and information management capabilities (Advisory

Group, 2010). Given the centrality of these skills to successful government library and research services, the sector has potential leadership roles to play.

- *Expanding and strengthening workforce learning and development*
Stronger mechanisms to encourage APS employees to develop their skills and career experiences were recommended (Advisory Group, 2010). There is scope for library and information professionals to add value to workforce capabilities across the APS, particularly in the areas of information and digital literacies, through the development and delivery of both formal and informal learning opportunities.

Governments are essentially information intensive organisations. Shergold reported that “good government is founded on good policy, and good policy depends on good advice... Good advice is factually accurate and backed by evidence” (Shergold, 2015, p.iii).

Ministers have access to a wider range of sources than ever before, including their party colleagues, political advisers, industry lobbyists, community advocates, policy think tanks and academia. They also hear from their constituents and individual citizens. This is a good thing: being able to draw on more information and multiple perspectives supports better decision-making. Public servants need to have the capacity to argue their case against alternative views.

(Shergold, 2015, p.15)

Good government therefore depends on access to high quality, authoritative information, which requires the expertise of library and information professionals to manage the resources and to support policy makers as they develop and use their skills to “transform mountains of information into pinnacles of knowledge” (Shergold, 2015, p.17). In government circles there is also increasing interest in the economic role of information, data and data-driven products and services (Bureau of Communications Research, 2016).

One key focus of the government reform agenda in many jurisdictions is the use of ICT to ensure governments meet their objectives effectively and efficiently. In the UK there has been particular interest in the role of ICT to provide better, more efficient services for less cost. Digital transformation of the government’s services has been vast and rapid. A 2010 review of the government’s web presence recommended a ‘digital by default’ approach to service provision across government and a single web point of entry for services to satisfy public expectations and cut costs (Fox, 2010). In response, the government established the Government Digital Service (GDS) within the Cabinet Office. The GDS is responsible for leading digital transformation of public services in the UK. All transactional services must meet the GDS’ Digital by Default Service Standard to build high quality services (Government Digital Service, 2015). The importance of digital services across government has been underscored by the private sector: “from funding to jobs, medicine, health and education, digitisation is completely transforming how the public service looks” (KPMG, 2014).

In 2015, the Australian Government established the Digital Transformation Office (DTO) with strategies and standards modelled on the GDS. Prime Minister Malcolm Turnbull has moved the DTO from the Communications portfolio to the Prime Minister and Cabinet portfolio (Burgess, 2015). This demonstrates the importance of the government’s digital service delivery program to the new political leadership. The Prime Minister’s office highlights the inconsistencies that currently prevail across government, noting that “users expect to access information and services from one government, not dozens of government agencies operating as silos” (Malcolm Turnbull, 2015).

At a recent forum hosted by the Australian Library and Information Association (ALIA) University and Research Librarians (ACT) group and AGLIN, *Change, challenges and opportunities: recasting your library skills* (AGLIN, 2015), the possibilities for collaboration between the DTO and government libraries were noted. The common commitment to the delivery of public services and the shared motivations to meet user needs were underscored. In his presentation, the DTO's Lead of Engagement, Brant Trim, noted that there was currently a lack of common or consistent standards in tagging content created by and about government departments. Librarians' own specialised skills in applying standards and organising content could assist the DTO in addressing this. While the forum did not propose any direct strategies to facilitate communication between government librarians and the DTO, it was recognised that there would certainly be opportunities for future planning and discussion.

There has been considerable scrutiny in the UK of the use of evidence in policy making (Rutter, 2012; Haddon, Devanny, Fosdick & Thompson, 2013; Rutter & Gold, 2015). Research revealed that there was often little incentive for ensuring that policy decisions were made on the best available evidence, as "there were few obvious political penalties" if good practice was not followed (Rutter & Gold, 2015, p.5). As a result, the Institute of Government developed a framework for assessing the use of evidence to guide decision making, arguing that governments are accountable to citizens and to the electorate, to Parliament and to other areas of government. Policy making would be improved if government representatives:

- Have properly analysed the issue they are trying to address
- Have conducted a wide-ranging search for evidence, both on what has gone before and of other interventions
- Have comprehensively considered the form of proposed interventions
- Are clear on the assumptions on which they assess the benefits and costs (and possible risks around them)
- Put in place plans for feedback, testing, evaluation.

(Rutter & Gold, 2015, p.16)

In a collaborative project, the Institute for Government will work with Sense about Science and the Alliance for Useful Evidence to test the new framework in order to determine its usability and its usefulness. This work will feed into an initial benchmarking activity to compare the work of individual government agencies (Rutter & Gold, p.17) and form part of nation-wide campaign to raise public interest in the imperative for evidence based policy and practice (Ask for Evidence, 2015). Increased emphasis is being placed on public participation in the policy making process, with many voices demanding access to information and data created by the government, which in turn makes the management of digital information resources a priority (Bureau of Communications Research, 2016; Fricker, 2016; National Archives of Australia, 2015; Shergold, 2015; Webb-Smart, 2016).

The challenges of electronic publishing in the context of government were examined in detail in a Linkage Project funded by the Australian Research Council. In the discussion paper, *Where is the evidence? Realising the value of grey literature for public policy and practice*, it was argued that "The internet has profoundly changed how we produce, use and collect research for public policy and practice, with grey literature playing an increasingly important role" (Lawrence, Houghton, Thomas & Weldon, 2014, p.2). The study articulated a range of concerns relating to grey literature: "searching, sifting, evaluating and accessing information and research are time-consuming and often frustrating tasks occupying a large portion of the day for those engaged in policy work" (Lawrence et al., 2014, p.3). This is in no small part due to the curation of policy resources being "dispersed and fragmented"

(Lawrence et al., p.3). Research findings revealed that the most important sources of information for policy workers were government department and agencies (94%), academic institutions (83%) and scholarly or commercial publishers (78%).

Two key concerns raised in the report were that, firstly, policy makers and practitioners struggle to find and evaluate relevant resources, and secondly, the lack of digital curation is compounded by outdated legislation. Government library and information professionals can contribute significantly to resolving these issues, in terms of developing information and digital literacy skills across the government workforce, ensuring effective information management policies and practices are in place so that grey literature is findable and accessible, and drawing on their professional networks to minimise duplication of curation activities. Shumaker emphasises the fact that high performing teams ensure that each team member works to his or her strengths. This means that, when library and information professionals are hardwired to manage the information dimensions of the working environment: “They’re best able to formulate the solutions that enable team members to use information effectively, and free up other members to do what they, in turn, do best” (Shumaker, 2015, p.1).

Government service delivery increasingly involves not simply collaboration across government, but also between government and non-government providers. Governments at all levels are outsourcing services to drive efficiencies and find savings. A 2013 review of the Victorian Government’s community and human services sectors examined how government, public service agencies, community service organisations and private providers coordinated service delivery in what the report calls “intergovernmental cross-sectoral collaboration” (Shergold, 2013, p. 5). Public administration, the review argued, should be re-conceptualised as a “strategic commissioner” rather than a provider of services, in order to reflect the growing importance of contracted providers to delivery (Shergold, 2013, p. 5). The review recommended embracing collaboration with the private and community sectors to enhance the diversity and efficiency of government service delivery. Once again, librarians are ideally placed to draw on their collaborative skills and multi-sector networks to potentially assume leadership roles in these efforts.

The concept of shared services in Australian government has been a topic of discussion in the academic and professional literature (Grant & Kortt, 2012; Victorian Auditor-General’s Office, 2014; Local Government Association of South Australia, 2015). The Australian Institute of Management (AIM) (2012) pays particular attention to the challenges associated with the implementation of shared services in the public sector and provides some valuable insights into the behavioural dimensions of the issue. The interface between state government and local government is clearly noted in the collaborative arrangements for the delivery of public library services. The barriers to and enablers of cooperative service models for public libraries were examined by the Centre for Local Government at the University of Technology Sydney (UTS) (2015). It was found that there have been a number of advantages relating to shared service arrangements in the public library context, for example lower overall costs, increased service provision (number of branches and opening hours), streamlined ICT infrastructure and the delivery of more innovative and popular programming. The Southern Sydney Regional Organisation of Councils (SSROC) (2015) also seeks to achieve significant benefits by introducing shared service arrangements, resulting in standardised processes and a reduction in the range of technology platforms utilised in public libraries.

Within the Commonwealth Government, the Shared Services Centre (SSC) provides corporate and IT services to 32 customers through a partnership between the Department of Education and Training

and the Department of Employment (Shared Services Centre, 2015). Services covered include payroll, financial processing, application hosting, integrated desktop technology solutions, digital communications support, and property and facilities. Given the growing use of technology in library services across all library sectors, it is critical that government librarians monitor developments in this approach to service management.

The changing roles of public servants were the focus of a 2014 report prepared by the Melbourne School of Government. This report, *Imagining the 21st Century Public Service Workforce*, noted increasing public expectations that governments would employ new technologies in service delivery, yet efforts were seen to be largely confined to the periphery (Dickinson & Sullivan, 2014). There is a new focus on information management skills within the government sector (KPMG, 2014; LexisNexis, 2014; Easton, 2015; Fricker, 2016; The Mandarin, 2016).

Government librarians might ask how they can contribute to these efforts, and whether they are able to lead by example in their delivery of programs and services. Librarians might also consider how well equipped they might be to take on or directly support the new roles which the Dickinson and Sullivan (2014) argued will characterise the future public service. As more voices enter public debates, public servants' roles might be viewed as moving away from being 'advisors' to becoming 'experts' (Dickinson & Sullivan, 2014). Such a shift places greater emphasis on high quality analytical skills, professional judgment and experience, and the ability to synthesise evidence (Dickinson & Sullivan, 2014; LexisNexis, 2014) and increasingly, it is government librarians who have the potential to demonstrate these skills.

Another key role with potential for librarians is the reticulist, who draws on connections to build up new networks of expertise, rather than working within silos (Dickinson & Sullivan, 2014). The report presents a skills framework for the future public service which is valuable in distinguishing between technical, human and conceptual skills. The latter category – encompassing skills like diagnosing complex problems, designing complex systems and being flexible (Dickinson & Sullivan, 2014) – might prompt librarians to reflect on the extent to which they currently devote resources to these more systematic, future-focused activities amid more day-to-day concerns.

Government libraries are nested within this complex context of reform, change and innovation. As the peak body for the library sector, ALIA has for many years supported the need for open, equitable and enduring access to government information through policy, guidelines and submissions to relevant government committees (ALIA, 2004; ALIA, 2009a; ALIA, 2009b; ALIA, 2010; ALIA, 2012; ALIA 2013). Specifically, ALIA has advocated for the critical role of government libraries: “government library and information professionals connect politicians and government employees to the essential information they need to make decisions based on facts, not fiction” (ALIA, 2014a), underscoring the dangers of failing to comprehend the importance of high quality information to effective, evidence based decision making, at all levels of government.

ALIA has expressed concern about the potential for Australian federal department libraries to be closed or outsourced as a result of cuts and reviews of services (ALIA, 2014b). The association is sensitive to the potentially negative implications of rapid technological change and has underscored the importance of ensuring that core principles are in place to ensure the effective creation, use and dissemination of government information (ALIA, 2009c). ALIA has specifically highlighted the need for greater collaboration and centralisation of services in the special library sector to demonstrate value and to pool resources (ALIA, 2014c).

3. Trends in government libraries

A selection of topics relating to special libraries is discussed in the book *Special libraries: A survival guide* (Matarazzo & Pearlstein, 2013). The fate of special libraries is encapsulated in the foreword, where James (2013) discusses the ways in which the librarians' knowledge and skills, particularly in corporate libraries, may be realigned as the parent organisation undergoes its own journey of mergers and acquisition. This requires the need "to embrace the flexibility and readiness to adapt to new economic realities and conditions in order to survive" (James, 2013, p.x). Given the highly specialised nature of the sector itself, it is valuable to review the challenges and opportunities facing government library services through both national and international lenses.

3.1 International perspectives

The International Federation of Library Associations and Institutions (IFLA) released a set of Guidelines for Libraries of Government Departments in 2008. The guidelines outline recommended practices for government libraries and were designed to be easily adapted to specific organisations across the world. IFLA defines government libraries as "any libraries that are established and fully supported by government to serve government. (While their primary audience is government, the actual audience served may be broader than government.)" (Bolt & Burger, 2008, p. 5).

In 2014 IFLA worked with partners in the library and development sectors to draft the *Lyon Declaration on Access to Information and Development*. The *Lyon Declaration* seeks to influence the United Nations' 2030 development agenda across the globe. While it outlines how access to information empowers governments and citizens, and supports sustainable development, it also acknowledges the crucial role of the library sector (*The Lyon Declaration*, 2014). IFLA's Government Information and Official Publications Section (GIOPS) published a response to the Declaration which highlights the role of government libraries and government librarians to assist achieve these objectives by ensuring that government information is widely accessible and by offering expert advice (GIOPS, 2014). The response makes two recommendations with significant implications for government libraries:

- That the contribution of libraries and librarians be recognised and documented in achieving the goals of the 2030 development agenda
- That countries develop and maintain strong networks of libraries with government information expertise to achieve sustainable development objectives.

(GIOPS, 2014)

The second recommendation is particularly valuable in suggesting a leadership role for government libraries and librarians within the profession. Within individual countries, their expertise can be harnessed in other types of libraries in order to assist the public in accessing and using government information, thereby contributing to the achievement of global sustainable development goals.

In the US, government librarians are represented by a division within the Special Libraries Association (SLA) – the Government Information Division – and a unit of the Library of Congress named the Federal Library and Information Network (FEDLINK). Both organisations provide forums to discuss the value and use of government information and government libraries. The activities of SLA's Government Information Division are relevant not only for government librarians but for all users of government information (SLA, 2010b), while FEDLINK focuses specifically on issues impacting federal libraries and librarians. FEDLINK's mission is to optimise federal libraries' use of resources through common services, resource sharing and ongoing professional development (FEDLINK, 2014). It provides significant cost savings to government, for example, by managing consortial acquisitions of

information products and services (Library of Congress, 2013). This initiative demonstrates the capacity of government library associations to contribute greater efficiency and cost effectiveness across government.

In 2007, the US Environmental Protection Agency (EPA) library service was effectively shut down, but subsequently re-opened. Matarazzo and Pearlstein (2013) presented a candid analysis of the EPA saga, which is in turn further updated by Balsamo (2013), who explained how the EPA network of libraries was able to reverse its fortunes. By developing a strategic roadmap for the future, the library staff have sought to communicate the true value of the service to all stakeholders. Despite this successful outcome for one agency, the vulnerable position of government libraries in the US was again revealed during the 2013 government shutdown. Any government services considered 'nonessential' were closed for over two weeks. This included many government libraries. The Census Bureau's library, which operates using contract staff, remained closed after the government and other bureau functions re-opened because the contract for library services expired during the shutdown (Huffine, 2014). Only after significant advocacy on the part of the employees was the contract renewed by management so that the library could re-open (Huffine, 2014).

The threat of severe budget cuts remains present for many US government libraries. In 2014 the American Library Association (ALA) passed a resolution in support of stable funding for Air Force libraries. Libraries across the Air Force network experienced six successive years of budget cuts, resulting in large reductions in staff, service and hours of operation (ALA, 2014). It was reported that six libraries were closed in the 2013-14 financial year, with a further three in the process of closing and eight no longer employing a professional librarian (ALA, 2014).

FEDLINK undertook an environmental scan to identify the major challenges faced by government libraries in order to chart the organisation's future directions (FEDLINK, 2012). Seven major trends were identified, which guided the development of the new business plan aimed at strengthening the collective activities of those working in the sector:

1. Demonstrate returns on investment
2. Establish mission critical programs
3. Integrate mobile devices, apps and dashboards into workflows
4. Expand roles as analyst, educator and consultant
5. Cultivate use of the Semantic Web, cloud computing and Web 3.0
6. Customize and personalize information to meet the needs of users
7. Collaborate via knowledge transfer and information sharing.

An infographic has been created by Federal library professionals to present a *Blueprint for success: A Federal library checklist* (Coady, Camerer & Clark, n.d), as a resource to encourage government librarians to have a broader understanding of their environment. The infographic refers to competences and standards, principal areas of professional practice, and career enhancement strategies such as professional development, mentoring and networking.

In the UK, the Chartered Institute of Library and Information Professionals (CILIP) represents the nation's library and information professionals across all library sectors. Included in CILIP's special interest groups are the Government Information Group (GIG) and the Health Libraries Group (HLG). The GIG represents those working in central government or who are interested in government information (CILIP, 2014a), while the HLG is a network of information professionals working in the health sector, including in the public health service and in government departments (CILIP, 2014b).

The HLG has been especially active in advocating for the role of government LIS professionals in government initiatives. In 2012 the UK government opened up consultation about a workforce strategy for the public health system. Major foci of the consultation activities were specific strategies to strengthen public health information and academic public health (Department of Health, Health Education England & Public Health England, 2013). HLG endorsed the emphasis on evidence based practice, and identified a greater role for knowledge and information professionals in supporting evidence based practice in public health (CILIP, 2012). The group suggested health libraries in the public service “present an opportunity to improve access to published evidence and the skills to appraise evidence” (CILIP, 2012, p. 6).

Canadian government libraries also acknowledged that there was much to learn from the health and biomedical sciences library sector. A study undertaken in Canada sought to redefine the federal libraries service model: Libraries and Archives Canada (LAC) conducted situated research to inform the Government of Canada Assistant Deputy Minters Task Force (ADM Task Force) on the Future of Federal Library Service. The embedded librarian was viewed as a particularly valuable way to develop a deeper understanding of an organisation’s requirements, to find gaps where new solution-oriented services could be introduced (Zeeman, Jones & Dysart, 2011). The ADM Task Force sought to establish clustered services (i.e. groups of libraries with overlapping subject interests) and centralised services (generic back-end services available to all) as options to leverage the professional expertise of government librarians.

It was hoped that, by 2015, Canadian public servants have seamless access to a “federal library service without borders through the interconnected network of government librarians, library services and all information resources” (McPherson, 2012, cited in Jordan & de Stricker, 2013, p.6). The proposed whole-of-government library service in Canada did not eventuate. The Federal Libraries Consortium (FLC) began as a grassroots organisation, but has been formally incorporated into the LAC. The primary goal of the FLC is to better manage the purchase and management of information resources across government agencies. Collaborative activities “maximise cost benefits, reduce administrative duplication, leverage procurement expertise, and provide access to otherwise unattainable resources” (FLC, 2015). Further developments have been noted, with the LAC working with the Canadian Federal Libraries Strategic Network (CFLSN) to consult with federal librarians about critical matters impacting on the sector, and to provide collaborative input into the Federal Science Library (FSL). This initiative involves eight science agencies, with the ultimate aim being “to ensure that GC employees - science, technology, and health researchers, program planners, and policy makers - have virtual access to both high-quality library and information resources and the services of skilled library professionals and subject experts provided by departments” (Marin-Cormeau & O’Connell, 2015). Common systems, common purchasing and seamless client service are key elements of the project.

Government libraries in New Zealand represent the largest cohort of special libraries in the country. Ralph and Sibthorpe’s 2009 report, *Emerging trends in New Zealand special libraries*, provided a comprehensive review of the sector. The review highlighted the extent of rationalisations and mergers of agencies, centralisation of resources in Wellington, and reductions in physical space allocation as the significant trends and issues affecting government libraries (Ralph & Sibthorpe, 2009). In 2013, Ralph and Sibthorpe noted that these trends were continuing to be significant challenges for the special library sector, reporting that reductions in funding and services had resulted in significant job losses and the closure of about 30 special libraries across all sectors since 2009. The authors also found that there had been extensive centralisation of collections, budgets and services, heavy increases in workloads, and greater use of contract workers in government libraries (Ralph & Sibthorpe, 2013).

It is interesting to note that the closure of government libraries stands at odds with trends in the corporate sector, where a study of small and medium-sized enterprises (SMEs) in the UK found that there were very real barriers hindering business people's access to quality information: a lack of awareness about where to find the required information, about comprehending the value of the information to their work, or about how to actually access, retrieve, use and interpret the information (Mark Ware Consulting, 2009). Cost barriers through subscription costs and paywalls added further complexity. In contrast with the situation in government, professional societies were finding that the opportunity to provide access to quality information through their library and information services was a very highly regarded value for their members.

A positive, but challenging, future is painted by LexisNexis in their white paper on the contemporary information management environment (2014). Drawing on the qualitative data gathered through an online survey of information professionals across Europe and a series of interviews conducted with senior information executives in France, Germany and the Netherlands, the authors discuss the implications of the exponential growth of information and data, particularly for the vast majority of people who assume that information skills are generic, rather than specialised. Information overload is accompanied by the pressure to provide instantaneous access to the required resources, as well as presenting the information in new visual formats, while continuing to maintain the highest standards of accuracy and quality. Nevertheless, information managers are encouraged to take advantage of the opportunities to utilising technology to reduce the time spent on routine, repetitive tasks and to build their communication and investigative skills to develop new roles as consultants and analysts with the ability to present information in different ways for different audiences and to add significant value to the strategic priorities of the organisation.

These ideas echo trends in the government library sector presented by FEDLINK (2012). Correlations with the academic research library have also been explored: the librarian's ability to connect people with ideas has also been explored in the recent report *A day in the life of a (serious) researcher: Envisioning the future of the research library* (Tancheva et al., 2016). In the corporate research sector, the value of these skills have been recognised by Arup University, with a librarian and knowledge specialist appointed to the leadership role in Australasia to "drive innovation and collaboration both internally and externally to support Arup clients and staff, and connects with the global Arup University leadership team" (Arup, 2016).

3.2 Australian perspectives

Here in Australia, ALIA has strengthened its representative efforts for government libraries and librarians since establishing its Special Libraries and Information Services Advisory Committee in 2009. The committee advises the ALIA Board to encourage the development of strategic programs for special librarians or those interested in special librarianship, including in the government sector (ALIA, n.d.). Ralph and Sibthorpe (2013, p. 137) argue that the association "is ahead in achieving some of the critical requirements for an advisory body to support and mentor special librarians, who are currently being challenged in every way."

In 2010 the advisory committee completed a survey of Australian special libraries which has provided valuable statistical information about the sector and its workforce, information that library associations have generally been slow to collect (Ralph & Sibthorpe, 2013). While the ALIA findings reflect special libraries as a whole, more than half of respondents worked in federal, state or local government libraries. The majority of respondents stated their staffing and client base had not changed significantly over the previous five years; however, those who answered the opposite cited

budget cuts, amalgamation of services and machinery of government changes as reasons for changes in service delivery (ALIA Special Libraries and Information Services Advisory Committee, 2010). The survey also highlighted a lack of attention to mechanisms for collecting feedback about and demonstrating the library service's value to the organisation. Gathering informal feedback at the time of service delivery far outranked service reviews, with questionnaires and surveys being the most common feedback mechanism. It was found that two-thirds of special libraries were unable to demonstrate the impact of their services and programs on the parent organisation (ALIA Special Libraries and Information Services Advisory Committee, 2010).

The professional group, ALIA Health Libraries Australia (HLA) has worked to ensure high level professional recognition with a major study into future workforce requirements for librarians working in the health sector (Hallam et al., 2011). ALIA, HLA and Health Libraries Inc. commissioned an independent study into the return on investment, expressed as community returns, provided by health libraries (SGS Economics, 2013). It was found that there was a \$9 return for every \$1 spent on library and information services across the health sector. Further research is currently being undertaken by ALIA HLA through a census of health libraries, to create an accurate picture of government, academic and commercial health libraries in Australia. The report on the census will be available in early 2016. The preliminary findings of a national survey of law librarians have also recently been presented (Brown, 2015), with a full report to be released in the near future.

ALIA works closely with AGLIN to support government libraries throughout Australia. AGLIN specifically represents Australian Federal Government library and information professionals, facilitating information provision to clients within the APS. The group has recognised that there is no cohesive model for government library services, nor are there any guidelines for best practice across the sector. AGLIN's *Statement of strategic intent 2009-2013* (AGLIN, 2009) underscores the challenges facing government libraries in the current economic environment, particularly the low level of understanding of the costs and value of quality information and services: "new resource management frameworks have resulted in greater accountability, greater scrutiny of resources and decision making at higher levels, with a concomitant decrease in flexibility for libraries" (2009, p. 4).

AGLIN was well positioned to publicise an independent survey commissioned by ALIA in 2013 to assess the return on investment of special library and information services in Australia. The research findings indicated that special libraries return \$5.43 for every \$1 invested (ALIA, 2014d). Moreover, this may be considered a conservative estimate, as the findings take into account time saved by clients – for example, political advisers – searching for information, but not the enhanced quality of the information supplied by special librarians (ALIA, 2014d). With effective advocacy, research such as this could contribute to building stakeholders' understanding of the value of government libraries across government and the wider community.

AGLIN (2009, p. 4) has also noted "a move towards shared services" and "a greater requirement for coordinated procurement across government" following the 2009 reform of federal administration process. The Victorian Government introduced a new model for government library services in 2009 (Shine, 2010; Staggs, 2010). The new Victorian Government Library Service (VGLS) has been described as an "extraordinary transformation" (Atkinson & Lewin, 2012). The process of building "one high-powered streamlined information machine" from "fifteen independent library services, 40 in-house catalogues and platforms, 14 sites managed by over 50 staff serving a total workforce population" (Atkinson & Lewin, 2012, p.1). The complexity of government information services is discussed, including the diversity of subject interest, yet with some overlap across the agencies, resulting in

artificial barriers to information access, and the diversity in research needs depending on the nature of work in different areas of government. The benefits of the whole of government approach to information services are clearly articulated: to the government itself, to those working to deliver public services, and to the library staff themselves (Shine, 2010; Atkinson & Lewin, 2012). Valuable insights are provided about the “framework for improved service delivery within a collaborative, productive and professionally satisfying environment for staff” (Atkinson & Lewin, 2012, p.18).

Within the Queensland Government context, opportunities for collaboration and cooperation between government libraries have been examined extensively in Hallam’s (2010) *Queensland Government Agency Libraries Review* (QGALR). Noting that the “patchwork of libraries” (Hallam, 2010, p. 3) across government presented barriers to research services and facilitated wasteful duplication, the review recommended establishing a network of research centres with a central hub to coordinate common goals, systems and processes. Specific projects were recommended to enhance service quality, efficiency and cost-effectiveness, including a single portal for all government information services, coordinated purchasing arrangements, and access by government officers to all libraries regardless of their agency affiliation (Hallam, 2010).

While the options presented in the final report (Hallam, 2010) offered the basis for discussion about the future directions for government library services in Queensland, political winds blew in a completely different direction. In March 2012, Campbell Newman swept into power as the Premier of Queensland, changing the political landscape completely. It was not an easy time for the public service, with an immense program of ‘rationalisation’ taking place. Government agency libraries were not exempt from the pain. One major change in service delivery took place in 2013, with the library of the Department of Premier and Cabinet (DPC) “packed up and moved across the river to settle in the State Library of Queensland in its new incarnation as GRAIL (Government Research and Information Library)” (Vilkins, 2014). The focus of the service concentrates on online/desktop delivery of tailored information, with users benefitting from access to the expansive resources of the State Library of Queensland, which is a ‘legal deposit’ library. By August 2014, seven government agencies had moved across to become part of the GRAIL community (Vilkins, 2014).

The QGALR discussion is particularly useful in suggesting how such initiatives might better equip government libraries and librarians to navigate machinery of government changes such as those affecting Queensland Government libraries in 2009 and 2012. Rationalising management, pooling resources and centralising services can mitigate the need to split collections and catalogues, renegotiate licences, relocate the service and dislocate from clients (Ralph & Sibthorpe, 2013; Hallam, 2010). At the same time, the review recognises limits on the effectiveness of centralised arrangements in the government library sector, as the embedded nature of libraries means that the staff develop expert understandings of their agency’s information needs and establish strong relationships with clients (Hallam, 2010). A key challenge is the need to determine how a network of government libraries is able to balance centralisation with embeddedness in order to provide services that are more efficient, effective, and equitable.

4. Determining the value of government library and information services

The literature reports the difficulty of obtaining current statistics of the number of special libraries in Australia. O’Connor (2007) and Ralph and Sibthorpe (2009) referred to the number reported in 1999 and concluded there were around 1125 special libraries in Australia; however, they argued that this

number was likely to be reduced due to downsizing and restructuring over the prior decade. A search on Australian Libraries Gateway¹ indicates there are currently around 1650 special libraries and 570 government libraries. However, it is difficult to verify this data's accuracy, as some entries in the database are branches of a central library or unstaffed collections. While statistical information focuses, of course, on the quantitative perspectives, attention today is often on qualitative perspectives, in order to determine the value of library services.

Traditionally, special libraries have evaluated their performance by measuring levels of client service – for example through surveys and focus groups – and capturing data about library collections and services such as size and usage. The data can be used to justify the present library service and support decisions about resourcing such as funding, space, staffing, collections and technology requirements. However, it is important to recognise that examining whether special libraries are efficiently and effectively delivering services is not the same as determining the value clients gain from using those services (Botha, Erasmus & Deventer, 2009). As Botha, Erasmus & Deventer (2009, p. 108) state: “the mere fact that a service is being used does not mean that the service is a valuable one, or that it makes a difference to the user.” Library size, usage and user satisfaction data can help identify strengths and weaknesses in library services and facilitate comparisons between libraries (Kelly, Hamasu & Jones, 2012), but they are unlikely to be clearly aligned with measures of success in the wider organisation (Oakleaf, 2010). Their usefulness in demonstrating impact to the institution as a whole is likely to be limited. It is therefore important for special libraries to demonstrate their worth and capture their intangible value.

Matthews (2013) discusses Taylor's model of value-added processes in information systems (Taylor, 1986), which seeks to conceptualise how the information use environment adds value for the user. Taylor identified six criteria where there may be perceived benefits to the user:

- Ease of use: reducing the difficulties associated with information resources or services
- Noise reduction: providing the optimum amount of information resources or services
- Quality: ensuring the accuracy and reliability of the resources or services
- Adaptability: responding to users' needs and requests
- Time savings: saving the users' time
- Cost savings: saving money for the users.

(Matthews, 2013, pp.165-167)

However, one major challenge for special libraries and information services in measuring value is that value as a concept remains highly contested in the literature. In particular, many studies use the terms 'value' and 'impact' interchangeably (Calvert & Goulding, 2015), without clarifying definitions. This can prompt confusion, given these terms can already appear ambiguous and subjective, especially for library users. Streatfield and Markless (2012) regard 'impact' as the effect of a program or service on individuals or groups, so research studies may focus either on social impact, or on economic value. Research measuring value in the special library sector can be broadly divided into economic and impact studies (Oakleaf, 2010). Economic studies are interested in return on investment (ROI), which measures the library's perceived benefits divided by its perceived costs. ROI metrics include time, money and labour savings, productivity improvements, quality enhancements, quicker responses, and lower risks of incorrect information (Oakleaf, 2010). For example, an independent survey commissioned by ALIA in 2013 found special library and information services in Australia return \$5.43 for every \$1 invested (ALIA, 2014c). Moreover, this may be considered a conservative estimate, as the

¹ www.nla.gov.au/libraries

findings take into account time saved by clients – for example, political advisers – searching for information, but not the enhanced quality of the information supplied by special librarians (ALIA, 2014c). It is important to recognise, however, that financial values do not always align with the overriding values of the organisation. Oakleaf (2010) suggests this is true of higher education, but it is also the case in the government sector, where it is not always easy or appropriate to ascribe monetary value to an agency's use of information.

Measuring the impact of information on users of special libraries might be more suitable. Impact studies typically survey special library users to examine impacts of services on their practices (Oakleaf, 2010). Botha, Erasmus and Deventer (2009) apply this approach to determine the most important indicators of impact in a South African research library on its clients. The authors' (2009, p. 109) definition of impact is "the effect the product or service has on the efficiency of the researcher" and "the contribution the product or service makes to the effectiveness of the researcher." This definition ensures the research is targeted specifically at impact on the organisation's bottom line. Importantly, the authors (2009) contextualise their approach with a stakeholder framework setting out the service's mission of enabling researchers to produce quality research which gains them recognition and additional funding, which in turn allows the organisation to contribute to the wider research needs of the country. This "spiral of impact" (Botha, Erasmus and Deventer, 2009, p. 111) demonstrates a multi-faceted, interconnected understanding of value and impact. Understanding the client leads to a service which positively impacts their research, which enhances the organisation's reputation and the wider research environment, which feeds back into the organisation, continuing the cycle (Botha, Erasmus and Deventer, 2009).

The authors' qualitative data suggest researchers see the service's impact on research success and time saved in search and delivery as the most important indicators of impact (Botha, Erasmus and Deventer, 2009). While the findings are limited by a small sample size and an associated lack of quantitative data, the authors developed an impact measurement template for libraries to capture quantitative data measuring users' perceptions of key impact indicators. They advocated using measurable indicators of impact that stand in for actual impact. Rather than claiming correlations between impacts and library services, they look for pieces of information indicating impacts or differences.

In a case study investigating the impact of an information unit on a property firm in the UK, Reynolds (2013) found considerable uncertainty surrounding the concept of impact. The employees of the firm showed little understanding of how to define impact or how it applied to organisational goals (Reynolds, 2013). They also expressed concern that impact is difficult to quantify and is highly subjective (Reynolds, 2013). Reynolds concludes that conceptualising corporate information services in terms of their impact to employees, workgroups and fee-earning work "is not generally how the IU [Information Unit] is seen and that a different way of discussing this might be worth investigating in the future" (Reynolds, 2013, p. 66). While Reynolds' research applies to a specific organisational context, it suggests special librarians should ensure concepts of value and impact are clearly understood within their organisation. Otherwise, their attempts to demonstrate their worth are unlikely to be effective: "unless the customer receives value, then the service really has no value at all" (Matthews, 2013, p.167).

Each special library has unique characteristics and attributes, which makes the process of measuring impact and value exceptionally challenging. There are currently no systematic methods allowing for rigorous data collection and analysis in special libraries. Simon (2011) notes the difficulty of

introducing standards and best practices for measurement and assessment when the special library sector's defining characteristics are diversity and difference. Consequently, she argues, the sector lags behind other types of libraries in developing quality standards and measuring service value. On a more positive note, Simon (2011) highlights the potential for special librarians to find information about best practices and competitive intelligence to aid organisation-wide benchmarking programs. This points to an opportunity for special librarians to more visibly demonstrate value to decision makers across their organisation.

A 2013 report commissioned by the Financial Times and SLA highlights the need for special libraries and librarians to measure and demonstrate their value to the organisation. The report draws on survey and interview data from a large sample of information professionals and executives working in corporate, government and academic contexts. Considering the perceptions of those who manage the organisational strategies and finances in these contexts adds richness to the findings. For example, one of the information professionals' major concerns is that their users are bypassing their expertise to access information directly, potentially increasing exposure to organisational risk (Financial Times Corporate, 2013). At the same time, the executives report suffering from information overload and perceive a lack of high quality, efficiently delivered information within the organisation (Financial Times Corporate, 2013). Both groups of respondents identify a common objective – a greater role for information professionals in saving user time, filtering and retrieving high quality information and minimising organisational risk – yet fail to recognise it, let alone achieve it, as the value of information services and professionals is not being successfully communicated or understood.

Indeed, the report suggests information professionals currently overestimate the level of value they provide to the organisation. Whereas 55% of surveyed information professionals believe they add “a lot of value”, this view is shared by only 34% of executives (Financial Times Corporate, 2013). The performance gap is greatest in the government sector, where the percentages are 50% and 14% respectively (Financial Times Corporate, 2013). The most important attributes for information professionals identified by respondents – communication skills, identifying user needs, and providing decision-ready information – are also characterised by strong disparities in performance ratings between providers and users (Financial Times Corporate, 2013).

The literature also advocates positioning special libraries at the centre of their organisation's innovation agenda as crucial to demonstrating value. The Pharma Documentation Ring (P-D-R) (Renn, Archer, Burkhardt, Ginestet, Nielsen, Woodward, & the P-D-R Library Affairs & Copyright Group, 2012) has developed a blueprint for corporate information centres in the pharmaceutical industry to become “innovation partners.” The blueprint (Renn et al., 2012) recognises that information has vital competitive value for research-based companies in fostering innovation, facilitating access to knowledge, and integrating content into everyday workflows. This is undoubtedly also true of the services provided by government libraries to their clients and departments or agencies. Given the renewed focus on innovation policy at the national level since the elevation of Malcolm Turnbull to the Prime Ministership, the sector might consider whether it is doing enough to demonstrate this value in the wider organisation and community.

The blueprint (Renn et al., 2012) identifies four major functions of corporate information centres: information access; information research; information technology; and knowledge management. At least the first three of these functions have long been traditional occupations of librarianship, but this means they are arguably very localised. Dempsey has long argued that libraries operate at the institutional level, whereas the users operate at the “network level” (Dempsey, 2008, p.115).

Government library and information professionals need to consider the value they provide to make their users' lives more productive and meaningful.

The blueprint is helpful in that it uses business terminology to reveal how these core areas generate significant innovative value for organisations. Information access, for example, is about providing a basis for sound processes and decision-making, and information research ensures money spent on information access boosts innovation and thereby restrains spending in research and development (Renn et al., 2012). This is a sophisticated approach to demonstrating value, by aligning the library's goals with the organisation's mission and embedding the information centre's functions in the strategic imperatives of the agency. This ensures that the value of the library and information service is intrinsically linked to the achievement of organisational outcomes.

Renn et al. (2012) characterise librarians and information professionals as possessing the skills and experience to successfully undertake all of the elements under information access (information acquisition and vendor relations, information and library services, and marketing), the majority of those under information research (awareness and training, information consulting services, retrieval and analysis, news intelligence business, and text analytics), and IT and informatics. Special librarians should therefore see themselves as central to organisation-wide innovation initiatives, even potential leaders.

Town (2010) offered a more holistic approach to measuring value and impact in library services. Rather than separating measures of worth into economic and impact dimensions, Town (2010, p. 268) proposed "a broader assessment of the meaning of value; and recognition that value is dependent on values sets or systems." Town (2010, p. 269) believes libraries should strive for a "transcendent" level of value, looking beyond immediate concerns to recognise the full range of intangible benefits they bring to organisations. This means contributing not only to the organisation's goals and bottom line, but also to its value systems. As values are chosen by an organisation, value measures cannot be devised until these values are agreed upon and known (Town, 2010). Town's connection between organisational values and value is key. It reveals how libraries' human, structural and relational capital is highly valuable to organisations and society. It also differs from other literature in arguing libraries should measure their value based on organisational value statements rather than goals, as these specify how to act, not what to do (Town, 2010).

Like much of the literature, however, Town offers little direct guidance on specific ways to measure value. Calvert and Goulding (2015) agree with Oakleaf (2010) that multiple methods may be required to estimate the value of library and information services, While it has been stressed that impact and value studies are "time consuming, technical and resource intensive" (Calvert & Goulding, 2015, p.280), some practitioners have sensed that "there is an agenda that isn't going to go away", so they need to be prepared by having "killer facts at our fingertips, to be able to pull them out when talking to somebody" (Calvert & Goulding, 2015, p.281). Urquart (2015) moves beyond the idea of data and facts to the need for narratives "to tell a coherent story, or a set of stories, to our users (and the funders and policy makers) about how our services matter to them" (Urquart, 2015, p.99).

5. Skills and competencies of government librarians

A number of professional organisations have developed frameworks of core skills and competencies for information professionals. The most relevant frameworks for special librarians, particularly those in the government library sector, are the SLA's *Competencies for information professionals of the 21st century* (SLA, 2016) and the Federal Library and Information Center Committee's (FLICC) *Competencies*

for federal government librarians (2011). Together these frameworks set out the knowledge, skills and attributes considered vital for the profession. They consider both the generic and specialist skills required by information professionals in a special library context. The documents' key implications for government librarians and libraries include:

- *'Traditional' librarianship competencies remain vital*
The competency frameworks emphasise skills in managing information organisations, resources, services, and technology – cornerstones of librarianship. Government librarians should remain confident their core skills will continue to be valuable in tackling emerging opportunities and challenges.
- *Competencies should be conceptualised in business terms*
While the documents largely reinforce traditional sets of competencies, the enabling competencies highlighted by the SLA (2016) emphasise the business context for special librarians, e.g. networking, relationship-building, marketing, project management, business ethics. In an environment where greater efficiency and effectiveness are sought, government libraries and librarians need to ensure they are maximising and demonstrating their value to wider organisational objectives and operations.
- *Organisational knowledge is a gateway to collaboration*
The FLICC (2011) framework foregrounds agency and organisational knowledge as a specialised competency for government librarians. This includes being able to evaluate and explain the agency's role within the government and its relationships with other agencies (FLICC, 2011). Using this knowledge, the FLICC (2011) states that government librarians also need to assess and propose inter-agency and government-wide library initiatives. The need for more integrated and coordinated government services was stressed in the Commonwealth government's blueprint (Advisory Group, 2010). Australian federal government librarians are well placed to draw on their in-depth agency or departmental knowledge and their networks across government to develop and lead more extensive collaborative efforts.
- *Collaboration is an enabling competency*
While the FLICC framework focuses specifically on collaboration within government and frames collaboration as a specialised competency, the SLA framework identifies collaboration as an enabling competency for information professionals (SLA, 2016).

The ongoing validity of these different competency frameworks reflects how the government library sector understands and defines its professional standards; however, without advocacy for incorporating them into professional practice their value remains largely abstract and theoretical. Jaeger and Bertot (2011) discuss the apparent disconnect between LIS education courses and the competencies required by government information librarians; Matarazzo and Pearlstein (2013) also argue that the concerns expressed in competency documents for special librarians have not been widely taken up in LIS education. The challenge for government libraries and librarians is to translate these competencies into meaningful decision making processes and work to embed them in everyday practice.

A 2010 report for the Australian Learning and Teaching Council (ALTC) offers a more empirical basis for discussion of skill sets required by librarians in a Web 2.0 environment. The report draws on focus

group data from information professionals representing all library sectors across Australia – including special libraries – to examine perceptions of Library 2.0 skills. Eight themes emerge from the data: technology; learning and education; research or evidence based practice; communication; collaboration and team work; user focus; business savvy; and personal traits (Partridge, Lee & Munro, 2010). While most of these themes overlap with the competencies identified in the SLA and FLICC frameworks, several pose additional implications.

The research reveals productive tensions surrounding the levels of ICT skills desirable for Librarian 2.0. Participants agreed successful librarians do not need to be IT professionals, but also noted that boundaries between IT and LIS professionals are rapidly narrowing (Partridge, Lee & Munro, 2010). This suggests that, as the world of digital information continues to evolve, further clarification of information professionals' desired technological skills is required. It also highlights a recent trend examined by Schneider and Barron (2014) that is particularly pronounced in special libraries: the emergence of the hybrid librarian-IT expert. This hybrid professional has emerged as information organisations recognise that integrating information and technology functions has significant benefits (Schneider & Barron, 2014).

In the context of law firm libraries, Schneider and Barron (2014) argued that information services can enhance and expand their role by demonstrating how their knowledge of the organisation makes them ideally placed to add value to technology and data. Employing staff with the skills to identify how information services and IT support overlap “is essential to the survival of the firm” (Schneider & Barron, 2014, p. 48). These hybrid professionals possess skills such as facilitation and contract negotiation that span both fields and promote greater collaboration between them in the organisation (Schneider & Barron, 2014). Like law firms, government agencies traditionally separate their library and IT services. There are therefore considerable opportunities for government libraries to become more visible within their organisations by fostering skills that transcend these divides. This could become a feature of future planning and discussion between Australian government librarians and the DTO.

Partridge, Lee and Munro emphasised the “paradigm shift” (2010, p.11) that new technologies brought to library and information work. However, as government libraries often need to adapt to the seismic changes resulting from budgetary and machinery of government decisions, they should not be daunted by changes in their ICT world. As the Web 2.0 world has introduced a networked, connected way of working within and across enterprises (Dempsey, 2008; Frey, 2014), library and information professionals must re-conceptualise the roles that they play – and the skills they require – to engage with and support their users' information needs (Inayatullah, 2014; LexisNexis, 2014; Lord, 2014). The skills required for a successful information professional are becoming more complex and plentiful (Partridge, Lee & Munro, 2010). In government libraries, this is occurring concurrently with the increasing complexity of problems, solutions and policies across government (Culhane, 2013; Marin-Cormeau & O'Connell, 2015) (see also Section 2 of this literature review). Commitment to ongoing personal and professional development as well as the confidence to move out of their comfort zones will be unavoidable if government librarians are going to possess the necessary range of skills to navigate this changing environment.

In a boost for government librarians around Australia, ALIA recently introduced a Government Specialisation strand to its professional development (PD) scheme. The PD scheme supports ALIA members in achieving professional certification in government library and information services.

Modelled on ALIA's initial Health PD scheme, the program is built around developing nine core competencies:

- Understanding Government information environments and the policies, issues and trends impacting them
- Understanding your agency's vision and strategic direction and the principles and practices related to providing information services that meet your users' needs
- Understanding management of Government information resources
- Understanding how leadership, finance, communication and management theory and techniques are applied in the public sector
- Understanding and using ICT to manage information
- Understanding laws, regulations, standards and policies applicable to your agency
- Understanding Government research methods and being able to critically evaluate resources from many fields
- Developing an understanding of discipline specific and specialised subject matter required by your agency
- Maintaining currency of professional knowledge and practice.

(ALIA, 2015)

This new PD specialisation provides government librarians with the opportunity to promote the breadth and depth of their skillset to stakeholders. Technical skills and expertise across all areas of digital information management will continue to be important, but increasing weight will be put on new skills relating to the creative presentation of information, the focused analysis of data and information, and the articulation of business intelligence (LexisNexis, 2014). Such skill sets will support staff across the public service "transform mountains of information into pinnacles of knowledge" (Shergold, 2015, p.17).

This reinforces the business-inflected terminology of the SLA competencies (SLA, 2003) and can contribute to the development of a more informed, evidence based approach to the management of library and information services. By adopting a more future-focused position in their careers, government librarians can be well positioned to not only manage their rapidly changing environment, but also to drive productive change within their information service and their agency (Partridge, Lee & Munro, 2010).

6. Conclusion

This literature review has presented and critically analysed key issues and challenges facing today's government libraries and information professionals working in the sector. It found that governments are changing and evolving in response to technological developments, financial pressures, and demands for more collaborative and whole of government service delivery strategies. It also revealed how government libraries across the developed world are beginning to leverage their potential as leaders within government through more streamlined and cooperative approaches to service which are more effective, efficient and equitable, and that better utilise the skills and attributes of their staff.

Finally, the literature review examined how the 21st century information environment is prompting government librarians to re-conceptualise their traditional competencies and to develop new skills not only to remain central to their agency's operations, but also to extend their reach. In this environment of rapid change, there are enormous opportunities for government agencies to design

and create new and better service models. Shumaker (2015, p.1) believes that government libraries and librarians are ideally positioned to lead the way:

This is a far different level of service than the old model of the librarian at the reference desk. It's active, not passive; engaged, not apart; customized, not generic. It gets librarians out of the library and into the life of the organization... where they can apply their skills to the maximum benefit.

The research undertaken in the literature review has informed the development of two data collection tools: an extensive online questionnaire seeking factual details about the operations of the diverse Commonwealth Government agency library and information services, and the open qualitative questions to be explored by library staff in a series of focus groups. A short questionnaire will also be made available to senior executives and managers in order to canvass their views about their agency's information services. The detailed information gathered during the project will be analysed and synthesised, to be presented in a final report in early 2016.

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