Taking a positive approach to change management in LIM organisations:
The role of Appreciative Inquiry

A Thesis

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By

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Certificate of Authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person nor material which to a substantial extent has been accepted for the award of any other degree or diploma at Charles Sturt University or any other educational institution, except where due acknowledgment is made in the thesis. Any contribution made to the research by colleagues with whom I have worked at Charles Sturt University or elsewhere during my candidature is fullyacknowledged.

I agree that this thesis be accessible for the purpose of study and research in accordance with the normal conditions established by the Executive Director, Library Services or nominee, for the care, loan and reproduction of theses.

Tricia Kelly

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Dedication

Shaun Patrick Kelly
11 October 1965 – 18 January 2012
I know you would be so proud
My love always
Abstract

Library and information management (LIM) organisations are on an almost continual path of change influenced by developments in technology, service models, financial allocations and staffing structures. The way in which LIM organisations approach change varies as does the success rate of the change management procedures initiated. Appreciative Inquiry (AI) is an approach to change management that has been gaining in popularity with organisational development (OD) practitioners since its inception over three decades ago. AI seeks to identify what works with individuals, teams or whole organisations and then build on those elements. This is a digression from the common change management approach of looking for a problem that needs to be fixed. To date, there has been only minimal evidence of LIM organisations utilising AI as a positive change management technique. This research discusses the issue of change management in LIM organisations and explores the applicability of the AI technique for LIM organisations particularly those operating with virtual teams. This project for the Doctor of Information Management has two stages. The first stage was the application of the Discovery phase of the AI cycle applied as part of change management workshops involving the CSIRO Information Management & Technology (IM&T) Library and Records staff in February 2007. Building on this foundation work, the second stage was the application of the full AI 4-D model in the development of a Professional Development strategy for the CSIRO IM&T Library Services team as a means of enabling staff to be agile with regards to their professional skills in an ever-changing work environment. The outcomes of these applications of AI are presented here along with recommendations for further research and implications for LIM organisations utilizing AI as a positive change management technique.
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Chapter 1: Introduction and Statement of Research Intent

“You must be the change you want to see in the world”
Mahatma Gandhi (1869-1948)

1.1 Introduction

Pick up a popular magazine these days and you are bound to come across a pop quiz asking “How stressed are you?” in which the quiz invariably links the rate of change experienced in your life to rising stress levels. As the rate and extent of change increases, so too, apparently, can our stress levels. This is obviously a very broad-sweeping statement and cannot be applied to everyone or every change situation, but it is true that some library and information management (LIM) professionals see change as very stressful and anything but an adventure. Change is a constant for LIM professionals whether it is to do with changes in the technology used by library staff, changes in the technology used by library clients, changes with aspects of the physical library or changes with the evolving nature of the professional role itself. But what if change could inspire, excite, and enthral? Perhaps that could be expecting a bit too much. But it does prompt the question – is there is a way that LIM organisations can take a positive approach to change management?

Change management is not a new issue and there is a considerable amount of literature devoted to this theme. However, at first glance there appear to be more articles written about the changes libraries and librarians are facing rather than research on change management strategies implemented within LIM organisations. There are a few notable exceptions (such as the case studies presented by Leong, 2008; Horn, 2008; and Gross & Leslie, 2008) that provide clear outlines of the change management processes followed. Learning from others’ research and experience in implementing techniques for managing change enables practitioners to adopt approaches that will meet their requirements and maximise the effectiveness of addressing change within their organisation and the industry as a whole. One such technique – Appreciative Inquiry – is the subject of investigation within this research project as a potential positive change management tool for library managers. Appreciative Inquiry (AI) is a change
management technique based on finding the best within an organisation and building on the elements that make it the best. Defined more formally by Cooperrider, Whitney and Stavros (2003, p. xiii): “AI is a form of transformational inquiry that selectively seeks to locate, highlight, and illuminate the ‘life-giving’ forces of an organization’s existence.” At the time of writing this thesis, it was not apparent that many LIM organisations had utilised this technique that encourages a positive approach to change management. This research highlights use of this technique and assesses whether it has practical application in organisations such as CSIRO with a geographically distributed library team.

1.2 Research aims and objectives

The objective of this research was to respond to the call by Maureen Sullivan (2004) for LIM organisations to explore Appreciative Inquiry and specifically, to apply Sullivan’s (2004, p. 227) suggestion to concentrate on the strengths, values and ‘best’ of what already exists. The aim of this research was to determine the potential of Appreciative Inquiry as a positive change management tool for library managers, especially those working with virtual teams.

The research was designed to answer the following questions:

- How can Appreciative Inquiry be used as a positive change management technique for LIM organisations?
- How effective the Appreciative Inquiry approach to change management might be for organisations relying upon virtual teams?

A recurring theme in library and information management (LIM) research literature is the relationship between practitioners and research – either the undertaking of research by practitioners or the application of research results by practitioners (Wilson & Streatfield, 1981; Powell, Baker & Mika, 2002; Haddow & Klobas, 2004; Booth, 2006; Klobas & Clyde, 2010). Practitioners desire research that can be replicated readily within their workplace and for the results to bring about meaningful and positive change. Action research is one such approach, defined as being critically reflective research that results in changes in practice as well as knowledge (Oosthuizen, 2002, p. 161). The
information sciences’ attraction to action research is evident with this approach being the most prevalent type of research reported in the LIM literature (Hernon & Schwartz, 2004, p. 413). Achieving successful organisational change is also particularly appealing to practitioners. The strong link between action research and responding to change, with practical outcomes and knowledge generation as goals, increases its attraction to LIM practitioners. Action research is enduring and as such is particularly well suited to the continuous change pattern that information sciences face in the pursuit of “the ubiquitous 24/7/365 service model” (Hernon & Schwartz, 2004, p. 413). Indeed, action research has been referred to as “the one practical research method that is fundamentally based on organizational change” (Baskerville & Pries-Heje, 1999, p. 2).

The need to address the issue of change management within LIM organisations highlights the value an action research approach may have for the LIM profession in “unleashing our creative energy” (Sullivan, 2004, p. 218). Hernon and Schwartz (2004, p. 414) add to this call for the application of action research studies in managing change in LIM organisations particularly given the extent and speed of change being experienced. Following on from this last point, the concept of positive change management will be investigated with particular attention given to a specific technique called Appreciative Inquiry.

1.3 Significance of the study

Effective change management is crucial for the success of any organisation, including those delivering library services, and what could be more attractive than effective change that has a positive benefit to staff and the organisation. There are three prominent reasons why LIM organisations need to tap into the effective change management practices such as AI which have benefited other disciplines. Firstly, demographic studies of LIM organisations around the world indicate a growing proportion of older library staff heading into retirement that will leave a considerable gap in knowledge and experience in teams. Secondly, many libraries still have hierarchical structures that were developed on historic processes and are neither appropriate nor responsive enough for the new service paradigms emerging in today’s
information environment (Moyo, 2004a; Moyo, 2004b). This is particularly applicable to the virtual team environment in which many library staff currently function. Thirdly, change is necessary. The library is not static and unchanging (Simpson, 2004, p. 134). Change is occurring at every level – change in the work environment; change in the nature of the work undertaken; change in the role of libraries within their constituencies; change in the nature of the profession itself; and change in the individual (Dority, 2006, pp. 3-4).

Changes faced by libraries stem from an increased emphasis on managing content, creating context, anticipating client needs in the changing information environment, training in the use of new technologies including blogs and wikis as sources of information and collaboration with IT professionals (Drake, 2000, p. 53). The move from print to electronic journals is an example of a specific change experienced by libraries that has had a wide-ranging impact on all aspects of the LIM organisation including budget allocations, physical library space utilisation, the selection of appropriate platforms for providing the service (hosted or in-house, aggregator or publisher-direct, etc), the implementation of federated discovery tools to improve easy information retrieval, plus training for clients in the use of the online resources and their interoperability with related tools such as bibliographic management packages. Library staff are not just focused on the content of information resources, but also now on the technology such as iPads and smart phones used by clients to access this content.

The role of libraries and library staff has changed and will continue to change as the Internet and the increased numbers of computers available influence the information seeking behaviour of library clients. Brindley (2009, p. 5) refers to this as the emergence of the “Digital Native” impacting on future information service provision. As such, managing change effectively is vital for LIM organisations and their clients in order that they can take full advantage of the ever-evolving digital environment and the opportunities for expanded roles and partnerships within this environment (Warnken, 2004, p. 323).
Thus the significance of this research lies in three key elements:

1. Due to technological, economic and social developments, LIM organisations have to cope with meeting the demands of a rapidly changing service environment (Hernon & Schwartz, 2004, p. 413; Stephens & Russell, 2004, p. 246). Libraries need to find methodologies to help them successfully cope with such a changing environment. This research explores the usefulness of one such methodology – Appreciative Inquiry – in this environment of rapid and significant change.

2. This research looks explicitly at implementing positive change in a fractured work environment, where teams (which may be physical or virtual) distributed across the organisation need to cooperate closely and effectively to reach organisational goals. This research will help confirm, or not, the usefulness of the AI approach in this environment.

3. Specifically, the research will help inform the change management processes within a complex organisation, the CSIRO, where change in relation to services, budgets and structure is being implemented in a sometimes turbulent environment.

1.3.1 Preliminary research on the topic

The success of AI in other disciplines has been well documented but a review of the literature reveals that uptake of this positive change management tool by libraries has, to date, been limited. Initial research into Appreciative Inquiry has provided evidence of the effectiveness of this technique as a positive change management tool applied to address a broad range of change issues faced in organisations ranging from educational, health, IT, human resources and even sporting organisations. AI is claimed to be adaptable to different working environments and is flexible enough to encompass small groups through to very large organisations. Although many organisations that have applied AI would have virtual teams, preliminary research on AI has not revealed studies undertaken specifically focusing on the application of AI with virtual teams. At the time this research study began, AI had not been applied broadly in CSIRO. However, an organisation such as this with approximately 6500 staff located across Australia and
internationally would appear to be able to benefit from the flexibility that AI offers in choosing the change management topic to focus on as well the various techniques that can be used when implementing AI. Given the success of AI within other disciplines, investigating the potential of this change management tool for library and information management organisations, particularly those with virtual teams, is of value.

1.3.2 Why AI is important

AI is important to explore as it provides a positive alternative to the traditional change management tools and techniques applied within library and information management organisations over the past decade or so. AI shifts the mind-set of managing change from the standard deficit-thinking approach of problem solving (what behaviour to stop) to instead creating an environment supporting generative inquiry about what behaviour to grow in order to address change in a positive manner (Lewis, Passmore & Cantore, 2008, p. 26). Studying an organization operating at its best provides an opportunity to learn about what is required for that organization to continue to grow and change in positive ways (Whitney, Trosten-Bloom & Rader, 2010, p. 6). This is not to say that AI ignores problems. Problems are reframed into affirmative topics encouraging a shift in thinking about the desired outcomes of the change situation at hand. In contrast to the types of top-down, imposed change approaches that have been applied in libraries with mixed success, AI takes an inclusive approach to managing change. Change driven by technological, economic and social developments is something that libraries will continue to experience well into the future. Although the extent and duration may vary, every library team leader and team member will experience some element of change during their working life. Leaders that keep staff focused during times of change and who can take an inclusive approach to motivate and empower their teams through change are usually successful (McKee, 1998a). To this end, investigating the applicability of AI as a flexible, inclusive and positive change management tool for libraries is important.
1.3.3 Impact

As noted earlier, there is a need for the evaluation of change management approaches in order to identify the approach that may work best with LIM organisations, especially those reliant upon successful virtual teams. If AI proves to be effective then this approach will be a real asset to the profession. A readily-available tool that improves the change process and increases the likelihood of positive outcomes is of interest to team leaders and anyone involved in implementing change in the workplace. The desired impact of this research is to empower library staff to respond positively to the ever-changing environment in which library services operate. The outcomes from this research study will be shared with the library and information community and can be used to inform the change management processes adopted by individuals, teams, team leaders and library organisations as a whole.

1.3.4 Evaluation

“Ultimately, a program evaluation will only be as good as the measures, or criteria, that are used to assess actual effectiveness relative to the intended impacts” (Steinhaus & Witt, 2003, p. 49). In the context of this thesis, the evaluation process aims to gather a range of data to be judged or assessed against the criteria of effectiveness as noted below. Given the nature of this research program, summative evaluation will be undertaken in order to identify outcomes and impacts associated with implementing the AI approach.

For this particular research which focuses on evaluating the effectiveness or otherwise of applying a specific management technique, it is first necessary to consider how “effectiveness” is determined. For organisations generally, effectiveness may cover a wide range of factors from contented staff or high profit margins to a clear mission and objectives and good corporate citizenship. However, a more generic definition has been spelt out in the various International Standards regarding quality (the ISO9000 series), which proposes it “refers to the degree to which a planned effect is achieved” (ISO9000, 2011). And in a survey undertaken by Mitchell (2010) seeking to define organisational
effectiveness, a clear majority of respondents summarised it as “goal achievement”. These definitions, related to planned effects or goal achievement serve well to define what is being sought by undertaking evaluation of the AI implementation.

For the purpose of this thesis, the planned effect or goal is ensuring that the change management process using the AI approach undertaken in the CSIRO IM&T Library and Records environment is implemented in the way best calculated to ensure ready adoption by the staff. Thus effectiveness in this case encompasses staff satisfaction with the change process.

Evaluation of this effectiveness will be undertaken through the research process of data gathering, assessment and interpretation of the results in order to provide “useful feedback” which can be used to influence decision-making or policy formulation, in this case, in CSIRO IM&T (Trochim, 2006). As noted by the Victorian government, in assessing the effectiveness of human resource initiatives, “both quantitative and qualitative data are essential in assessing outcomes” (Victoria. Dept. of Innovation, Industry and Regional Development, n.d., p. 2). Thus the approach taken in evaluating the AI implementation will include quantitative data gathered through surveys of participants plus qualitative data acquired through interviews with a sample of participants.

Thus it is a critical component to any piece of research to ensure that the measures used to evaluate any intervention are clearly developed; what is being measured is clearly identified and how this compares to the intention of the intervention formally articulated.

**1.4 Specific areas of this investigation**

1.4.1 The organisation (CSIRO) and why this research is important to the organisation

Along with many colleagues in academic, public and special libraries, library staff within the Commonwealth Scientific and Industrial Research Organisation (CSIRO)
have experienced considerable change from the mid-1990s onwards due to developments in technology (particularly the evolution of the Internet and electronic publishing) and associated budget implications. At the time of this research project beginning in 2005, library services in CSIRO were employed by the various Divisions that made up CSIRO’s research business units, receiving funding from the Divisions’ operational budget. Working together in an informal federated model of service delivery, library services worked in partnership rather than competition with centralised purchasing of major subscriptions, cooperative purchasing of datasets and a shared Integrated Library Management System. Central support for these activities was provided by the Information Management group established within CSIRO Information Technology Services (ITS). Library staff and the Information Management group sought efficiencies where possible to meet changing demands of clients and to maximize information resources in support of CSIRO’s research. A proactive and collaborative approach was required to facilitate the adoption of electronic journals and other information services to be made available across a geographically dispersed research organisation with approximately 6500 staff located across Australia and overseas. However, increasing pressures from publishers’ pricing models plus significant variations in the way Divisions allocated their operational budgets for library services resulted in a push to explore more effective and efficient resourcing processes and service delivery methods. Similar funding and service level issues had been addressed in IT services resulting in the formation of an enterprise-level CSIRO IT business unit in 2004.

The One Information Services Review began in 2005 investigating alternative models for improving the effectiveness and efficiency of library services as well as records services in CSIRO. However, by the end of 2005, the One Information Services Review was overtaken by a broader Research Support Services (RSS) Review. RSS proposed a major restructure of support services within CSIRO to create an enterprise shared services model for functional groups such as library services, records services, contract administration, legal, property services, human resources and finance. The focus of RSS was on identifying efficiencies in resourcing and service delivery of research support services. The level of change associated with this restructure created a
significant environment of stress and uncertainty for library and other research support staff particularly when confronted with stories in the media indicating that there could be up to 400 research support jobs lost as a result of the restructure\textsuperscript{1}.

In June 2006, Library, Records and IT staff were integrated into an enterprise-level business unit called CSIRO Information Management & Technology (IM&T). At this stage it was predominantly budgets and line management that changed and staff had yet to go through changes in their day-to-day roles. Library and Records staff went through a recruitment process late in 2006 whereby all staff had to apply for positions within the new structure as the current roles were not continuing in the new model of service delivery. Staff were contacted in September/October of 2006 and advised of their future roles. Workshops were organised for February 2007 by which time Library and Records staff were aware of the positions they would hold in the new structure but were yet to transition into those roles. The workshops were the first opportunity for Library and Records staff to meet as newly formed teams and to learn about the service delivery model and the next stages of the change process. Transition planning was to occur with individual staff and their team managers later in April/May 2007. The second stage of the integration project occurred in Nov 2007 with the IT, Library and Records staff being integrated into one management structure. This however, underwent a subsequent restructure late in 2008 with Records moving to a separate business unit and IM&T then consisting of the IT Services and Library Services functional teams.

This timeline of events depicts a work environment of continuous significant and disruptive change over several years. The change process initially started in 2005 was an inclusive approach seeking contributions from Library and Records staff of ideas on future structure and services. This process was superseded by the RSS review which was a top-down imposed change process aiming to implement an enterprise services model and to generate efficiencies in resourcing and delivery of research support services. Anecdotal feedback from library staff prior to the workshops in February 2007 indicated an element of “change fatigue” and low levels of morale. As the Executive Manager of CSIRO IM&T Library Services at the time of this change, the author of this

\textsuperscript{1} ‘Jobs set to go as flagships falter’, Canberra Times 28/10/2005
research had been investigating ways to build on the strong foundation of the library teams’ knowledge and skills in order to make some of the change process a more positive experience and strengthen the morale of the library team as they moved into new roles, new teams and a new service delivery model. A review of the literature revealed information about Appreciative Inquiry (AI) being utilized in disciplines other than information management as a positive approach to change. Thus the initial aim was to explore AI further and where possible, to implement a process that would help build staff confidence in the future direction of library services within CSIRO as well as assist individuals to make the transition within their own roles and into the newly formed teams.

1.4.2 Specific approach to be adopted in CSIRO

Appreciative Inquiry is promoted as a flexible, inclusive change management tool. Practitioners can take a number of approaches when implementing AI within their organisation or team focusing on a wide variety of affirmative topics applicable to the change situation being experienced. AI is also flexible in the delivery techniques utilized in the AI approach. For example, the AI process can involve small groups through to large numbers of participants and can be undertaken in person or using online collaborative tools. More details about AI will be discussed in the next chapter but the specific approach to be adopted in this research study had to be inclusive of the virtual team structure of library services within CSIRO. This would require a combination of in-person and virtual collaboration in the implementation of the AI process.

As mentioned previously, this research project engaged participants from the Library and Records teams of the Commonwealth Scientific and Industrial Research Organisation (CSIRO) Information Management & Technology (IM&T) business unit distributed across Australia. Library services in CSIRO underwent a major restructure in 2005 associated with the implementation of the new service delivery model. Roles were evolving and new teams were being formed. Taking an AI approach to managing the change within the Library and Records teams was an opportunity to shift from a traditional problem-solving approach to change. The aim of this research within CSIRO
was to apply AI as a means to build on the experiences of Library and Records staff in identifying what elements were considered critical to create exceptional change ready teams and to then apply that knowledge in the newly restructured teams where possible.

In exploring the topic of exceptional change ready teams, there are two key stages of this research project. The first stage consists of a pilot study and the application of the Discovery phase of the AI technique focusing on the creation of exceptional change ready teams. The second stage of this research project builds on the work undertaken in the first stage and expands the application of AI to fully utilise the four phases of Appreciative Inquiry – Discovery, Dream, Design, Destiny - in the creation of a professional development strategy to enhance change-readiness for CSIRO IM&T Library Services staff.

1.5 Method of investigation

“Conversations that matter” is a phrase used to describe the application of Appreciative Inquiry (Whitney & Trosten-Bloom, 2003, p.78). Appreciative Inquiry is built on eight guiding principles one of which includes the constructionist principle recognising that reality is created through social interactions and conversations exchanged. The importance of social constructionism to the practice of Appreciative Inquiry is expanded upon by Lewis, Passmore and Cantore (2008, p. 30) who state: “Change takes energy, and positive emotion-based energy is a powerful resource for change. Many people are energized by exciting conversation, and conversation-based change processes recognize and utilize the source of energy generation.” Appreciative Inquiry is focused on building energy for change through positive conversations. The role of the researcher in directing, initiating and participating in these conversations is a recognized and integral component of the Appreciative Inquiry approach. Questions are designed by the researcher to initiate “conversations that matter” on a particular topic applicable to the change process which the team or organisation is experiencing.

Action research is employed as the main research method within this study. The attraction of the method for this research study lies in its appropriateness in situations where there is a need to remain flexible, where there is a wish to be inclusive of
participants in the research process, and where there is a desire to bring about change at the same time as undertaking research into a specific topic or issue (Dick & Swepson, 1997). Although predominantly a qualitative research project focused on “conversations that matter”, there is also a quantitative aspect to reporting the findings. Findings from questionnaires and focus group discussions are presented in tabular format with frequency of response indicated to provide an understanding of the strength and extent of concern over a particular variable. Through the frequency of responses, the researcher was able to gain a perspective of what was deemed important by respondents when considering the particular professional development activities necessary to enhance change-readiness. Chapter three provides more detail about the research method, data collection and analysis.

1.6 Definition of terms

**Appreciative Inquiry (AI)** – an affirmative process for change management assuming the best of people, organisations and relationships (Whitney, 1998, p. 315). The Appreciative Inquiry cycle incorporates four phases: *Discovery* – appreciating what gives life and discovering the best of what is; *Dream* – envisioning results and dreaming about what might be; *Design* – co-constructing what should be; and *Destiny* – sustaining the change and identifying how to empower, learn and adjust or improvise from the process for the future (Cooperrider & Whitney, 1999, p. 30).

**Change readiness** – the level of readiness for change is reflected in the attitudes, beliefs and intentions of the participants particularly in relation to the extent to which they consider changes are needed and the view they have of the organisation’s capability to successfully make those changes (Armenakis, Harris & Mossholder, 1993).

**Library and Information Management (LIM) organisations** – this term is used within this research to encompass small and large library service teams that may be in the public, special, academic, school or private sector of the industry. LIM organisations may be a component of a parent organisation – such as is the case with the Library Services team being a functional team within the CSIRO Information Management &
Technology business unit which in turn is a component of the broader organisation that is CSIRO.

**Managing change** - is recognising that there are organisational, technical, human and cultural components associated with change and that planning, monitoring, communication, and other strategies can assist in the change process (Anderson & Anderson, 2001, p.46).

**Professional development (PD)** – the practice of keeping skills and knowledge up to date with regards to developments in technology, services and information resources. This is also referred to in the literature as “continuing professional development” or CPD (Varlejs & Walton, 2009).

**Virtual teams** - Lipnack and Stamps (2000, p. 18) define a virtual team as “a group of people who work interdependently with a shared purpose across space, time, and organisation boundaries using technology”. Team members may be geographically separated from each other but come together through the use of technology such as email, phones and videoconferencing (Kurland & Bailey, 1999, p. 56).

### 1.7 Assumptions and limitations

This study evolved in response to a direct need to manage the significant and prolonged change that library services, along with other research support services, in CSIRO were experiencing. An assumption of this research is that the researcher is not only undertaking the research but is also a key participant in the system being researched. At the time of this research beginning, the researcher was the Executive Manager, CSIRO IM&T Library Services responsible for implementing change within the library services team geographically distributed across Australia. The role of the researcher in the research process is actively recognized through approaches such as the action research method and the Appreciative Inquiry technique employed in this research study. Action research is a cycle of action and reflection, leading to further action. An assumption of
this research is that it will be an iterative process with further research avenues emerging as the research progresses.

Limitations of this research include that the study is undertaken within the parameters of the Research Support Services review in CSIRO where there are certain elements that cannot be changed (such as budgets) and is set within an environment of considerable change prior to the application of Appreciative Inquiry. Although the questionnaires and interview tools developed as part of this research can be utilized by other LIM organisations, the results from this research will be specific to the IM&T Library Services team within CSIRO at a particular stage in a major restructure process and will not necessarily be replicable elsewhere. The time available to conduct the study, the availability of participants and an element of change fatigue for participants within this turbulent environment were also potential limitations.

1.8 Organisation of the thesis

The organisation of this thesis reflects the dual nature of the research in that it is focused on the application of the Appreciative Inquiry technique as well as the practical outcomes of the projects used in testing the application within a LIM organisation. This first chapter provides an introduction to the research topic, the research environment and associated assumptions and limitations. A review of the literature follows in the second chapter exploring aspects of change management, change in libraries, professional development as a means of managing change, and then a focus on Appreciative Inquiry. Chapter Three describes the research design providing details about the research method, data collection and analysis as well as limitations around the research design itself. The outcomes of Stage 1 and Stage 2 of the research study are presented in Chapter Four followed by an analysis and discussion of the findings in Chapter Five. The thesis will conclude with an overview of the research including the contribution this research makes to the existing body of knowledge, limitations, future research opportunities and recommendations based on the findings from the research.
This introductory chapter has outlined the research objectives and why this research is worthwhile pursuing. Critical success factors for effective change and the Appreciative Inquiry technique will be explored through a review of the literature in the following chapter.
Chapter 2: Literature Review

“If you don’t like something, change it; if you can’t change it, change the way you think about it”
Mary Engelbreit (1952 - )

2.1 Introduction

Library and information (LIM) organisations are on an almost continual path of change driven by developments in technology, service models, staff structures and financial allocations. The way in which LIM organisations approach change varies as does the success rate of the change management techniques initiated. One particular approach to change management – Appreciative Inquiry – has been gaining popularity in a wide variety of disciplines since its inception over three decades ago in the field of Organisational Development. This literature review chapter is organised into two main topics. The first topic to be explored is the broad issue of change management. The focus then narrows to change management in LIM organisations particularly those with virtual teams. Professional development as a means of enhancing change-readiness in teams is examined before discussing positive change management approaches. The second key topic investigated in this chapter is the positive change management technique of Appreciative Inquiry. The review will conclude with a discussion of the potential of AI for use by LIM organisations particularly those with virtual teams.

2.2 Change management

Benjamin Franklin has been attributed with the popular saying that “nothing is certain but death and taxes”. Change could perhaps be added to this mix. Change in our daily lives, in both the work and home environment, is pervasive and the pace of change looks increasingly rapid. This may be due in part to the advances in technology being made every day impacting on services and activities in all aspects of our lives. How we deal with change depends to a large degree on the type of change being faced.
2.2.1 Types of change

In order to undertake effective change management at the individual or organisational level, an awareness of the various types of change is useful. Pendlebury, Grouard and Meston (1998, p. 12) categorise the different types of change in terms of three main variables: depth (ranging from superficial to profound); speed (a measure of the combination of the depth and duration of change) and implementation (forcibly imposed or as a result of consensus, voluntary or involuntary). The authors acknowledge the risk of over-simplification but use these variables as the main guides. They then move on to describe the two main types of environment in which change takes place: static (not accustomed to change) and dynamic (change is perceived as an everyday activity). Static environments give rise to discontinuous change which Pugh (2000, p. 3) describes as a break with past practices in recognition that the former ways of doing things is not sustainable. This pattern of change could be permanent (such as moving to a new location), periodic (such as related to budgets or job vacancies) or isolated (one-off situations such as a fire or flood) (Curzon, 1989, p. 23). “Profound change” is a term used to describe a change process where learning occurs and the organisation builds the capacity for ongoing change (Senge, Kleiner, Roberts, Ross, Roth & Smith, 1999, p. 14-15). Profound change only occurs where there is a shift in people’s values, aspirations and behaviours in combination with a shift in systems, practices and processes (Senge et al., 1999, p. 15). Getting people to shift their behaviours first requires an understanding of the various ways in which people react to different types of change (Gordon, 2005, p. 184).

2.2.2 Resistance to change

Whatever the type of change faced by staff, resistance is a normal and common reaction, even where the existing situation is considered unsatisfactory (Pendlebury, Grouard & Meston, 1998, p. 198). Resistance can take different forms. It may be passive resistance where the person continues to do as they always did and pretend that change will not impact on them, or the reaction can be aggressive where the person actively works to undermine others’ excitement, continually complain or even sabotage the change efforts underway (Gordon, 2005, p. 186). A study undertaken by Vakola and Nikolaou (2005)
indicated that highly stressed staff demonstrated decreased commitment and increased reluctance to accept organisational change. Some may say that this is not very surprising, but it is still an important correlation to consider when faced with staff who are viewed as being resistant to change.

Thinking about change from a “what will be the impact upon me?” perspective is natural as the change may indeed impact on the type of work staff currently do, the systems they know well, the clients that they have established a strong working relationship with as well as potentially their employment in general. As Gallacher (1999, p. 6) highlights, it is the fear of the unknown and the possibility of loss that creates resistance. This fear of loss is emphasised by Bull (2002, p. 11) who believes that resistance comes about because it is easier for library staff to focus on what is lost than what might be gained, because what is lost is familiar whereas what might be gained has not been realised yet. In this way, change might be viewed as the “destroyer of what is familiar and comfortable rather than the creator of what is new and exciting” (Qubein, 2001, p. 17).

This perspective can hinder the ability of the individual to consider any change as being positive. Having a considerable amount of experience in change in the libraries and recognising that change was a constant, Bull (2002, p. 12) created a useful acronym to help her remember that change can have a positive IMPACT:

- I – Imagine, if you could do what you do in a different way
- M – Move forward in your thinking, don’t get stuck in a rut
- P – Prepare for transition, and consider ripple effects, retraining as necessary
- A – Activate your potential, it is always just ahead of where you are
- C – Communicate effectively, be considerate, and complimentary
- T – Teamwork eases the burden: trial and error are tools for growth.

Keeping a positive outlook as Bull (2002) has recommended may assist in reducing the level of resistance to change (Avey, Wernsing & Luthans, 2008, p. 65). Common causes of resistance include a lack of understanding why change is necessary; the variation in the way individuals prioritise different issues; a lack of understanding about the vision of what the change is aiming to achieve; fear of the consequences of the change
particularly in potential loss of employment; and the level of interest individuals have in the change overall (Pendlebury, Grouard & Meston, 1998, p. 199-202). Qubein (2001, p.17) supports this view and highlights the importance of good communication to assist with addressing some of these causes of resistance. Team leaders can do this by explaining the reasons for the change; showing what plans are in place to keep risks to a minimum; emphasizing the things that remain the same; letting staff know what to expect, step by step; demonstrating that the management team are fully behind the change and have confidence in the value of the changes; and giving positive feedback to staff on the constructive changes they make.

Kriegel and Brandt (1996, p. 8) believe that it is not so much a case of overcoming resistance, as that is a natural reaction to change, but more of a case of turning resistance into what they call ‘change-readiness’. Kriegel and Brandt (1996, p. 8) define change-readiness as “an attitude that is open and receptive to new ideas; excited rather than anxious about change; challenged, not threatened, by transitions; committed to change as an ongoing process.” Library leaders in particular need to be aware of their own approach to change as they can influence the level of change-readiness in others particularly their team members. Olson and Singer (2004) provide a useful guide on the leadership change cycle addressing awareness, behaviours, skills and action. Anderson and Anderson (2001, p. 43) join the call for leaders to recognise their responsibility to build a change strategy that, among other things, sets a realistic pace for the change.

Although LIM professionals appear to be well aware of the impacts of the drivers of change, it is unclear whether awareness equals understanding and whether this knowledge is applied to planning and implementation of change programs in LIM organisations more generally (Stephens & Russell, 2004, p. 240). These general concerns over organisational change and change readiness are shared widely across all sectors, but as has been noted previously, the pace of change within the LIM environment makes implementing effective change a key indicator for organisational success. The following section will consider LIM organisations and their handling of change.
2.2.3 Change and LIM organisations

A library and information management (LIM) organisation is a complex entity consisting of people, systems, places, services and the information resources themselves, with changes impacting on virtually every aspect of the organisation. Corcoran, Dagar and Stratigos (2000, p. 29) identified several drivers for change in LIM organisations:

- Competitive pressures from use of the Internet as a research tool
- Brand dilution and confusion in the rush to desktop deployment
- Information is becoming a commodity
- Intranets, technology and knowledge management accelerate the change
- Corporate libraries are going through de-mergers, forming new business units, and aligning with key functional units
- Companies are realising that they can save costs on content.

This list of drivers is reinforced by Myburgh (2003) who provides an extensive list of the multiple sources of change for information professionals highlighting the range of technological, economic and social drivers impacting on the way library services are developing. These drivers have had a particular impact on the role of the LIM professional balancing the ‘traditional’ services with moving into specialised roles as analysts and project team participants. The challenges of balancing these roles were identified in the responses to a Training Needs Survey conducted by CAVAL in 2007. In their responses, library staff listed the following top 10 challenges facing library and information services looking ahead to the year 2010 (Sayers, 2007b, p. 17):

- New and emerging technologies such as blogs, wikis, podcasts
- Managing budgets and seeking new funding sources
- Marketing and promoting services
- Workforce and succession planning
- Managing e-resources
- Demonstrating the value, relevance and return on investment of libraries
- Library design and space planning
- Copyright compliance
- Understanding and keeping ahead of clients’ information needs
Information and digital literacy

With this list of challenges it is no surprise that change management is such a focus for LIM organisations and has become a key competency that today’s LIM professionals must possess (Ashcroft, 2004; Penfold, 2000; Bryant & Poustie, 2001; Weir, 2000; Fourie, 2004; Knight, 2009). Developing such competencies is an important factor in ensuring successful change management and is thus considered in more detail in a later section.

Forces of change such as the ones outlined previously include both external and internal drivers and it is usually a combination of these that drive change within LIM organisations. Pendlebury, Grouard and Meston (1998, pp. 8-10) provide examples of external forces for change in business. These drivers can also be applied to LIM organisations as follows:

- The market – actual and potential clients of the LIM organisation
- The competition – others are claiming the information role and librarians need to redefine their roles and emphasize the unique contribution they make to information provision (Pugh, 2000, p. 13). As Line (1991, p. 97) points out, “..they [the competition] are generally better at self-promotion than librarians!”
- Technological innovations – obviously the development of the Internet is a key driver but there are other innovations driving changes in delivery and use of information including mobile phones, iPods and personal digital assistants (PDAs). White (2006, p. 22) believes that managing technological change is the greatest challenge librarians face.
- Social changes – changes in the way society views the value of information may bring about changes in the way information support is delivered. Some social changes may overlap with technological innovations – an example of this would be the development of Open Access publishing and the social push behind this initiative to make scholarly information more freely available.

It should be noted that ‘external’ forces does not mean forces that are completely removed from an organisation. For example, LIM organisations that are part of a larger
organisation such as a government department or a university may find that the external drivers are coming from within their parent organisation.

Internal forces drive change initiated by the LIM organisation and often originate with the organisation’s recognition of weaknesses that need to be addressed or strengths that can be built upon for further development (Gallacher, 1999, p. 4). Pendlebury, Grouard and Meston (1998, pp. 10-11) consider that growth and its impact on internal logistics and management vision are the two major internal forces driving change within an organisation. If a business is to remain viable, it needs to respond to these internal and external drivers. A failure to change would eventually result in going out of business. This is also pertinent to libraries.

Was Line’s (1991, p. 103) call for librarians to “take much more account of management trends in industry and elsewhere” heeded? Not according to Pugh (2000, p. 17) who considers that LIM organisations lack a strong tradition of change management. Pugh (2000) provides a comprehensive overview of the various change techniques such as total quality management (TQM) and business process reengineering (BPR) and their application within LIM organisations, providing case studies to illustrate the good and bad of change management. One of the topics discussed in the overview by Pugh (2000) is Organisational Development (OD). Emerging in the 1970s, organisational development recognises that change is a constant and that organisations need to develop a capacity for change that is inclusive of the organisation’s culture as well as structures and processes. As organisational development considers change management as a natural part of organisation life, this view sits well in the long-term, systematic and systemic changes that libraries experience (Pugh, 2000, p. 25).

Penfold (1999, pp. 124-127) explored in detail the state of the information profession at the end of the 1990s suggesting the following framework for starting the change process within LIM organisations:

Stage 1: Review – what are you doing?
Stage 2: Analysis – why are you doing it? Who are you doing it for? What are the users’ needs?
Stage 3: Planning – what must we provide? What can we provide?
Stage 4: Implementation – how?
Stage 5: The Way Forward – maintaining the momentum and assessing the impact.

This framework outlined above provides library managers with a potential guide for preparing communication with stakeholders about the change that will impact on them. For example, following the outline above, communication could be planned around the topics of what change is happening; why it is happening; the planning and implementation steps that are being put in place; and then the ways in which the change will be reviewed. Whatever the framework chosen for managing change, there are a number of common elements in a change process (Hirshon, 1999, pp. 124-125):

- Trigger situation (see the previous discussion on internal and external drivers for change)
- Planning
- Communication
- Restructuring
- Process and policy analysis
- Training
- Monitoring and assessment
- Cultural change.

It is important to note that these elements are not linear and will overlap throughout the change process. Of these, achieving cultural change can be the most challenging as it impacts on the success of each element and the overall change process.

As evidenced by the previous discussion about the plethora of drivers, both internal and external, pushing and pulling library organisations into change, there are three prominent reasons why LIM organisations need to tap into effective change management practices such as AI which have benefited other disciplines. Firstly, demographics studies of LIM organisations around the world indicate a growing proportion of older library staff heading into retirement that will leave a considerable gap in knowledge and experience in teams. Secondly, many libraries still have hierarchical structures set in place from
many years ago which are neither appropriate nor responsive enough for the new service paradigms emerging in today’s information environment (Moyo, 2004a; Moyo, 2004b). This is particularly applicable to the virtual team environment in which many library staff currently now function. Thirdly, change is necessary. The library is not static and unchanging (Simpson, 2004, p. 134). Change is occurring at every level – change in the work environment; change in the nature of the work undertaken; change in the role of libraries within their constituencies; change in the nature of the profession itself; and change in the individual (Dority, 2006, pp. 3-4). As such, change is vital for LIM organisations and their clients to take full advantage of the ever-evolving digital environment and the opportunities for expanded roles and partnerships within this environment (Warnken, 2004, p. 323).

Taking this last point a step further, Horn (2008, p. 6) lists five key environmental factors that highlight the need for effective change management within the library and information industry:

- New models of information creation and dissemination are continually being introduced
- There is an exponential increase in the pace of change in ICT
- Generational changes are influencing both client and staff behaviours
- New approaches to teaching and learning are being sought
- Institutional funding mechanisms are increasingly being based on research quality frameworks based on quality and impact.

Although LIM organisations are experiencing social, technological and economic challenges, evidence of change management processes applied in libraries has historically been rather scarce in the literature. Throughout the 1990s to mid 2000, the focus appeared to be more on the pressures libraries (and librarians) were facing and the potential new roles rather than a formal approach to outlining the change processes applied and the outcome of those processes. There is however, an increasing number of case studies being published more recently outlining a structured approach to change management within an LIM organisation. Three case studies (Gross & Leslie, 2008; Leong, 2008; and Horn, 2008) provide useful examples. These articles outline the
experiences within three different Australian academic libraries in the implementation of a change process and are written from a practitioner-researcher perspective. Leong (2008) focused on identifying strategies to enhance change readiness and professional competence of reference librarians at the University of New England. Gross and Leslie (2008) reported on the adoption of a Learning 2.0 program at the Edith Cowan University Library while Horn (2008) provided a case study of the change process utilised by the Deakin University Library undergoing a major restructure. Collectively, these articles provide evidence of the different change management processes implemented and the outcomes achieved recently in Australian libraries.

Of course, an important issue in contemporary change management literature is whether change can be managed. Drucker (1999, p.73) believes that “One cannot manage change. One can only be ahead of it.” Indeed, a number of articles on change management spend considerable effort on the language of change, explaining that change management is not about managing change per se but is about managing people or the organisational environment (Palmer & Dunford, 2002; Moran & Brightman, 2000; Bender, 2000). Marshak (2002) outlines the context of organisational change and provides an interesting discussion on why the language and concepts of change have been limited by fundamental assumptions stemming from the Industrial Age when there was a focus on taking a top-down approach to managing change which was talked about in terms of fixing problems. Pugh (2005, p. 97) argues that it is not so much that change can be managed but far more important is for library staff to learn to “live in the state of constant flux that all change, and digital innovation, in particular, produces”. Leaders that keep staff focussed during changes and who can motivate and empower their teams through change are usually successful (McKee, 1998a). Change management with virtual teams brings an added level of complexity to the change process. Keeping staff empowered and motivated during a major change process can be a challenge for team leaders managing staff that are geographically dispersed from one another.
2.2.4 Change management with virtual teams

Team building is often viewed as one of the important components for successful change management – creating a team that builds on the diversity of members and one that can support the team members through change. Lipnack and Stamps (2000, p. 18) define a virtual team as “a group of people who work interdependently with a shared purpose across space, time, and organisation boundaries using technology”. Team members may be geographically separated from each other but come together through the use of technology such as videoconferencing (Kurland & Bailey, 1999, p. 56). Over a decade ago, Barner (1996) predicted seven big changes that would challenge organisations of the future – the virtual organisation where the majority of staff were geographically dispersed, often globally, was the first of the big changes he outlined. The development of information and communication technologies (ICT) provided the impetus for the creation of virtual teams bringing Barner’s (1996) prediction to fruition. Using complexity and chaos theories, Black and Edwards (2000) examined whether virtual organisations were a fad or feature of the 21st Century. Their findings indicated that virtual or network organisations were an emerging logical form for organisations to take and that their use and development for sustaining organisational life in today’s information age would continue into the foreseeable future. CSIRO could be described as a virtual organization with staff located all over Australia as well as internationally. Although there are teams that have members co-located at a CSIRO facility, many virtual teams exist within the organisation consisting of members in various geographical locations relying on telecommunications technology to operate together effectively as a team. CSIRO IM&T Library Services staff work in a variety of virtual teams. The IM&T Library Services team is geographically distributed with members located at CSIRO facilities in metropolitan as well as regional locations across Australia. Within the larger cities there may be clusters of staff located together at one facility but they may be members of different virtual teams responsible for library collections, information support and information specialists. There are also library staff working outside the standard reporting structure on information management project teams with other staff from functional areas such as IT, records, and communication.
The three most common types of virtual or ‘distributed’ teams in LIM organisations are management teams which are usually permanent, easier to set up and run than any other type; project teams which tend to be transient and fluid, cross-functional teams; and process-based teams such as reference services teams or technical services teams (Pugh, 2005, pp. 152-153). The benefits for LIM organisations in having these types of virtual teams are threefold. Team members can be at any location which is particularly useful if the library has several branches or has information staff co-located with their clients outside of the physical library; team members can be recruited for their competencies, not just their physical location (Gould, 2005); and commute times are reduced for staff (if they are working from home).

There are, of course, downsides to virtual teams as well. Kurland and Bailey (1999, p. 64) believe that “remote managing becomes more challenging the further [the staff member] is from the office…with virtual teams presenting the most difficult situation.” The geographical distances between team members certainly present a number of challenges such as building and sustaining the virtual team culture. Although informal and social interaction does occur using email, desktop videoconferencing, and other social networking services, it is not on the same level of day-to-day interaction that occurs when team members are located together at the same facility. Performance appraisal and monitoring of virtual team members can be a challenge and involves a great deal of trust between team members and team leaders. There is also the potential for professional isolation for remote staff who may not have local professional development opportunities to the same degree as those in metropolitan areas. Kelly (2005) explores some of the methods useful in addressing these challenges. These methods include effective communication; team building; exploring professional development opportunities and embracing technology. Within the CSIRO IM&T Library Services team, meetings and in-house training opportunities are held regularly using online collaborative tools such as MeetingPlace that allows teams members to interact in an online workspace regardless of where the team members are geographically located.

Handy (1995) claimed that libraries were always likely to be among the first to embrace the opportunities and challenges that virtuality offered including confronting the
tremendous challenge of how to manage people that you do not see. This view is supported by Pugh (2005, p. 149) who states:

“The problems of managing, communicating with, and leading people who could not be seen are far from new. What is different is the emergence of information systems and information architecture that has revolutionized the scope and reach of distributed organizations. Multisite university library operations, the structures of practically every public library in the world, and merged organizations that led to administratively unified institutions operating with geographically separated centers, have been common for a very long time.”

Technology is an important asset for virtual teams. Email, mobile phones, videoconferencing, group software, personal digital assistants (PDAs) all provide communication and interaction opportunities for a geographically distributed team. But as Vakola and Wilson (2004, p. 112) rightly point out, the success of virtual teamwork does not rely merely on the use of technology but is to a greater extent reliant on the effective management of the ‘human’ side of the virtual team. Steele (2000, p. 69) emphasizes the importance of creating a sense of “staff camaraderie” to aid communication within a decentralised library organisation. Strategies to do this include an annual two or three-day meeting for all staff including relevant external speakers, internal speakers and discussion sessions on common processes and procedures. The greater value of such meetings is for the staff to meet, get to know each other and get a deeper understanding of their team. This view of a “team spirit” is supported by Lee-Kelley (2002, p. 465) who considers that the social dynamics of the virtual team is a real concern when face-to-face contacts are few and far between and where communication is primarily via email, phone or video-conferencing facilities. This can be exacerbated by generation gaps as different generations have different perceptions of teams (Pankl, 2004, p. 218).

Howarth (2006) believes that many organisations have not yet embraced the full potential and benefits of a virtual team claiming that the two main barriers to the success of virtual teams are management’s fear of losing control and an inability to manage by objectives rather than by headcount. Team leaders have to overcome these barriers in order to effectively manage virtual teams on a day-to-day basis as well as during periods of change. Vakola and Wilson (2004, pp. 119-120) identified four major critical success
Chapter 2: Literature Review

factors team leaders should consider for effectively dealing with change in a virtual context:

- **Information sharing** – create and maintain information and knowledge sharing within the team as well as an environment that supports learning and performance management.
- **Organisational culture and teamwork**– ensure a participatory culture including flat structures, open communication and involvement in decision-making.
- **Acceptance of change** – encourage a positive approach to change created through a planned changed program that addressed fears and concerns, encourages involvement and participation, and explains the objective of the change.
- **Training** – establish a training strategy particularly in the skills required to support the change.

To support the critical success factors, leaders of virtual teams require key skills such as the ability to motivate staff remotely; an approach that uses influence rather than authority; an ability to maintain the focus of the team; and an ability to manage the behaviour of team members including performance appraisal undertaken remotely (Clutterbuck, 2007, p. 176). If these critical success factors and key skills are not addressed, library managers and team leaders are in danger of creating an environment conducive to isolation, lack of communication, lack of understanding and a lack of trust, all of which will impact on the virtual team’s ability to manage change effectively.

**The importance of trust**

On the issue of trust, Lipnack and Stamps (2000, p. 19) believes it is one of two crucial elements for virtual teams claiming “webs of technology and trust link virtual teams”. Without trust and technology, the virtual team will find it difficult to operate effectively. Managing teams presents challenges relating to personal contact, communication, team dynamics and management behaviour. These challenges increase where there is an element of virtuality (Pugh, 2005, p. 151). Lipnack and Stamps (2000, p. xxvii) believe that “everything that goes wrong with in-the-same-place teams also plagues virtual teams – only worse.” This view is supported by Cascio and Shurygailo (2003, p. 375) who consider that virtual team environments “magnify the differences between good and
bad projects, organizations, teams and leaders.” Meetings have to be scheduled, quick progress checks are not always ‘quick’, and facilities for videoconferencing have to be established. For any LIM organisation going through significant changes and who have virtual teams, the two specific challenges of communication and trust must be addressed.

**Communication** – communication is a critical success factor in positive change management and is also a key element to successful teams. When communication is truly a two-way process, managers and teams alike focus on not just understanding the vision but on ways to assist the organisation to achieve change (Spencer & Mountford, 1997, p. 108). During times of major change, active communication is crucial and making sure all members of the virtual team have access to the relevant information is a high priority. One strategy is to develop a team intranet where all documents such as meeting minutes, strategic plans, action plans, policies, and updates related to the change process can be accessed (Kelly, 2005, p. 121). The site may also have a common area for open discussion among the team members.

Although email has provided virtual teams with an avenue for distributing information, it is not always communication that has occurred. Communicating is understanding that a message has been understood, otherwise it is just informing. If email is the only source of communication, the lack of the nonverbal signals can cause misunderstanding. As Pugh (2005, p. 154) explains, “Distributed teams miss out on all the nuances of subtle communication, particularly because the nonverbal aspects of communication are not available to all the members.” This lack of nonverbal cues can also lead to the loss of trust.

**Trust** – Trust is critical for virtual teams to function and excel (Cascio & Shurygailo, 2003, p. 373) and is the answer to the challenge of how to manage people whom you do not see. Trust is defined as “a firm belief in the reliability or truth or strength etc. of a person or thing… the state of being relied on” (“Trust,” 2011). The manager or team leader must have confidence in the reliability of the virtual team member doing their job, and the virtual team member must provide the foundation to support the belief that they can be relied on to operate effectively and do their job in a virtual environment. To
work with people you rarely see or have never met, there has to be some basis to believe
considers that “unlimited trust is, in practice, unrealistic. By trust, organisations really
mean confidence, a confidence in someone’s competence and in his or her commitment
to a goal. Define that goal, and the individual or the team can be left to get on with it.”
Conversely, mistrust means that there is a high likelihood of suspicion generating
difficulties at each step of developing and delivering on a common goal. This suspicion
can quickly develop into resistance during times of significant change.

Trust appears quite regularly in the research literature on virtual teams. In the course of
their grounded theory study of a global virtual team in the international moulding
industry, da Cunha and e Cunha (2001) proposed that trust within a virtual team
emanated from three major sources including the previous experience that each team
member had with teamwork (i.e. positive experiences working with other teams); the
reputation of the institutions involved (i.e. high performance-based with hardworking
people); and the presence of important shared goals.

A study by Morris, Marshall and Rainer (2002) investigated the link between IT system
user satisfaction, trust, and job satisfaction in virtual teams. Their findings indicated that
organisations seeking the benefits of a flexible, technology-enabled virtual team must
consider both the level of trust among team members, and the users’ satisfaction with the
information technology on which the virtual team relies (Morris, Marshall and Rainer,
2002, p. 22). Similarly, Henttonen and Blomqvist (2005) explored the role and
development of trust in the early stages of a virtual team. Their research findings also
highlighted the importance that trust, commitment and communication have in the
culture and functioning of virtual teams.

Working with virtual teams does create challenges such as building trust, but these
challenges are not insurmountable nor do they outweigh the value that teams have
during periods of change. Major organisational change cannot be undertaken by an
individual and teams are important agents within the change process (Choudrie, 2005, p.
65). Teams that have members with differing perspectives, expertise and knowledge can
provide the robustness to facilitate change...as long as the team dynamics have been carefully considered. If one team member with strong resistance to change is the dominant person in the team, this can have a negative, flow-on effect to other members of the team. There has to be an element of managing teams as well as managing change – all team members should be confident and comfortable enough with their role on the team to raise issues or to respond to issues raised by others. Although virtual teams may be considered somewhat commonplace today, the implications for managing virtual teams during change or enhancing the change-readiness of staff within those virtual teams has only recently started to be explored (Lee-Kelley, 2002, p. 473).

2.2.5 Professional development as a means of enhancing change-readiness of staff

Many of the change management articles reviewed earlier in this chapter highlight the importance of training, education or professional development for staff as part of the “people” aspect of a change management strategy. Providing training is a means of improving a staff member’s ability to cope with rapid change in the LIM industry (Weaver-Meyers, 1992, p. 13). According to Knight (2009, p. 52): “The contemporary LIS manager is required to live successfully in two time zones – the present and the future; and this can only be achieved through the continuous improvement of the right skills and knowledge.” Three key areas that professional development can contribute to in order to achieve effective change within an organisation are outlined by Smith (2004, p. 149). He notes that creating an organisational environment supportive of learning and development; developing and sustaining an orientation towards learning and skill growth from the individual’s perspective; and empowering staff with the skills and knowledge required for working in the changing environment are critical. This last point is supported by Leong (2008, p. 79) who considers that it is vital to build change readiness to empower staff to respond to a continually changing environment. Indeed, continuing professional development is strongly advocated as a means of supporting lasting and significant change within the library and information profession (Smith, 2001, p. 262). Professional development activities can be undertaken to strengthen skills and knowledge in a broad range of topics such as new products, new technology, new
services such as data management or teamwork and leadership topics including negotiation, conflict, change and resource management. Marketing, promotion and evaluation of products and services would also be applicable skills for today’s LIM professional (Ashcroft, 2004). Dority (2006, pp. 6-8) recommends the following ‘career competencies’ as a strategy for having a career that will sustain from both a financial and an intellectual perspective:

- An understanding of who you are, who you can be, and who you want to be.
- A determination to accept reality
- A focus on solutions rather than obstacles
- An understanding and acceptance of change
- A willingness to adapt skills to the environment
- A willingness to look for opportunity
- An ability to anticipate
- A willingness to take risks
- A commitment to continuous learning
- An enthusiasm and willingness to engage in the work
- An ability and willingness to continually reinvent ourselves.

These personal competencies can be applied to any career development, not just that within the LIM professional environment. A study of 200 job advertisements from the UK, Canada, Australia and the USA identified a profile of professional and general (or social) skill sought of new employees (Gerolimos & Konsta, 2008, p. 696). The professional and general skills were subdivided into broad categories with designated skills identified under each category. Professional skills included categories such as process management of conventional materials; process management of digital materials; ICT skills; administrative organisational skills; and education. The general (or social) skills identified included personal traits, interpersonal skills, experience and lifelong learning/continuing education.

There has been an increasing interest in continuing professional development reflected in the proceedings of the World Conference on Continuing Education for the Library and Information Professions over the years since the first conference was held in 1985.
This increasing interest is not surprising given that this is indeed an era of rapid and continuous change where the need for library staff to remain agile with their skills is at a premium (Ferguson, 2003, p. 18). This is evidenced by the plethora of articles in the LIM literature addressing changing roles of the information professional. Content analysis of job advertisements in the library and information sector also provide a clear indication of the dynamic state of roles and the skills required by today’s information professional (Kennan, Cole, Willard & Wilson, 2005; Orme, 2008; Pamment, 2008).

A key driver for professional development for LIM professionals can be stated simply as sustaining relevance in an environment where professional boundaries are blurring as roles and skills adapt to the changes in the digitised information landscape (Agha, 2001; Bosanquet, 2010). This blurring is evident in the emerging field of eResearch and data management where library staff have a key role to play along with colleagues in the IT, records, and science administration professions. Many academic and research libraries are starting to develop research data management services utilising their information management skills to create a strong foundation for data management (Stokker & Hallam, 2009, p. 565). These new roles emerging in the profession require a set of capabilities such as attitudes, aptitudes and approaches that can be called upon whenever new needs or opportunities arise (O’Leary, 2000, p.22).

The digitised information landscape of Web 2.0 provides opportunities for library and information professionals to develop new skills. Web 2.0 or ‘World 2.0’ is characterised by Allard (2009, p. 63-64) as having the following parameters: the user experience as an information seeker is changing; the user experience as an information producer is new; content is being processed outside the traditional cycle; and cyber infrastructure is implicit. Professional development is critical for library staff to develop appropriate skills essential to working within the Web 2.0 environment. These skills go beyond technological skills to also incorporate interpersonal and communication skills (Del Bosque & Lampert, 2009, p. 262; Broady-Preston, 2009, p. 268-269). Partridge, Menzies, Lee and Munro (2010, p. 265) have published what they claim is “one of the first empirically derived analyses of the key skills, knowledge and attitudes of librarian
Their findings indicate that librarian 2.0 was ultimately about applying good librarian practices such as being attuned to changes in clients’ needs and thinking and engaging proactively with technology to meet those needs (Partridge et al., 2010, p. 270). All the traits of librarian 2.0 as listed by the authors are valuable but two traits stand out as being particularly relevant to this research project on change management and professional development. These traits as outlined by Partridge et al. (2010, p. 270) are:

- Change management skills: flexible, adaptable, open minded, and a risk taker who is comfortable with experimentation and able to handle rejection.
- Active learner: a willingness to continue learning and implementing new services. Evolving knowledge and understanding of industry and client needs; ability to take on new technologies and tools to provide a service that is useful.

Similar to the active learner trait listed above, the American Library Association (2009) have “Continuing Education and Lifelong Learning” as one of their core competencies for library and information professionals. This competency recognises the “necessity of continuing professional development of practitioners in libraries and other information agencies” as well as the education of library patrons. Professional development for library and information professionals is not necessarily focussed only on acquiring new skills but it is also a means of adapting existing valuable library skills such as analysing, evaluating and describing to be applicable in the changing work environment (Ashcroft, 2004, p. 83).

2.2.5.1 Professional development in LIM organisations

Within the LIM industry, professional development (or continuing professional development (CPD) as it is also known) is a common term describing the practice of keeping skills and knowledge up to date in order to be able to move more effectively with changes occurring in the industry. Professional development has been an important issue for LIM staff since the 1970s when the concept was first developed (Doney, 1998, p. 486). Many of the professional associations such as the Australian Library and
Information Association (ALIA), American Library Association (ALA), Special Libraries Association (SLA), and The International Federation of Library Associations and Institutions (IFLA) strongly support continuing professional development. For example, ALIA encourages and facilitates continuing professional development including recommending members join the ALIA Professional Development scheme and attain Certified Practitioner status “to gain a competitive edge” (Australian Library and Information Association, 2010). Other associations such as the UK professional body, the Chartered Institute of Library and Information Professionals (CILIP), have recently made continuing professional development (CPD) mandatory for chartered members (Broady-Preston, 2010, p. 74). The Library and Information Association of New Zealand Aotearoa (LIANZA) is also introducing CPD as part of their professional registration scheme (Cossham & Fields, 2007, p. 583). A useful article exploring the issues in relation to mandatory CPD was presented at the 2010 IFLA conference (Broady-Preston & Cossham, 2010). The mandatory CPD schemes being implemented by the CILIP in the UK and the LIANZA in New Zealand were compared with the pros and cons of each scheme discussed. The authors (Broady-Preston & Cossham, 2010, p. 13) acknowledge that their review is a contribution to the debate about mandatory CPD rather than an answer to the issues raised. It is clear from their review that the outcome of implementing mandatory rather than elective CPD is yet to be determined and is an area that warrants further research once these schemes have been in place for a period of time to allow robust assessment. It should also be kept in mind that neither mandatory nor an elective type of CPD can guarantee quality outcomes (Ritchie, 2008, p. 103).

Although the professional associations provide support and encouragement, it is the individual’s responsibility to maintain an awareness of the directions of the profession as well as the ways in which consumers of information are seeking, obtaining, using and sharing information. This is relevant to all functional areas of a LIM organisation as changes are occurring across the board in circulation and technical services; reference and outreach services; as well as in team management. In a study exploring the gap between new librarians’ perceptions about how library studies prepared them for their career and what technology skills their new employer expected them to have, researchers Del Bosque and Lampert (2009) surveyed subscribers on the NEWLIB-L listserv. As
part of the survey, respondents were asked to outline the strategies they use for keeping their skills current. The following key strategies were identified from the 95 survey responses received by Del Bosque and Lampert (2009, pp. 282-284):

- Staying curious and exploring new things (92.4%)
- Keeping up on reading (journals, news media, books, listservs) (88%)
- Using technology as a tool (blogs, wikis, RSS aggregators) (81.5%)
- Taking classes and workshops (69.6%)
- Attending conferences (65.2%)
- Joining committees and getting involved in new initiatives (37%)
- Research and scholarly efforts (14.1%)

This research was predominantly targeted at new information professionals with less than nine years of professional employment. However, whatever the stage an individual has reached within their career, professional development activities are still relevant to keeping up knowledge and skills relevant to the information industry, and more particularly, relevant to the clients for whom the library service (and therefore the library staff) exists. From the LIScareer.com website, Ellard (2003) recommends library staff continue their professional development through a range of activities such as staying current virtually through participation on email lists or blogs; professional reading using electronic alerts to keep up to date with latest developments; publishing; mentoring; networking; attending seminars, workshops and conferences; becoming involved in a professional association; and formalising continuing professional development if possible. Keeping up with professional reading was the focus of a study by Hardesty and Sugarman (2007, p. 201) of just over 700 participants which found that the most popular methods used by library staff for staying current were:

- Listservs (95%)
- Journals/Magazine articles (94%)
- Attending professional conferences (85%)
- Table of contents service or other email alerts (36%)
- Attending virtual professional conferences (i.e. webcasts) (33%)
- Blogs (28%)
- RSS aggregators or XML readers (15%)
These activities can be supplemented by others such as giving presentations at seminars, workshops and conferences (not just attending these events as mentioned above) and volunteering for institutional and/or community service (Flatley & Weber, 2004).

A research study undertaken in Australia in 2001 examined professional development from the organisational perspective, with findings indicating a “strong and growing body of staff development activities in the Australian academic and research libraries sector” (Smith, 2002, p. 35). From the 42 replies received, Smith (2002, p. 30) identified the key types of professional development activities as the following:

- Attendance at conferences, pre/post conference workshops and seminars (93%)
- Orientation/induction programs (90%)
- Attendance at external short-course training and development programs (90%)
- Visits to other libraries (89%)
- Attendance at continuing professional education (CPE) programs (87%)
- In-house short-courses (82%)
- In-service training programs (78%)
- Job exchanges within the library (75%)
- Guest speakers on topics of professional interest (69%)
- Staff exchanges with other organisations (60%)
- Support for publication (44%)
- Support for research (38%)
- Reports of research in progress and/or completed (15%)

Smith (2002, p. 30) noted that several respondents commented that they had a preference for internal and/or online programs in order to help make their professional development budgets stretch further through adopting these more cost effective options.

Whatever the methods and focus of activity undertaken, professional development should have the outcome of providing library staff with information, knowledge, and skills in order to meet requirements for current and future roles. As Dority (2006, p. 4) explains, library staff should focus on lifetime employability which involves “continually
developing new ways to contribute and grow professionally, and seeking out opportunities to do so.” There is no ‘silver bullet’ solution to professional development. Each person has their own interests and way of learning just as each organisation has their own approach to professional development programs. That a professional development strategy exists for the individual and for the organisation, and is put into practice, is a key element of a positive approach to change in the information profession. Such a strategy provides the framework for team members to utilise professional development in order to keep their skills up-to-date in line with changes in the industry. How or what the information professional learns is first and foremost driven by the individual’s desire of what and how to learn. A study of over 500 Canadian professional librarians found that the motivations for professional development included personal satisfaction; new professional knowledge and skills; preparation for future work assignments or projects; job security; more influence over work decisions; pay; recognition from organisation; more challenging tasks or projects; opportunity to network with other librarians; and opportunities for promotion or better job (Chan and Auster, 2005, p. 162). The researchers found that there were significant gaps identified between what was desired (the ‘wants’) and what was actually likely to be gained (the ‘gets’) through undertaking professional development.

2.2.5.2 Challenges of implementing effective professional development programs

Career-long learning through a combination of personal achievement, education and work-based opportunities is integral to the success of the individual professional and the information profession overall (Hallam, 2007). However, preparing staff for the future is one of the greatest challenges that LIM organisations face (Sullivan, 1992, p. 1). From a scan of the literature, it is clear that there are five specific challenges associated with implementing a professional development strategy:

1. Managerial vs. individual perceptions – Cossham and Fields (2007) provide an analysis of the differing views between managers and staff regarding continuing professional development needs of librarians and library assistants. This study highlights
the pressures managers face in developing good CPD choices to maximise the effectiveness of CPD budgets while trying to meet the professional development needs of individual staff. The study found that there was a significant gap between the development that individuals want and the type of professional development that their managers think they should have. Other findings were that organisations needed to place a greater strategic focus on professional development to cover budget, organisational and individual requirements and that individuals needed to take more responsibility for their own developmental needs (Cossham & Fields, 2007, p. 573).

2. **Putting learning into practice** – translating newly acquired knowledge into practice can be a challenge but it is important to do this before the energy and the effect of the professional development course or conference has worn off and the skills lost through lack of reinforcement (Farmer, Ward & Wood, 1998, p. 11).

3. **Part-time nature of the workforce** – flexible work arrangements in many LIM organisations means that there will be staff who work on a job-share or part-time basis. It is vital that the training and development needs of part-time staff are met just as those who work full-time have their professional development needs addressed (O’Brien & Hayden, 2008, p. 217). This will prevent a gap developing in the ability of part-time and full-time staff members to keep pace with changes in the industry and ultimately, the library’s ability to meet the information needs of their clientele.

4. **Virtual teams** - the virtual nature of teams in many LIM organisations can create challenges for professional development of team members. Team leaders need to be aware of the professional development needs and wants of team members regardless of where they are located. Awareness is one aspect to address but it is actually meeting these needs and wants with an element of equity across the virtual team that can be the real challenge for team leaders. Those virtual team members located outside capital cities may not have the same degree of access to in-person activities such as professional conferences, vendor presentations, seminars, or group training sessions due to these activities not being available on a regular basis in regional or remote locations. These types of events tend to occur more frequently in capital cities where there is a larger
audience of information professionals located. Travel costs (including time as well as airfares) may impact on whether a team member in a regional or remote area can participate in these types of professional development activities. There are however, an increasing amount of professional development activities that can be undertaken by virtual team members wherever they are located. Vendors are now providing webinars; there are more library ‘unconferences’ occurring (which although they do have an element of in-person attendance also incorporate a large element of virtual involvement via social networking tools); and managers of virtual teams can also utilise online collaborative tools such as MeetingPlace in order to make the most effective use of in-house training opportunities between members of their team.

5. Time available – in a study of the attitudes of library staff to continuing professional development Doney (1998, p. 490) found that the most often cited deterrent for individuals undertaking professional development activities was time. This included aspects such as time away from work (work building up awaiting their return) and the lack of time available to undertake activities such as courses outside of work hours. Another study on the ways library staff keep up to date with professional reading found that library staff were less limited in having the time available to locate information either through journal articles, blogs, email lists etc than they were in finding the time to actually read and digest the information they had located (Hardesty and Sugarman, 2007, p. 203).

Self-paced, online training programs are helping to address many of the challenges listed above. However, managers in some LIM organisations may feel unsure about providing staff with training and development opportunities, believing that this will simply provide staff with the means to move on to other jobs in other organisations (Jordan & Lloyd, 2002, p. 183). Although professional development does indeed improve the marketability of individuals, equipping them with the ability to progress their career, it has been found that organisations providing a structured and supportive approach to training and development tend to attract and retain high quality staff (Jordon & Lloyd, 2002, p. 183). The availability of professional development as part of an overall remuneration package is now recognised as playing a critical role in the recruitment and
retention of LIM staff, particularly Generation X and Y staff members (Sayers, 2007a, p. 479). Supporting staff to undertake professional development, and to apply the skills learnt into practice within the organisation, stimulates communication, improves morale and encourages the development of change-ready teams with staff prepared for challenges in the workplace (Sanders, 2004, p. 157). All of this makes for an attractive workplace. LIM professionals must undertake professional development in order to stay agile enough to exploit their place in the changing world of information and data creation, organisation, provision, utilisation and sharing (Allard, 2009, p. 64). Ultimately the responsibility for professional development lies with the individual (Webb, 1995, p. 25). However, LIM organisations need to recognise the positive contribution professional development makes in enhancing the change-readiness of their staff.

Change-readiness relates to the ability to approach change from a positive perspective which is crucial to the success of an individual’s effort to develop a career that is enduring and enjoyable (Dority, 2006, p. 162). It is this positive aspect that will be explored further in this research.

2.2.6 Positive change management

Change management addresses an organisation’s overall ability to continue to exist and flourish in an environment of continuous change. Bender (2000, p. 5) suggests that “change is the lifeblood of progress, the catalyst for innovation, and the enzyme that breeds new thinking”, emphasizing the importance of developing the organisation in a positive way to make it robust but at the same time, flexible enough to navigate successfully through a multiplicity of change. Positive change management thus engenders a view that change is an opportunity for positive transformation, not a crisis to be avoided (Hillenbrand, 2005).

Positive change management has a basis in positive psychology, which Sheldon and King (2001, p. 216) claim is an approach that “revisits the average person with an interest in finding out what works, what is right, and what is improving.” Studies have demonstrated that employees’ positive emotions or ‘positive psychological capital’ may be an important contribution to positive organisational change and act as a counter to
resistance behaviour (Avey, Wernsing & Luthans, 2008, p. 65). Positive change management is looking for opportunities for growth instead of focusing on the negative. This requires a shift in thinking for many people. For example, instead of thinking “how will this change affect me?” turn that phrase into “What changes can I make to produce effective results?” (Bull, 2002, p. 11). Building on this way of thinking, individuals can create strategies for approaching and managing change in a positive way. Dority (2006, pp. 162-166) suggests the following approaches:

- Embrace beginner’s mind, and get comfortable with not knowing
- Work on being more open to opportunities for growth
- Move your own cheese, that is, improve your level of change-readiness
- Honour your sense of humour
- Get used to letting go
- Be patient with the unfolding, rather than rushing to closure
- Develop your strategies for dealing with chaos
- Let go of perfection
- Develop an expectation of personal resiliency.

Lubans (2003, p. 196) describes the type of positive approach as outlined above as being in the ‘learning zone’ and that the more time spent in the learning zone, the greater the capacity to meet challenges. Being in this ‘learning zone’ and learning from positive aspects of performance may seem at odds with the traditional management techniques of problem-solving (Tombaugh, 2005, p. 15). A mind-shift is required moving the emphasis from identifying and then fixing problems to instead a position of learning that accentuates the positives in addressing change (Oswick, Grant, Michelson & Wailes, 2005, p. 386). One technique for applying this type of positive change management approach is Appreciative Inquiry (AI). This is a technique that, unlike problem-centred approaches, looks at what is working well within an organisation and seeks to amplify and replicate it (Oswick et al., 2005, p. 386). This technique is explored in more detail and considered against the critical success factors for change management.
2.2.7 Critical success factors

The capacity to change well and at speed is an essential asset for any organisation (Pendlebury, Grouard & Meston, 1998, p. xv). This includes libraries. As already noted, change is a necessity for LIM organisations and their clients in order to take full advantage of the ever-evolving digital environment and the opportunities for expanded roles and partnerships offered within this environment (Warnken, 2004, p. 323). According to Penfold (2000, p. 34) the key to success for LIM organisations in the current-day environment of constant pressure to prove value of staff, services and existence to management, is the ability to “predict, manage and exploit change in all areas of work”.

Kotter (1995, p. 103) outlines eight critical success factors for positive change to transform an organisation:

- **Establish a sense of urgency** – examine market and competitive realities; identify and discuss crises, potential crises, or major opportunities
- **Form a powerful guiding coalition** – assemble a group with enough power to lead the change effort; encourage the group to work together as a team
- **Create a vision** – create a vision to help direct the change effort; develop strategies for achieving that vision
- **Communicate the vision** – use every vehicle possible to communicate the new vision and strategies; teach new behaviours by the example of the guiding coalition
- **Empower others to act on the vision** – get rid of obstacles to change; change systems or structures that seriously undermine the vision; encourage risk taking and non-traditional ideas, activities and actions
- **Plan for and creating short-term wins** – plan for visible performance improvements; create those improvements; recognise and reward employees involved in the improvements
- **Consolidate improvements and producing still more change** – use increased credibility to change systems, structures and policies that don’t fit the vision;
hire, promote and develop employees who can implement the vision; reinvigorate the process with new projects, themes and change agents

- **Institutionalise new approaches** – articulate the connections between the new behaviours and organisation success; develop the means to ensure leadership development and succession.

Other critical success factors for positive change include:

**Time** – Although the ability to control the time it takes to implement and complete change is not always within the manager or team leader’s power to influence particularly in situations of imposed changed, it does need to be noted that prolonged change can impact on the success of a change process. Team members may become “decreasingly motivated and increasingly skeptical” when the change process is too prolonged (Pendlebury, Grouard and Meston, 1998, p. 14).

**Recognition that everyone is responsible** – Often there is a view that “management is the source of problems and only management has the power to fix them” (Senge et al., 1999, p. 13). This is not the case and everyone is responsible for planning and implementing change. Part of this is enabling staff to get through the transition stage when implementing change. According to McKee (1998b) transition is the psychological process that people go through to come to terms with the change whether it be a new manager, a new location or a new role. McKee (1998b) believes that the transition stage needs to be successful in order to make the overall change process successful.

**Active communication** – Active communication is regularly raised as crucial for successful change management. The nature and reasons for change should be consistently and regularly communicated to stakeholders, particularly employees (Savery & Luks, 2000, p. 309). The demand from stakeholders for communication during a major organisational change initiative might be considerable and constant but active communication can assist in addressing rumors and developing trust (Ringer & Strong, 1998, p. 18).
Engage change agents – According to Ward (2007), people’s responses to change tend to fall in one of the following categories: Innovators or ‘change junkies’ (2-3%); Early Adopters (10-15%); Early Majority (30-40%); Late Majority (30-40%); Laggards (1-2%). Ward (2007) believes that the critical group is the Early Majority or more specifically, a sub group within who have a higher tolerance for risk than others within that group. These are the change agents who should be targeted and involved as much as possible as they will help to bring all groups together and create a successful change process. The value of change agents to achieve successful change attracts considerable support within the change management literature (Saka, 2003; Mosley, 2004; Holland, 2000; Shaughnessy, 1996).

Transform negative thinking into positive – Seeing the positive in a turbulent environment of imposed change make take some doing but transforming individual’s thinking particularly in periods of radical change is strongly supported (Kohl, 2006, p. 118). This view is supported by Calabrese, Goodvin and Niles (2005, p. 440) who state: “An organization that delves into problems will keep finding problems but an organization that attempts to appreciate what is best in itself will discover what is positive. These discoveries can bring about change based on a foundation of strengths.” This transformation of thinking requires individuals and the collective group to focus on success rather than just problems to solve.

Tombaugh (2005, p. 16) posits that change management methodologies relying on problem-solving techniques should be replaced with approaches that instead identify and build on the factors of organisational success. One change management approach that takes this type of positive approach is Appreciative Inquiry (AI). This technique will be explored in more detail in the next section of this review.
2.3 Appreciative Inquiry

“Ap-pre’ci-ate, v., 1. valuing; the act of recognizing the best in people or the world around us; affirming past and present strengths, successes, and potentials; to perceive those things that give life (health, vitality, excellence) to living systems 2. to increase in value, e.g. the economy has appreciated in value. Synonyms: VALUING, PRIZING, ESTEEMING, and HONORING.

In-quire’ (kwir), v., 1. the act of exploration and discovery. 2. To ask questions; to be open to seeing new potentials and possibilities. Synonyms: DISCOVERY, SEARCH, and SYSTEMATIC EXPLORATION, STUDY.“

(Cooperrider & Whitney, 1999, p.2)

Appreciative Inquiry (AI) is a change management technique based on finding the best within an organisation and building on the elements that make it the best. AI has evolved from the field of organisational development and has been getting increasing attention for its successful application in facilitating organisational change (Coghlan, Preskill & Catsambas, 2003, p. 5).

Defined more formally by Cooperrider, Whitney and Stavros (2003, p. xiii): “AI is a form of transformational inquiry that selectively seeks to locate, highlight, and illuminate the ‘life-giving’ forces of an organization’s existence.” AI revolves around qualitative, narrative analysis, focusing on stories and their generative potential (Whitney & Trosten-Bloom, 2003, p. 166). Interviews and subsequent data analysis are important elements in the “mean-making” or “sense-making” activity in what is termed the Discovery phase of the AI process. Interviews are designed to be informative, enlightening and inspiring and are used as a means to encourage people to remember the best times and what made them the best times, to recognise that they share similar dreams for their organisation and to be inspired to create the best organisation possible (Whitney & Trosten-Bloom, 2003, p. 140-141).
According to Watkins and Cooperrider (2000), AI is “an inquiry process, a continuous learning paradigm that seeks the most creative and generative realities.” AI takes a significantly different approach to organisational issues, challenges and concerns by focusing first on what is working particularly well in the organisation instead of focusing on problems as is the approach more often taken by organisations during the change management process. Avital (2003, p. 6) provides a contrast of the main unique features of AI with those of what he terms ‘deficit thinking’ (see Table 1.)

<table>
<thead>
<tr>
<th>Method Archetype</th>
<th>Appreciative Inquiry</th>
<th>Deficit Thinking</th>
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</thead>
<tbody>
<tr>
<td>Drive</td>
<td>Generative inquiry</td>
<td>Problem solving</td>
</tr>
<tr>
<td>Focus</td>
<td>Boundary spanning</td>
<td>Gap closing</td>
</tr>
<tr>
<td>Tactical Objective</td>
<td>Enable success</td>
<td>Prevent failure, fix problems</td>
</tr>
<tr>
<td>Actors</td>
<td>Whole systems</td>
<td>Varied, usually isolated entities</td>
</tr>
<tr>
<td>Guiding Paradigm</td>
<td>Voluntaristic</td>
<td>Mainly deterministic</td>
</tr>
</tbody>
</table>

Table 1 Distinct features of Appreciative Inquiry (Avital, 2003, p. 6)

AI exchanges deficit thinking with affirmative processes for change management assuming the best of people, organisations and relationships (Whitney, 1998, p. 315). Instead of hunting down possible causes and solutions to problems, effort is put into imagining what it would be like if the “best of what is” occurred more frequently and what resources would be required for this to happen. Based on this, changes are implemented to bring about the desired future. As Coghlan, Preskill and Catsambas (2003, p. 6) state:

“The power of Appreciative Inquiry is the way in which participants become engaged and inspired by focusing on their own positive experiences. Usually in a workshop setting, participants remember and relate personal experiences of success, identify the common elements of these experiences, and devise statements and action plans for making those experiences occur more often in the organization.”

2.3.1 The development of Appreciative Inquiry

The origins of AI stem from organisational development and arose from the work of David Cooperrider, a doctoral student at Case Western Reserve University in the US in
1980. Cooperrider and his supervisor, Suresh Srivastva, changed an organisational analysis looking at what was going wrong with an organisation into an inquiry focusing on the positive life-giving factors of that organisation. Over the past three decades, AI has evolved from a theory to a practical process for positive change management in organisations and the applications of AI have been many and varied. Whitney (1998, pp. 318-319) highlights some of the applications of AI such as global organizing, organisational culture change, team building, leadership development and performance management. Other examples of the application of AI include:

- A qualitative case study grounded in appreciative inquiry was used to identify traits and attitudes of teachers that supported effective teaching at a high school in the US (Calabrese, Goodvin & Niles, 2005).
- AI was utilised as a means of improving the practice of exit interviews (conducted when a staff member leaves an organisation) making it a positive experience for both the organisation and the staff member (Bosch, 2001).
- AI philosophy and methodology was used to establish and implement a strategy for the professional development of a global company’s salesforce (Goldberg, 2001).
- A study into understanding the organisational determinants that contribute to IT system success applied AI as the methodology (Avital, 2003).
- Mellish (2001) applied AI to strategic planning to facilitate the amalgamation of four departments into one new faculty within an Australian university.
- AI was identified as a cost-effective way to connect UK National Health Service (NHS) professionals’ motivations toward quality in their work with the strategic direction of the NHS (Wright & Baker, 2005).
- A study by Akdere (2005) with a small resident-based nonprofit organisation indicated that the AI method was an appropriate model for systemic practice in community development.
- Van Vuuren and Crous (2005) explored AI as an alternative approach to initiate the management of ethics in organisations.
- A case study of the Sri Lankan cricket team used AI to enhance their teamwork prior to their April-July 2006 tour of England (Gordon, 2008)
• AI was utilized as a strategy for ‘rejuvenating’ an academic lecturer’s professional practice, enabling the development of a personalized action plan for future professional practice (Giles & Kung, 2010).

As these examples illustrate, AI can be applied in different environments from the personal to the organisational addressing a wide range of issues. More examples of the application of AI can be discovered at the Appreciative Inquiry Commons\(^2\). An Australian portal called the Australian Appreciative Inquiry Network\(^3\) has also been launched providing links to papers, presentations and tools for sharing amongst AI practitioners or those simply interested in finding about more information about this technique. More recently, around 40 people gathered in Melbourne on 6 October 2010 for the inaugural “Appreciative Inquiry Forum: Exploring Appreciative Inquiry in Australia” to inform those interested in being part of the AI community\(^4\). This forum grew from contacts established at the 2009 World Appreciative Inquiry Conference “Creating a Positive Revolution for Sustainable Change” held in Kathmandu, Nepal 16-19 November 2009\(^5\).

2.3.2 Principles of Appreciative Inquiry

AI is a framework with “particular principles and assumptions and a structured set of core processes and practices for engaging people in identifying and cocreating an organization’s future” (Coghlan, Preskill & Catsambas, 2003, p. 6). There are eight essential beliefs underpinning the practice of Appreciative Inquiry. Whitney and Trosten-Bloom (2003, p. 54-55) provide a summary outlining the eight principles and their definition (see Table 2).

<table>
<thead>
<tr>
<th>Principle</th>
<th>Definition</th>
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</thead>
<tbody>
<tr>
<td>1. The Constructionist Principle</td>
<td><em>Words Create Worlds</em></td>
</tr>
<tr>
<td></td>
<td>• Reality, as we know it, is a subjective vs. objective state.</td>
</tr>
<tr>
<td></td>
<td>• It is socially created, through language and conversations.</td>
</tr>
</tbody>
</table>

\(^2\) [http://appreciativeinquiry.case.edu](http://appreciativeinquiry.case.edu/)

\(^3\) [http://www.appreciativeinquiry.net.au](http://www.appreciativeinquiry.net.au)


<table>
<thead>
<tr>
<th>Principle</th>
<th>Description</th>
</tr>
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</table>
| 2. The Simultaneity Principle    | *Inquiry Creates Change*  
  - Inquiry is intervention.  
  - The moment we ask a question, we begin to create a change. |
| 3. The Poetic Principle          | *We Can Choose What We Study*  
  - Organisations, like open books, are endless sources of study and learning.  
  - What we choose to study makes a difference. It describes – even creates – the world as we know it. |
| 4. The Anticipatory Principle    | *Image Inspires Action*  
  - Human systems move in the direction of their images of the future.  
  - The more positive and hopeful the image of the future, the more positive the present-day action. |
| 5. The Positive Principle        | *Positive Questions Lead to Positive Change*  
  - Momentum for large-scale change requires large amounts of positive affect and social bonding.  
  - This momentum is best generated through positive questions that amplify the positive core. |
| 6. The Wholeness Principle       | *Wholeness Brings Out the Best*  
  - Wholeness brings out the best in people and organizations.  
  - Bringing all stakeholders together in large group forums stimulates creativity and builds collective capacity. |
| 7. The Enactment Principle       | *Acting “As If” is Self-Fulfilling*  
  - To really make a change, we must “be the change we want to see.”  
  - Positive change occurs when the process used to create the change is a living model of the ideal future. |
| 8. The Free Choice Principle     | *Free Choice Liberates Power*  
  - People perform better and are more committed when they have freedom to choose how and what they contribute.  
  - Free choice stimulates organizational excellence and positive change. |

Table 2 Principles of Appreciative Inquiry (Whitney & Trosten-Bloom, 2003, p. 54-55)
Whitney and Trosten-Bloom (2003, p. 78) believe these eight principles point to one simple message: “Appreciative Inquiry is about conversations that matter.” By this, the authors are referring to an inclusive, two-way communication approach that might take the form of inquiry, dialogue, discussion or debate with all stakeholders at all levels in the change process. Bushe (2007, p. 30) posits that “AI’s distinctive competence is as an intervention into the social construction of reality.” This genuine open communication has the ability to generate energy for all stakeholders to collectively design positive futures based around the eight principles list in the table above.

These principles have been translated into eight assumptions by Hall and Hammond (n.d.) to assist in communicating the basics of AI:

- “In every society, organization, or group, something works
- What we focus on becomes our reality
- Reality is created in the moment, and there are multiple realities.
- The act of asking questions of an organization or group influences the group in some way
- People have more confidence and comfort to journey to the future (the unknown) when they carry forward parts of the past (the known).
- If we carry parts of the past forward, they should be what is best about the past.
- It is important to value differences.
- The language we use creates our reality”.

Hammond (1998, p. 13) explains assumptions as “the set of beliefs shared by a group, that causes the group to think and act in certain ways.” By questioning long-held assumptions and replacing them with new and more appropriate assumptions, the first step necessary for any organisational change has been taken (Hammond, 1998, p. 13). The assumptions listed above might seem straightforward but it is a noticeable shift away from the traditional problem-solving change management approach taken by many LIM organisations. Several of the assumptions support the theory of social constructionism, reflecting the belief that there is no one reality or truth but that truth is grounded in individuals’ perceptions and their shared understandings of reality (Coghlan, Preskill & Catsambas, 2003, p. 8). One of the key differences that separates AI from other conventional change management process is the focus AI has on changing how people think rather than just focusing on changing what people do (Bushe & Kassam, 2005, p. 161). AI assumes that even in the most challenging organisation, there
are experiences and practices that can be shared with the collective group through conversations and shared stories in order to create a hopeful future together (Branson, 2007). The power of conversation is mentioned above as an assumption of AI, recognizing that the presence of the researcher and the way questions are worded will influence the group in some manner as they participate in the Appreciative Inquiry process (Hall and Hammond, n.d.). In this way, the AI process begins with an affirmative topic to focus the conversation on the positive.

2.3.3 The Appreciative Inquiry process

The AI process commences with the selection of an affirmative topic or topics providing context for the process (Mellish, 1999). These topics must be stated in the affirmative and should be something that the organisation wants to learn about and enhance (Whitney, 1998, p. 317). Affirmative topics can be determined by a small focus group or by all the organisation members and will form the basis for the Appreciative Inquiry four “D” cycle: Discovery, Dream, Design and Destiny (see Figure 1).

![Figure 1 The 4-D Model of Appreciative Inquiry (Cooperrider & Whitney, 1999, p.30)](image-url)
2.3.3.1 Discovery – Appreciating what gives life.

The purpose of the Discovery phase is to recognise and evoke the positive potential of the team or organisation through inquiry (Van Vuuren & Crous, 2005, p. 406). Interview questions are formed around the affirmative topic, and an interview guide is created that explores the participants’ beginnings with the organisation, what they value most about themselves, their work and the organisation, their appreciative stories related to the affirmative topic and their hopes and dreams for the organisation (Whitney, 1998, p. 317). Cooperrider, Whitney and Stavros (2003, p. 23 provide the following set of generic questions that can be used as a starting point to discover ‘life-giving’ aspects of an organisation or workplace:

1. “Looking at your entire experience with the organisation, remember a time when you felt most alive, most fulfilled, or most excited about your involvement in the organisation.
   a. What made it exciting?
   b. Who else was involved?
   c. Describe how you felt about it.

2. Let’s talk for a moment about some things you value deeply; specifically, the things you value about yourself, about the nature of your work, and about this organisation.
   a. Without being humble, what do you value most about yourself as a person and as a member of this organisation?
   b. When you are feeling best about your work, what about the task itself do you value?
   c. What do you value about the organisation?
   d. What is the most important thing this organisation has contributed to your life? To the world?

3. What do you experience as the core factors that give life to this organisation? Give some examples of how you experience those factors.

4. What three wishes would you make to heighten the vitality and health of this organisation?” (Cooperrider, Whitney & Stavros, 2003, p. 23).

These core questions can be modified to suit the chosen affirmative topic. For example, if the affirmative topic is getting the best from team meetings, the questions would change their focus from the organisation to the team. The interviews are usually conducted in pairs, ideally with all members of the organisation participating. Although paired interviews are recommended by Hammond (1998, p. 35) as the most effective
tool for exploration, organisations with geographically distributed staff may have a small team of staff trained in AI who then travel around to do all the interviews with the distributed staff. Key themes that emerge from the Discovery phase are then explored further in the following Dream phase.

2.3.3.2 Dream – Envisioning what might be.

As mentioned, the Dream phase builds on information gathered from the Discovery phase. Key themes that have emerged are explored further and transformed into statements of strategic and social intent (i.e. positive propositions) that excite, stretch and guide participants towards a preferred future (Mellish, 1999). Hammond (1998, p. 42) explains the process as follows: find examples of the best (from the interviews); determine what circumstances made the best possible (in detail); take the stories and envisage what might be. As part of this last step, write an affirmative statement (a provocative proposition) that describes the idealized future as if it were already happening. To write the proposition, apply “what if” to all the common themes. Then write affirmative present-tense statements incorporating the common themes.

Hammond (1998, p. 43) then provides a number of example provocative propositions based on the affirmative topic of extraordinary customer service:

- “Our customers have a pleasant experience when they talk to us
- We anticipate their needs and have the information available when they call
- The information we need to answer their question is available to us with a touch of the finger
- We devote time to learning more so we keep our expertise current
- We feel the support of our other organizational members and are confident we all know extraordinary service is how we help people
- Our business provides an important service to our customers
- We are proud to be a part of this organization”.

Another example of a provocative proposition focusing on information and knowledge management is provided by Whitney and Trosten-Bloom (2003, p. 213):

“Up to the minute information is one of the vehicles through which we serve our customers and maintain our professional capacities. Everyone has access to the information needed to excel at their job. Our state of the art knowledge management
system allows each of us to create a personalized portfolio of information and to share best practices, to host online dialogues, and to keep ahead of the competition.”

Participants visualise a desirable future, envisioning themselves and their organisation functioning at their best (Coghlan, Preskill & Catsambas, 2003, p. 10). This phase encourages participants to think ‘outside of the box’ and to collectively engage in describing their dream for the future of their work and their organisation (Whitney, 1998, p. 317).

2.3.3.3 Design – Co-constructing what should be.

It is important to focus on developing achievable plans and steps to make the vision from the Dream phase a reality (Akdere, 2005, p. 26). The Design phase is focused on articulating what has to be put into place to support the vision. The outcome of this phase may be strategies, processes, and systems required to make the vision happen. Mellish (2001, p. 54) reports on the Design phase of an AI case study with an Australian university. In that example, the participants compiled a list of key operational impact issues for the provocative propositions and then developed a project plan covering scheduled tasks, accountabilities, resource implications and a timeline. These details were then mapped into a broader transitional plan enabling the change to occur in a positive, inclusive manner.

2.3.3.4 Destiny – Sustaining; to empower, learn and adjust/improvise.

The fourth stage of the AI model is the Destiny cycle in which all the previous discussions are linked together. Participants discuss what will be and how to liberate, learn, actualize and improvise what has been planned (Akdere, 2005, p. 26). Key decisions are made, action plans developed and strategic performance indicators identified (Mellish, 2001, p. 55). Akdere (2005, p. 26) refers to this as the “sustaining stage” where co-creating a sustainable preferred future is the focal point. As the model illustrated in Figure 1 indicates, this phase is ongoing as participants implement changes, monitor their progress and engage in new discussions and appreciative inquiries (Coghlan, Preskill & Catsambas, 2003, p. 11).
It is important to note that there is very little about AI that is linear – it is a broad framework, not a rigid path to follow (Whitney & Trosten-Bloom, 2003, p.219). AI is meant to be flexible in order to apply to different organisations and situations. The participants can be focus groups, teams, whole organisations. This flexibility adds to the attraction of AI to organisations seeking to make change a positive experience.

2.3.4 Is there anything negative about Appreciative Inquiry?

Critical evaluations of AI as an action research approach are relatively scarce in the literature (Grant and Humphries, 2006, p. 402). Most of the criticism that does exist is about AI accentuating the positive too much and implying an unwillingness to examine problems, weaknesses and things that are going wrong (Patton, 2003, p. 91). In their study on AI and action research, Egan and Lancaster (2005, p. 42) interviewed AI practitioners who identified potential challenges to the AI process arising from tension from unidentified difficult interpersonal relations, unvoiced feelings of anger or frustration and the potential withdrawal of dissatisfied stakeholders from the AI process. However, Coghlan, Preskill and Catsambas (2003, p. 6) defend AI and say that it does address issues and problems, “but from a different and often more constructive perspective: it reframes problem statements into a focus on strengths and successes.” Supporting this view, Whitney and Trosten-Bloom (2003, p. 18) argue that AI does not dismiss accounts of conflict, problems or stress, it simply does not use them as the basis of analysis or action. When they do arise, accounts of conflict, problems or stress are validated as lived experience, and then reframed as a positive inquiry. The authors provide examples, e.g. the problem of high employee turnover becoming an inquiry into ‘magnetic work environments’; the problem of low management credibility reframed as an inquiry into traits of inspired leadership; the problem of sexual harassment at work is reframed to become a focus on creating ‘positive cross-gender working relationships’. The reframing of problems into affirmative topics is central to AI (Whitney & Trosten-Bloom, 2003, p. 19). This reframing brings about a shift in the thinking of AI participants. AI is not about “ignoring the negative, but seeking new ways to illuminate what is beneath the ‘problem’, what it is that the client of the system wishes to create for its future” (Royal & Hammond, 2001, p. 177).
An interesting posting by Burger (2004) on Knowledge Board\textsuperscript{6} uses the analogy of the Titanic and the iceberg in providing his critical review of the ability for AI to address specific issues. Burger (2004) claims “Appreciative enquiry [sic] techniques might have pointed out that the Titanic was an impressive ship, with a splendid interior, providing first class hospitality and entertainment…AE [sic] seems to be directed at summoning up team spirit and upbeat atmosphere. That may yet melt an iceberg.” This criticism that AI does not address issues head-on appears unfounded though as the affirmative topic can be formed on any issue, big or small. Coghlan, Preskill and Catsambas (2003, p. 6) support AI and say that it does indeed address specific issues and problems, but simply does so from a different, constructive perspective, reframing problem statements into statements of strength and successes. Continuing in this frame of discussion, Banaga (2001, p. 263) comments that AI accepts the realities of difficult issues as areas in need of transformation. Hammond (2005) refers to this as “naming elephants” in making sure that ‘undiscussables’ are brought into the conversation and framed in a constructive and positive way during the AI process.

In outlining the strengths and limitations of AI, Rogers and Fraser (2003, p. 75) consider that when used in the right circumstance and properly implemented, AI is a useful and valuable technique but caution that it requires special skills to be done properly and is not necessarily appropriate for every situation in the workplace. In this respect, Appreciative Inquiry is not a crisis management tool (Elliott, 1999, p. 53). Although it can help to provide a new view of the issues behind a crisis, AI takes time to conduct properly which is time a crisis situation often can’t afford. The better approach would be to utilise AI to address issues before a situation becomes a crisis.

2.3.5 Appreciative Inquiry as a positive change management technique for LIM organisations

Focusing on the positive and grounded in personal experience, AI is an alternative approach to change management that holds considerable promise for LIM organisations (Sullivan, 2004).

\textsuperscript{6}http://www.knowledgeboard.com/
According to Sorensen, Yaeger and Nicoll (2000) AI in both popularity and application, has spread dramatically. There is strong evidence that a strengths-based organisational culture and appropriate change management practices such as appreciative inquiry can help organisations to meet their business goals (Tombaugh, 2005, p. 17). This is as applicable to LIM organisations as it is to consumer product companies.

Mellish (1999) believes that the 4-D model of AI is “infinitely transferable to any context” and offers the following examples where AI could be applied: individuals reflecting on their career directions; a group needing to develop and agree on their team approach to an issue; different groups needing to establish co-operative arrangements; an organisation considering strategic shifts in direction; an organisation needing to align service strategy to client demand; an organisation attempting to manage a merger; or community consultations. Each one of these examples could be referring to LIM organisations. In the case of the CSIRO IM&T Library Services team, several of these examples are applicable to the change process the team was experiencing as part of the review of research support services. Similarly, Coghlan, Preskill and Catsambas (2003, p.19) describe a range of situations such as volatile work environments, deteriorated interpersonal relationships, and the desire to build a sense of community as opportunities where AI has the most potential to contribute. Although each one of these situations could be applicable to LIM organisations undergoing major change, there is a significant lack of evidence in the research literature that AI is being fully utilised by LIM organisations. Perhaps this outcome is not so surprising. As Sullivan (2004, p. 223) has noted, given the long history of taking a problem-solving approach, most libraries would find applying AI effectively would require a considerable shift in the organisation’s values and beliefs in introducing change. Despite this, Sullivan (2004, p. 224) considers that that AI could have major benefits and calls for LIM organisations to consider applying AI, even if it is just to begin a change process with the following list of ‘Discovery’ questions:

- “Identify a time in your experience with this library when you felt most effective and engaged. Describe this. How did you feel? What made this situation possible?”
- “What is your value to the organisation? In what ways do you contribute your best? What are your strengths?”
• What do you appreciate most about this library as an organisation? In what ways does it excel?
• What are the three or four most important aspirations for the future of this library? What are the key components for its vision?
• What are some sources of pride for you in your work?
• Describe a leader who has influenced you. What did that person do? How did that person interact with you? Describe some specific instances in which you experienced this influence.
• Think of a time when you felt especially creative. Describe what you were doing, what you were thinking, and what you were feeling.
• Tell me about a peak experience in your professional work. What was it about your situation, organisation, colleagues, or yourself that enabled this to occur?”

At the time of writing this review, a search of the literature revealed two presentations available on the Internet of libraries that have used AI – British Columbia Library Network (Morrison & Nussbaumer, 2007) and Washington State University Libraries (2006). The BC Library Network presentations are available online and the WSU Libraries have included a Web page with an overview of the AI process but published reports or articles in the LIM research literature by either organisation are not available at this stage. It would appear that LIM organisations have not adopted AI as a change management technique despite its popularity in other disciplines, or if they have, the results and learning from this process have not been made readily available in the literature.

2.3.6 Virtual teams and Appreciative Inquiry

The attraction of AI for LIM organisations with virtual teams is that AI “integrates inquiry and action within a particular developmental framework that guides the analysis and process of group interaction” (Patton, 2003, p. 88). Clutterbuck (2007, p. 172) considers AI to be a useful technique for teams to utilise for determining aspects such as:

• The success of each stage of the team’s evolution
• The valuable qualities that have been introduced at each stage
• The valuable qualities for which newcomers to the team would like to be recognised
• How the team as a whole can ensure that they are recognised
• What the team can do together to repeat or build on past successes
• How combining old and new perspectives can help to better achieve goals.

Bushe (1998, pp. 41-44) supports the effectiveness of AI for new teams and has developed a ‘best team’ AI intervention for new teams in which a shared and generative image of the new team is socially constructed through appreciative dialogue. As previously discussed, trust has been identified as a critical success factor for virtual teams. This could readily become the affirmative topic to be explored in the AI process. Hammond (1998, p. 57) provides a useful sample question for trust that could be used by LIM organisations with virtual teams:

“Describe a time when you were part of a team that had a high level of trust and respect among the members. How was trust and respect communicated? What made it possible to establish trust in that group?”

More sample positive questions are provided by Whitney, Trosten-Bloom, Cherney and Fry (2004, pp. 16-67). They organised them into various dimensions of team development and effectiveness including fostering supportive and empowering relationships; elevating energy and spirit; advancing productivity and performance; and stimulating purposeful and uplifting communication.

Although not referring specifically to virtual teams, many of the case studies on the application of AI were of large global organisations where one would assume virtual teams would exist. AI can be undertaken with small or teams as large as 1000 as was illustrated in some of the case studies. According to Stamps and Lipnack (2004, p. 31) a comprehensive approach to AI should “combine face-to-face with virtual methods to create a process that includes both synchronous (same time, whether face-to-face or virtual) and asynchronous (different time) interactions.” If all members of an organisation cannot come together, AI is flexible enough to allow a tailored approach – for example, if a LIM organisation has a large team of people geographically distributed across a country, then the initial affirmative topic could perhaps be developed through a smaller focus group that can be brought together face-to-face. The Discovery interviews can be done in regional groups, through a small team of staff trained in the AI process travelling around to all staff or even over the phone or via videoconference. This could be similar for the Dream phase. A sample of the larger population could then be
included in a workshop for the *Design* and *Deliver* phases. The important element to consider is the broader the involvement, the broader the benefits for the organisation. Youngman (1999) considered that most libraries were not positioned for rapid change – and this appears to still be the case over a decade later. LIM professionals need to respond to dynamic environments and that response needs to be informed by research (Rowley, 2004, p. 208). Calls have gone out for research to model change processes, to track the progress of major organisational change efforts in LIM organisations and to document their effectiveness (Stephens & Russell, 2004, p. 246). Despite this, the evidence in the literature is that although major restructuring of many LIM organisations is occurring, little is being written in a way that will provide guidance for those facing similar challenges (Ward, 2001, p. 137).

This is certainly the case with the application of positive change management techniques such as AI within LIM organisations. Although the literature on AI is considerable (and growing), there is a lack of research on the application of AI to LIM organisations. While AI may have been utilized by LIM organisations, the lessons learned from this application do not appear to have been shared widely with the professional community. Encouraged by the successful application of AI within a large variety of organisations and by the positive approach it provides to change management, the utilisation of AI by LIM organisations, particularly those with virtual teams, warrants further exploration. The value of AI to LIM organisations planning or undertaking change is evident:

> “Organizations are centers of human relatedness, first and foremost, and relationships thrive where there is an appreciative eye – when people see the best in one another, when they can share their dreams and ultimate concerns in affirming ways, and when they are connected in full voice to create not just new worlds but better worlds” (Cooperrider, 1996, p. 1).

This chapter has explored the literature in relation to change management in LIM organisations and the potential for a positive approach to change promoted through the use of Appreciative Inquiry. This research study will highlight the use of Appreciative Inquiry and assess whether it has practical applications in organisations such as CSIRO with a geographically distributed library team coping with a rapidly changing environment. The next chapter provides details about the research method, data collection and analysis as well as limitations around the research design itself.
Chapter 3: Research Design

“Human beings, by changing the inner attitudes of their minds, can change the outer aspects of their lives”

William James (1842-1910)

3.1 Introduction

Action research is employed as the main research method within this study. The attraction of taking this approach to the research lies in its appropriateness in situations, such as the CSIRO IM&T Library Services team, where there is a need to remain flexible, where there is a wish to be inclusive of participants in the research process, and where there is a desire to bring about change at the same time as undertaking research into a specific topic or issue (Dick & Swepson, 1997). Although predominantly a qualitative research project focused on “conversations that matter” using an Appreciative Inquiry approach, there is also a quantitative aspect to reporting the findings. This is not unusual as there is often scope within research projects to use qualitative and quantitative methods in a complementary way (Williamson, Burstein & McKemmish, 2000, p. 35). Findings from questionnaires and focus group discussions will be presented with the frequency of response indicated. Through the frequency of responses, readers can get a perspective of what might be a “common view” shared by participants about topics such as particular professional development activities considered to be essential to enhance change-readiness. This chapter describes the approach taken in both phases of the project, considers the strengths and weaknesses of the research methodology and the key issues that arose during the data collection process.

3.2 Social construction of reality

Broadly speaking, ‘interpretivism and ‘positivism’ are the two major traditions of research within the social sciences (Williamson, Burstein & McKemmish, 2000, p. 25). While positivist research is most usually associated with quantitative data collection and
deductive reasoning, interpretivist research has a greater emphasis on qualitative data collection and is concerned with meanings constructed by people as they interpret their world (Williamson, Burstein & McKemmish, 2000, p. 37). Through talking with others, humans construct meaning with regards to words and actions which then has the potential to create reality for that individual. As Ottosson and Björk (2004, p. 866) explain “reality is constructed from your thoughts of reality, which means that reality is relative and not absolute, as everybody will have their own view of reality.” Reality is created through the research participants’ perception of their world and their situation as well as their interpretation in communicating that perception. Sharing these thoughts and views with others through conversations can influence the group’s view of truth and reality. This is the basis of social constructionism. Rather than taking the stance that knowledge of the world is acquired through observation, social constructionism purports that it is what is experienced in active interchange between people that creates perspectives of the world (du Toit, 2003, p. 34). Meaning is constructed in the coordination of multiple values, beliefs, activities and perspectives of people engaging with one another (McNamee, 2002, p. 36) and the world they are interpreting (Crotty, 1998, p. 43). These meanings are fashioned through conversation, language and stories shared within an organisation (Gergen & Thatchenkery, 2004, p. 228; Lewis, Passmore & Cantore, 2008, p.45).

Social constructionism is one of the key principles that underpin the Appreciative Inquiry technique (refer to Table 2) and is evident through the storytelling approach that the Discovery phase encourages. Barge and Oliver (2003, p. 126) explain that Appreciative Inquiry is “unabashedly focused on identifying what works well within organizations as a means of engaging in and facilitating innovation in social-organizational relationships, arrangements and processes.” In this approach, words and conversations determine what is meaningful in the organisation (Manley & Shaw, 2002, p. 161). The storytelling and inclusive approach of AI encourages engagement within a group environment, building a sense of community and trust (Morris, 2004, p. 22). The social constructionism principle of AI is further supported by Olaisen (1985, pp. 141-142) suggesting that social reality is the product of the subjective experience of
individuals and the best way to get an understanding of that reality is by “direct, give-and-take interaction with the members of the population in question”. This can be a challenging task for the researcher to understand the meaning of the research participants’ view of reality (i.e. their view of what is true) and then to describe and interpret that meaning (Gorman & Clayton, 2005, p. 5) within the researcher’s own view of reality. Faure (2006, p. 25) believes that the “power of AI is in the convergence of these multiple realities into a common understanding across the organisation.” Appreciative Inquiry is an action research approach that provides the opportunity to engage in generative conversations at all levels, creating a common bond leading to organisational development through the social construction of new realities.

### 3.3 Method – Action research

Developed in the early 1940s and attributed to social psychologist, Kurt Lewin, action research is considered to be a “family of research methods united by a certain set of principles and a certain style” (Dick & Swepson, 1997). Cyclic in nature (or a series of cycles in a spiral form), action research is critically reflective and is often intended to bring about a change of practice, while creating knowledge at the same time (Oosthuizen, 2002, p. 161). In its most basic form, action research can be illustrated as shown in Figure 2.

![Action Research Cycle](image)

**Figure 2 Basic action research cycle (Oosthuizen, 2002, p. 161)**

Some action research cycles incorporate other specific steps such as plan, act, observe, reflect (Moody & Shanks, 2003, p. 626) or pre-stage context and purpose, diagnosing,

- Planning a change
- Acting and observing the process and consequences of the change
- Reflecting on these processes and consequences
- Replanning
- Acting and observing again
- Reflecting again, and so on…

The emphasis is on critical reflection which consists of an analysis of the action from the previous step and then planning the next action based on this analysis (Dick & Swayne, 1997). This reflective approach engenders a learning process in the action research cycle (Oosthuizen, 2002, p. 161). The difference between action research and other methods is that this learning process results in actionable knowledge (Coghlan & Brannick, 2005, p. 14). Rowley (2004, p. 213) supports this, claiming that a definitive aspect of action research is that it involves the dual goal of providing a practical solution to a problem while making a contribution to knowledge. There are a quite a number of approaches to action research. These range from traditional action research taking a problem-solving, collaborative change management approach central to the theory of organisational development, through to participatory action research seeking to empower people through the process of constructing and using their own knowledge to address a particular situation (Coghlan & Brannick, 2005, pp. 14-20). Appreciative Inquiry is another action research approach but differs from traditional action research in that it exchanges deficit, problem-solving thinking with affirmative processes for positive change management assuming the best of people and organisations (Whitney, 1998, p. 315).

Just as there are many approaches to action research, there are also many techniques that can be utilized within each approach. These can include interviews, focus groups, content and group feedback analysis (Oosthuizen, 2002, pp. 167-171). As Bradbury and Reason (2001, p. 451) comment: “Action research respects and works with many
epistemologies”. Whatever the approach or technique used, action research has a number of consistent characteristics. Greenwood and Levin (1998, pp. 75-76) outline the core characteristics of this research methodology as:

- Action research is context bound and addresses real-life problems
- Action research is enquiry driven where participants and researchers co-generate knowledge through collaborative communicative processes in which all participants’ contributions are taken seriously
- Action research treats the diversity of experience and capacities within the local group as an opportunity for the enrichment of the research-action process
- The meanings constructed in the inquiry process lead to social action, or these reflections on action lead to the construction of new meanings
- The credibility-validity of action research knowledge is measured according to whether actions that arise from it solve problems (workability) and increase participants’ control over their own situation.

3.3.1 Action research and information science

Dick and Swepson (1997) present the view that action research is indeed an appropriate method for those “in the business” (i.e. practitioners). Glanz (1999) supports this approach claiming that action research can help practitioners to glean valuable insights into practice. Although Glanz (1999) was specifically referring to the application of action research by teachers within the school environment, his views are very applicable to practitioners within the information sciences as well. Glanz (1999) believes that action research:

- Creates a professional problem-solving ethos;
- Enhances decision-making – builds greater feelings of competence in solving problems and making instructional decisions;
- Promotes reflection and self-assessment;
- Instils a commitment to continuous improvement;
- Creates a more positive climate in which learning is one of the foremost concerns;
• Impacts directly on practice; and
• Empowers those who participate in the process.

This view is supported by Dick and Swepson (1997) who believe action research is particularly appropriate in situations where there is a need to remain flexible; where there is a wish to involve people in the system being researched; where there is a desire to bring about change at the same time; or where the situation is too ambiguous to frame a precise research question.

Each of these situations would be applicable to the information sciences – and many a practitioner would identify these as indicators of the appropriateness of action research within their work environment.

Markless and Streatfield (2006, p. 120) claim the views of action research in LIM organisations can range from “cheap research conducted by practitioners dragooned into undertaking fieldwork on behalf of academic colleagues, through to real professional development based on the idea of the reflective practitioner focusing on service impact.” It is this latter point about utilising action research to respond to change with practical outcomes on service impact and knowledge generation that attracts IS practitioners to employ action research within the workplace. Action research can provide a useful platform for investigation within the LIM environment. Rowley (2004, p. 214) suggests some of the possible aspects to explore include change management and innovation; organisational cultures and sub-cultures; decision-making processes; team working and team effectiveness; communication; customer experiences and service delivery. Of these, change management is particularly appealing.

It should be noted however, that a degree of confusion appears to exist among practitioners over action research and “business as usual” with some practitioners (upon hearing about action research) asking “isn’t that what I do now as part of my professional practice?” (Dick & Swepson, 1997; Wortley, 2000). When unevaluated action is incorrectly presented as action research, this gives action research a poor reputation (Swepson, 1995). Another complaint about action research in LIM has been
that too much of the published literature falls into the ‘look at what I have done’
category rather than being a clearly structured discussion of the problems, theoretical
and Schwartz (1996) refer to this as “wash and wear” research that is primarily action
without the theoretical context of action research. There are indeed many similarities
between action research and ‘business as usual’ practices but the distinguishing point is
the deliberate, frequent, critical reflection that forms a core part of the action research
methodology (Dick & Swepson, 1997). However, like any research methodology, there
are both strengths and weaknesses which make the approach more appropriate to some
situations than others.

3.3.2 Strengths of action research

Action research has a number of strengths that relate to the way it builds on the
knowledge and experience among participants, using existing techniques of research for
the development of a practical outcome. The main strengths of action research are that it
is practical, participative, context sensitive and critically reflective.

Practical – not only are there real benefits for participants through a practical outcome
but action research should also result in the generation of knowledge that is useful for
developing the capacity in organisations to solve their own problems (Olsen & Lindøe,

Participative – action research builds on knowledge and experience among participants
including the researcher. As Greenwood and Levin (1998, p. 78) highlight, unlike other
social science research that purposely blurs the researcher’s social role, action research
fully acknowledges the participant status that the research has, treating this as a resource
for the process and that the development of new knowledge (the desired outcome of the
research) is built specifically on this participation. The use of multiple informants (i.e.
stakeholders) in the process is another strategy useful for improving the rigour of action
research (Moody & Shanks, 2003, p. 613; Dick, 2002).
**Context sensitive** – action research explicitly portrays values relating to the research topic and research participants as an inevitable and important part of the research process (Macklin, 2005, p. 6). Actions and meanings generated from the action research process need to be understood and explained within context of the situation at hand and the community involved in the research at that point in time. In the case of this research study, although the questionnaires and interview tools developed can be utilized by other LIM organisations, the results from this research will be specific to the CSIRO IM&T Library Services team at a particular stage in a major restructure process and may not necessarily be replicated elsewhere.

**Critically reflective** – if undertaken correctly, the researcher needs to ensure that the critical reflection aspect of the action research process looks specifically for things that contradict the expected (or desired) outcomes. The active seeking of disconfirming evidence is a strategy recommended to improve the internal validity of action research results (Moody & Shanks, 2003, p. 631; Dick, 2002). The overall strength of action research is that can be readily undertaken within real organisations with real people and allows research ideas to be refined via an iterative learning process (Moody & Shanks, 2003, p. 626).

### 3.3.3 Weaknesses of action research

Some of the weaknesses of action research have been identified as difficulty in generalising results beyond specific cases (validity) and researcher bias (reflexivity) (Moody & Shanks, 2003, p. 627).

**Validity** – action research is almost never generalisable (Glanz, 1999). Action research builds on the relatively unique combination of specific knowledge and experience that each group of participants has. The evolutionary nature of action research means that there is usually not a simple beginning and end point and that the “choice-points” (Bradbury & Reason, 2001) experienced along the way are most likely to be different from one research project to the next and one research group to the next. This has been
seen as one of the major disadvantages of action research (Dick & Swepson, 1997). Action research is perceived as being aimed at local decision-making only, limiting it to a single organisation at a specific point in time (Hernon & Schwartz, 1998; Hernon & Schwartz, 1999; Van House, 1991). A possible solution to this drawback is to undertake a number of studies in similar settings and see if the results are alike. However, the fact that the results may not be generalisable does not mean that the outcome is not useful. The application of action research within that library, or that organisation, or that community of information professionals is still of value if it results in change and the generation of knowledge within that library, organisation or community. Indeed, Moody and Shanks (2003, p. 639) consider that the fact that the organisation incorporates the outcomes of the action research into their standard practices is the ultimate test of validity.

**Reflexivity** – action research faces the same scrutiny as other qualitative research methods in the issue of researcher influence on the subject of their research. Reflexivity is recognising and accounting for the complexities of the researcher’s presence within the research setting (Holliday, 2007, p. 138). In action research, this issue is addressed by critical subjectivity which is “a state of consciousness different from either the naïve subjectivity of ‘primary process’ awareness and the attempted objectivity of egoic ‘secondary process’ awareness” (Reason, 1994, p. 327). As Reason (1994, p. 327) goes on to explain, critical subjectivity means that it is understood that people’s view of reality is going to influence their participation and contribution to the research process. Action research explicitly recognises this and through critical subjectivity, highlights the awareness of the individual’s perception and bias and articulates this as part of the research process. The two danger areas according to Reason (1994, p. 327) are unaware projection and consensus collusion. Unaware projection can occur when anxieties created from the examining and questioning nature of the research process are projected onto, or cloud, the issue under study. Consensus collusion has the potential to occur in situations where participants (or co-researchers) may band together as a group in response to an anxiety to defend their shared worldview or their particular area of
experience. This can have significant impact on the democratic approach supported by action research.

Not all researchers believe that action research has these weaknesses. Dick (1997) strongly supports the validity of action research, claiming that action research is better placed than other research methods to meet the challenges of flexibility and participation in complex situations. This is reinforced by Oosthuizen (2002, p. 163) outlining the ways in which action research can be undertaken in a rigorous manner to order to generate valid knowledge. With these strengths and limitations in mind, action research was confirmed as an appropriate method for assessing this change management project.

3.4 Data collection and analysis

The focus of this research is an exploration of how Appreciative Inquiry could benefit the change management process of an organisation such as CSIRO, particularly in teams that are distributed and working virtually. The research is designed around AI principles employing an action research method. The constructionist lens that focuses the study influences the nature of the research questions that were asked and informed the research design. Appreciative Inquiry requires that the action research method focuses on exploring examples of positive influence and factors that facilitate and strengthen change. This first stage of the research is driven by the following question How can Appreciative Inquiry be used as a positive change management technique for LIM organisations? The second question, How effective the Appreciative Inquiry approach to change management might be for organisations relying upon virtual teams provides the evaluative aspect of the AI enquiry and the action research method. It does this by exploring the effectiveness of AI in identifying positive factors and influences that enable change to occur. This is particularly important for environments that are fractured or distributed across organisations such as the virtual library and record teams within CSIRO Information Management & Technology (IM&T) who form the sample for this research.
The four phases of the research design are outlined in the following sections. The AI process is framed by constructivism, therefore the research was designed to explore how participants experienced and made meaning of the change management process. In keeping with the AI approach, the research design focused on collecting examples of positive factors and influences that contributed to the change management focus in the Discovery and Dream phases of the study. The final phase of the research is the Destiny phase which acts as the evaluative phase of the study. In this final phase participants move to reflecting on the change management process. A combination of quantitative and qualitative data is gathered at this point via a 12 question survey using a 5-point Likert type scale to assess direction (positive or negative) and intensity of participant's experiences within this change-management study. The use of quantitative measures provides a perspective of what might be a 'common view' shared by participants.

There were two key stages of the project (see Figure 3):

Stage 1: Application of the Appreciative Inquiry Discovery phase – The first stage of the research project consisted of a Pilot study and the application of the Discovery phase of the AI technique in response to Sullivan’s (2004, p. 227) suggestion to “Begin a planned change or problem-solving effort with reflective exploration of the ‘best of what is’”. This was essentially referring to the application of the Discovery phase of AI. Stage 1 of the research project thus involved the following steps:

- Examine Appreciative Inquiry surveys and develop a questionnaire for the Discovery phase to find out “what gives life” in exceptional change-ready teams.
- Apply questions in a pilot study.
- Modify the Discovery questionnaire as a result of the pilot study.
- Apply the modified Discovery questionnaire at a workshop held in 2007 with CSIRO Library and Records staff members.
- Transcribe the questionnaire responses.
- Analyse questionnaire responses for the emergence of common themes.
- Report the findings.
Stage 2: Application of the full Appreciative Inquiry cycle (Discovery, Dream, Design, Destiny) The second stage of the project involved the application of the complete four phases of the AI technique and involved the following steps:

- Identify an affirmative topic from analysis of Stage 1 outcomes.
- Incorporate lessons learnt from Stage 1 into the application of the full AI cycle dealing with the topic raised in Step 1.
- Develop an appropriate questionnaire for the Discovery interview.
- Apply the questions in one-on-one Discovery interviews with a sample group.
- Transcribe the Discovery interview responses.
- Analyse the Discovery transcriptions for the emergence of common themes.
- Report the findings from the Discovery interviews.
- Undertake the Dream & Design phases of the AI cycle drawing on the outcomes of the Discovery phase.
- Complete the AI cycle with the application of the Destiny phase, using a survey to gather feedback and evaluate the process.

3.4.1 Sampling

Where direct observations of every element in a research population are not feasible, a subset or sample is often used to reflect the characteristics of the total population (StatPac Inc., 2009). Social science research uses two general approaches to sampling, classified as either probability or nonprobability. The probability approach is where all participants in the population under study have a possibility (that can be mathematically calculated) to be included in the sample selected. Random sampling, systematic sampling and stratified sampling are all forms of probability sampling. If a nonprobability approach is taken to sampling, this means that participants in the population under study are selected in a non-random manner usually on the basis of their availability or because of the researchers’ personal judgement that the participants are suitably representative (Herek, n.d.).
Chapter 3: Research Design

Figure 3 Outline of the research project

**Pilot Study (Discovery)**
Affirmative topic: *Exceptional change-ready teams*
Participants: 5
Research group: CSIRO Library staff
Technique: Semi-structured interviews via phone or in-person

**Discovery**
Affirmative topic: *Exceptional change-ready teams*
Participants: 83
Research group: CSIRO IM&T Library and Records staff
Technique: Paired interviews in-person at workshop session, Melbourne

**Appreciative Inquiry 4-D Model** – *Affirmative topic drawn from Stage 1: “Professional Development for CSIRO Library staff in a changing world: The right skills for today and tomorrow*

1. **Discovery**
   Participants: 29
   Research Group: CSIRO IM&T Library staff
   Technique: One-on-one interviews via MeetingPlace (online collaboration tool)

2. **Dream**
   Participants: 60
   Research group: CSIRO IM&T Library staff
   Technique: Group activity in-person at Library Conference, Canberra

3. **Design**
   Participants: 60
   Research group: CSIRO IM&T Library staff
   Technique: Group activity in-person at Library Conference, Canberra

4. **Destiny**
   Participants: 25
   Research group: CSIRO IM&T Library staff
   Technique: 5 point Likert-type scale survey via email

*Figures not shown:* Questions refined, Affirmative topic identified.
Nonprobability selection methods include purposive sampling, judgement sampling or snowball sampling (also known as network sampling). This research project used both approaches to sampling.

For the pilot study in Stage 1, purposive sampling, a nonprobability approach used when it is important to include specific groups in the sample, was undertaken (Williamson, 2000, p. 213). Purposive sampling was used for the pilot study to help inform the further development of the *Discovery* questionnaire. By using purposive sampling, participants were able to be chosen based on specific criteria such as participants’ time with CSIRO and the participants’ location. The variation in time working within CSIRO was an important element to consider, as it was desirable to include participants with a range of time within CSIRO and therefore a range of exposure to changes and opportunities within the organisation. Location was also considered an important factor in selecting participants in order to represent the geographically-dispersed, virtual nature of the CSIRO Library network. Although the resulting sample of participants in the pilot study was female, gender was not a defining factor for their inclusion.

For Stage 2 of the research project, systematic sampling, a probability approach, was used to draw a sample from the entire CSIRO IM&T Library Services team. Due to limitations with time and staff available to conduct the interviews, a systematic approach was taken which involved selecting every $n^{th}$ element from a list until the total list had been sampled (Williamson, 2000, p. 212). In the case of this research project, every 2$^{nd}$ name was chosen from the list of total staff in the CSIRO IM&T Library Services team. The staff list used in this case was in no particular name order (i.e. not alphabetical by surname). This sampling method created a research sample group of 36 potential participants to target for participation in the *Discovery* interviews. This sample size provided a manageable number of interviews to be conducted in the period of time available and would provide a snap-shot of the views and activities of approximately half of the CSIRO IM&T Library Services team members with regards to professional development activities. The results of the sampling methods are discussed in the next section on data collection.
3.4.2 Data collection from Stage 1 of the research project (application of the *Discovery* phase of the AI model)

3.4.2.1 Pilot study

The pilot study using the *Discovery* phase of Appreciative Inquiry was undertaken in August 2005. The participants were employees of CSIRO and members of the CSIRO Library Network, an informal but strong consortium of CSIRO library staff. The CSIRO Library Network was integrated with Records and IT staff to form CSIRO Information Management & Technology team in June 2006. For this pilot study, five members of the CSIRO Library Network were selected through purposive sampling based on the time employed with CSIRO and the location of the participant.

Two of the participants had considerable length (>20 years) of employment with CSIRO while the other three participants varied from < 5 years experience with CSIRO, between 6-10 years within CSIRO and between 11-15 years within CSIRO. This variation in time working within CSIRO was an important element to consider, as it was desirable to include participants with a range of time within CSIRO and therefore a range of exposure to changes and opportunities within the organisation.

Location was also considered an important factor in selecting participants in order to represent the geographically-dispersed nature of the CSIRO Library Network. Four of the participants were based in metropolitan locations (two in Canberra, one in Brisbane, and one in Melbourne) where there is a high concentration of CSIRO Library Network staff and library clients. One of the participants was based at a regional location (Townsville) where there are considerably less numbers of library staff and clients. Initial contact was made with prospective participants by phone with details provided about the proposed research project using a prepared information sheet as a guide. An information sheet and consent form were then emailed to those agreeing to participate. Once the signed consent forms were returned, a semi-structured interview was undertaken with each participant either over the phone or in-person, depending on the
participant’s location in relation to the researcher who was located in Canberra. Three of the interviews were conducted over the phone and two were conducted in-person at two different locations. A copy of the interview questions was emailed to participants being interviewed over the telephone, or handed to those being interviewed face-to-face. This was to assist in keeping the interviews on track but was only given to the participants at the beginning of the interview in order to reduce any potentially negative impact on the spontaneity of responses, seen by Knapik (2006, p. 6) as a major element in the knowledge making enterprise, encouraging “unimpeded self-disclosure”. A copy of the questions used in the pilot study is attached in Appendix 1.

The interviews were recorded on audiotape using a small hand-held recorder. Although the consent form included the information that the interview would be recorded, this point was reiterated at the beginning of each interview. As two of the participants were in a direct line management structure with the interviewer, two points in particular were reinforced verbally as well. These points were that there was no penalty attached to any responses and that the interviewee could choose not to participate in the interview.

The researcher transcribed the interview tape recordings into MS Word documents. The next step was to identify emerging themes or patterns within each participant’s response and across the group’s responses. Each individual transcript was analysed and, using MS Excel, responses to the majority of the questions were coded to two main concepts. The first concept detailed the actions described by the participants while the second concept focused on any feelings/emotions that the participants described in their responses.

The pilot study involved applying Appreciative Inquiry as a means of gathering information about the ‘life-giving forces’ of exceptional teams and was a useful process for testing the questions in preparation for the broader application with the Library and Records communities in the newly formed CSIRO IM&T team. Although time-consuming in both the undertaking of the interview and the transcription of the recordings, the richness of the data gathered through the interview process was certainly
a highlight, providing an insight into the way the participants perceived the values, benefits, and potential of themselves and the network. Alvesson (1996, p. 465) provides a good summary of the benefits experienced through undertaking these qualitative interviews:

“This approach [the interview] is beneficial in as much as a richer account of the interviewee’s experiences, knowledge, ideas and impressions may be considered and documented. Interviewees are less constrained by the researcher’s pre-understanding, and there is space for negotiation of means so that some level of mutual understanding may be accomplished, making data richer and more meaningful for research purposes.”

3.4.2.2 Data collection from CSIRO Information Management & Technology (IM&T) workshops Discovery session

Building on the experience gained from the pilot study, the Discovery phase was then applied to a broader group of participants. In June 2006, members of the CSIRO Library Network, the Records staff and Information Technology (IT) staff were integrated to create the new functional unit of CSIRO Information Management & Technology (IM&T). IT staff had been formed into one enterprise group called CSIRO IT a number of years earlier. The Library and Records staff were the next groups to be transitioned from the Divisional model to an Enterprise model. As part of this integration process, two workshops were held in February 2007 in Melbourne with CSIRO Library and Records staff coming together to learn about the change process ahead as well as provide an opportunity for questions and answers with the management team about the new service delivery model to be implemented or about the change process itself. The first workshop for CSIRO IM&T Library and Records staff was held on the 19th-20th February with members from the Library Collection, Record Collection and Information Support teams. There were 60 attendees – (41 library staff, 14 records staff, and five staff from the management team including the workshop facilitator). The second workshop was held on the 22nd-23rd February for CSIRO IM&T Library and Records staff from the Information Specialist and Record Keeping teams. At this workshop there
were 51 attendees (30 library staff, 16 records staff, and five staff from the management team including the workshop facilitator).

In the creation of CSIRO IM&T, one of the aims was the development of new cross-functional teams (including virtual teams) that would be able to meet change in the information management environment in a proactive way. Creating this type of exceptional change-ready team became the focus of one of the sessions at the change workshops and it was determined to follow Sullivan’s (2004) suggestion to use the first phase of Appreciative Inquiry as a means of discovering what the CSIRO IM&T Library and Records staff perceived as the life-giving forces of exceptional teams. By sharing stories about their positive experiences in exceptional change-ready teams, participants would provide a solid foundation for the new teams to build on and move forward together with a shared vision of what makes an exceptional team. This focus of the workshop was also in line with the ‘best team’ AI intervention for new teams developed by Bushe (1998, pp. 41-44) in which a shared and generative image of the new team is socially constructed through appreciative dialogue. An hour and half was scheduled for the morning of the second day of each workshop during which participants were given a brief overview of the concept of Appreciative Inquiry and the aim of the session – that is, to discover what people saw as being critical elements of exceptional teams. The timing of the session was of importance as the first day of the workshop had sessions providing information about the new service delivery model to be implemented. This was the main purpose of bringing staff together for the workshop. This meant that staff were able to hear about the service delivery model for the newly formed CSIRO IM&T and gain some knowledge about the types of changes that would be required in order to fully implement the service delivery model before they participated in the Appreciative Inquiry session.

As part of the Discovery aspect of the Appreciative Inquiry technique, the questions were designed as a means of using recall and storytelling to gather information about positive experiences within the participants’ professional work. Participants were encouraged to focus on the positive experiences in a team environment that they had had
and to describe what, in their perception, contributed to making those experiences positive. The data collection technique was a semi-structured interview between pairs of participants. The questions developed in the pilot study (i.e. developed using two main sources of Appreciative Inquiry core and example questions (Magruder Watkins & Cooperrider, 2000; Sullivan, 2004) were modified slightly to the specific research population – Library and Records staff from CSIRO Information Management & Technology (IM&T) – and the specific topic of exceptional teams (see Appendix 2). One of the two main changes made from questionnaires used in the pilot study was to delete Question 3 “What do you appreciate most about CSIRO’s library services? In what ways does it excel?” as it had been found in the analysis of the pilot study transcripts to duplicate the responses received in the previous questions about sources of pride in the workplace. The other change in the questionnaire was to modify the question about a peak experience, focusing it on the topic of exceptional teams and the key theme of trust and respect in exceptional teams that had emerged from the pilot study. The importance of trust in virtual teams has been discussed previously and the aim here was to focus the question on discovering participants’ positive experiences in the ways in which trust and respect were established and communicated within a team.

Workshop participants were provided with a brief overview of Appreciative Inquiry and the purpose of the questionnaire modified from the pilot study as mentioned above to focus on positive experiences within exceptional teams. As the participants were in a direct line management structure with the researcher, a number of points were reinforced verbally:

- there was no penalty attached to any response;
- although the session would not be anonymous as it was a paired interview situation, the written responses would be anonymous to the researcher;
- participation was voluntary and staff could choose not to participate in the paired interviews if they so desired without any penalty.

Information sheets (see Appendix 3) and participant consent forms (see Appendix 4) were handed out to all attendees at the beginning of the session. The questionnaires
were then handed out after the brief overview of AI was presented. In the first workshop, out of 60 attendees there were 40 participant forms signed although there were only 39 completed questionnaires collected. In the second workshop, out of the 51 attendees there were 46 participants forms signed and 44 completed questionnaires collected. This resulted in 83 completed questionnaires from a potential population of 111 workshop attendees – a participation rate of 82%. Those attendees who chose not to participate in the paired interviews were free to leave the workshop session and the majority exited the room as the interview process commenced. A small number stayed at the tables but did not participate in the paired interview process.

Those who volunteered to complete the questionnaire were then requested to pair with another participant. The questionnaire sheets were handed out (a copy of the questionnaire is attached in Appendix 2). Most participants paired with others at their table while a number of participants did move to other tables. The data was collected on paper during the paired interviews. One participant asked the questions and wrote down the answers while the other participant spoke. This role was reversed approximately half way through the session. The facilitator (the researcher) moved around the room during the interviews to provide assistance with the procedure of the interviews if required. The researcher was careful, though, not to influence the content of the interview. This was in line with the suggestion by Grant and Humphries (2006, p. 413) that by deflecting attention away from what may seem to be a negative discussion in an AI interview, the researcher may lose “valuable opportunities: to learn something unexpected; to demonstrate our commitment to participant directed research; and to deepen trust.” The question sheets were then collected at the end of the session and later transcribed into electronic format by the researcher.

The following steps from the qualitative data analysis procedure outlined by Williamson (2000, p. 276-282) were used as a guide for managing the data - transcribe the data; categorise the data and conceptually organise the categories; “play with ideas”; and undertake word searches.
1. *Transcribe the data* - Each individual response from the questionnaires was transcribed into an MS Excel spreadsheet. Although the responses were not confidential as the data was collected through the paired interviews, there was a level of anonymity for the respondents to the research as the researcher could not identify the respondents from the questionnaires collected at the workshop. The questionnaires did not contain names of participants – the only details collected were gender, age and time with CSIRO. There were enough participants in the various ranges to reduce the ability to identify individuals. The researcher did not have knowledge of specific details such as age or time with CSIRO for workshop participants. The collection of the questionnaires was undertaken with all participants putting their questionnaires in a pile in the middle of each table before heading out to morning tea. The questionnaires were then collected at random throughout the room so that they were not collected in the same order as the tables had been set out in the room. This was just a small means of further enhancing the anonymity of responses for the researcher.

2. *Categorise the data and conceptually organise the categories* - Data analysis with qualitative research is described as “a process of reviewing, synthesizing and interpreting data to describe and explain the phenomena or social worlds being studied” (Fossey, Harvey, McDermott & Davidson, 2002, p. 717). The first step was to reduce the data to meaningful and manageable portions through the identification of common themes and the development of categories (Gorman & Clayton, 2005, p. 207). Emerging themes or patterns within each participant’s response and across the group’s responses were identified. This did require an element of interpretation which Mason (1994, p. 91) explained is a common occurrence in qualitative research as the words that researchers choose as labels for emergent themes are rarely the precise words used in everyday conversation. Responses to the majority of the questions were coded to two main concepts as had been identified in the pilot study. The first concept detailed actions described by the participants while the second concept focused on any feelings/emotions that the participants described. The second concept provided an element of context to the actions described but was not appropriate for every question.
3. “Play with ideas” – it was essential to repeat going back over the raw responses a number of times to be able to “play” with ideas about the various themes that were emerging from an analysis of the responses. Once broad themes had been identified, the raw responses were again reviewed with a mind to whether the responses associated with any of the themes had already been identified or were unique.

4. Undertake word searches - Word searches were also conducted in Excel to identify possible groupings of responses and to measure frequency of responses coded to the various themes.

The main themes to emerge from the paired interviews are outlined in the next chapter. These themes were then examined in relation to the development of Stage 2 of the research project – the application of the full Appreciative Inquiry cycle.

3.4.3 Data collection from Stage 2 of the research project (application of the full Appreciative Inquiry cycle)

The cyclical nature of action research – investigate, change, review – leads to further topics to investigate, change and review. In line with this cyclical approach the themes that emerged from the Discovery questionnaires in Stage 1 of this research project were examined for aspects that called for further exploration in the creation of exceptional change-ready teams. Key themes that emerged from Stage 1 included:

- Open communication.
- Increased professional development opportunities.
- Increased opportunities for knowledge sharing/Ability for groups to come together.

In the months following the Exceptional Teams Discovery session held at the Melbourne workshops two of these three key themes were addressed. “Open communication” was an issue subsequently taken up after the workshops with recommendations produced on methods to improve the communication flow within IM&T. This has been an issue of focus for the IM&T Management Team and steps have been taken to improve
communication within IM&T. The theme of “increased opportunities for knowledge sharing” had also been addressed with the introduction of SharePoint and MeetingPlace – both tools that greatly facilitate the improved sharing of knowledge across the newly formed teams in IM&T.

A small working group was formed to address professional development in the CSIRO IM&T Library Services team, delivering a presentation on the topic at the *CSIRO Library Services: Moving Forward* conference in June 2008. The aim of this presentation was to ‘kick-start’ the thinking about professional development with the terms of reference for the working group as follows: “Identify professional development required, opportunities for group training and propose a programme for professional development for the library community.” This issue was still in early development by the beginning of 2009 and a professional development strategy remained an issue yet to be fully addressed.

Stage 2 of this research project aimed to utilise the full 4-D model of the Appreciative Inquiry technique to focus on the key theme of “increased professional development opportunities” which was the one major theme not to have been resolved, despite the activities of the working group described above. Thus the affirmative topic for the application of the full 4-D model of AI evolved into a statement which it felt captured the essence of the problem: “Professional Development for CSIRO Library Services Staff in a Changing World: The Right Skills for Today and Tomorrow”. Using AI to address the issue of professional development within the CSIRO IM&T Library Services team would, it was felt, assist in providing:

- a clear definition provided on what constitutes professional development;
- the creation of a set of agreed principles (provocative propositions) on which professional development in the CSIRO IM&T Library Services team would be based;
• an inclusive approach, encompassing the three functional teams – Information Specialists, Information Support and Collection Management – building on team members’ positive experiences of professional development and

• the development of a methodology for planning and delivering professional development opportunities providing strategic direction for professional development for the CSIRO IM&T Library Services team.

The application of the full Appreciative Inquiry process would provide the opportunity to develop practical outcomes for the Library Services team and IM&T as a whole.

3.4.3.1 Discovery

Stage 2 of this research project began in 2009 at which time the CSIRO IM&T Library Services team encompassed 71 library staff members in total from the three library teams – Information Support, Library Collection, and Information Specialists. As mentioned above, the affirmative topic chosen for Stage 2 – “Professional Development for CSIRO Library Services Staff in a Changing World: The Right Skills for Today and Tomorrow” – was based on the outcomes of Stage 1 of this research project. Learning from previous experiences with the pilot study that used one-on-one semi-structured interviews and the Stage 1 Discovery questionnaires undertaken at the workshops in Melbourne a similar approach was selected for Stage 2 due to the richness of the data gathered by this means. The Discovery questions applied in Stage 1 were modified to focus on the affirmative topic chosen for Stage 2 but still followed the general format of “what gives life” type of questions recommended by AI creators and practitioners. A copy of the interview questions used in Stage 2 of the research project is attached in Appendix 5.

Communication around the project commenced with an email sent by the Senior Manager, Information Services to all library staff highlighting the beginning of the project focusing on professional development. Professional development as a means of enhancing the ability to manage change is of relevance to every person in the CSIRO
IM&T Library Services team regardless of their gender, location, ethnicity, or the particular team they work within or the role they have within that team. However, due to limited resources for this research project, undertaking *Discovery* interviews with the total CSIRO IM&T Library Services team of 71 was not possible. As such, systematic sampling was applied to the total research population of 71. As noted earlier, every 2\textsuperscript{nd} name was chosen from the list of total staff. The staff list used in this case was in no particular name order (i.e. not alphabetical by surname). This technique created a research sample group of 36 potential participants.

An email was then sent by the researcher to each of the 36 potential sample group participants – personalised with their name and no other details of other participants. The email outlined what participation in the project would entail providing an outline of the one-on-one interviews. Sample group members were asked to respond by the end of the week indicating whether or not they would choose to participate in the project. It was clearly outlined as a voluntary process with no penalty if people chose not to participate.

By the end of the week there were 29 members of the sample group who confirmed their participation in the *Discovery* interview process. The remaining sample group members were not available due to other commitments including being on leave at the time of the interviews. A schedule of interviews was developed and dates and times confirmed with the 29 participants. On the morning of the day that their interview was scheduled, another personalised email was sent to each of the participants (in some cases, the email was sent the afternoon of the day before for those who were having interviews first thing in the morning). The email contained attachments – the Consent Form and the Information Statement – that required the participants to read and return a signed ‘informed consent’ agreement. The email also provided information and a hyperlink to a SharePoint site created on the CSIRO internal network to provide information about the Professional Development project. The site was managed by the researcher and was accessible by all the CSIRO IM&T Library Services staff. Staff could view a calendar outlining the anticipated research project process as well as access links to other relevant documentation including the report on the findings from Stage 1 of this research project.
All of the professional development *Discovery* interviews were conducted using MeetingPlace as, given the virtual nature of the geographically-dispersed CSIRO IM&T Library Services team, the researcher was not in the same physical location as any of the participants. MeetingPlace is an online collaboration software tool that enables documents to be shared on screen with participants. As such, the questionnaire document was shared via the MeetingPlace interface throughout the interview. The questions had not been emailed prior to the interview as the aim was to get spontaneous responses that encouraged a story-telling approach rather than prepared statement.

MeetingPlace also enables the sharing of documents in real time so participants can work on a document collaboratively. An example of the usefulness of this approach is where the questionnaire called for the participant to create a list of the types of activities they considered to be professional development activities. As the participant was naming activities, the researcher typed those activities into a Word document that was visible on screen. Participants were able to immediately request changes to the list of activities they were creating in answering this question. The document capturing their responses was saved as a Word document (with the naming convention of “PD Interview10AugA”) with no identifying features apart from date and time of the interview. The first question was aimed to garner some level of understanding of the participants’ view of what types of activities constituted professional development. The first part of Question 1 resulted in a list of types of professional development activities – including those that the participant may or may not have undertaken. The second part of Question 1 was to elicit from the participant their view of which of those activities from the list they thought were essential for a person working within the library industry. The researcher and the participant went through the list and the participant indicated which activities they considered were essential. The researcher highlighted those activities on screen – again, participants could see what was being typed and make changes as they desired. The list was added to as activities were discussed as a result of responses to the remaining questions in the interview questionnaire.
The third part of Question 1 asked the participant to indicate which activities from their list were ones they were currently undertaking and how frequently they participated in those activities. Frequency was seen as a key indicator in determining the relative importance of an activity. This quantitative data, when viewed in the light of the qualitative information being gathered through the storytelling process, was seen as providing powerful additional data to help inform this *Discovery* phase. A scale was used to indicate approximate frequency:

- Never
- Rarely (annually if that)
- Occasionally (once a quarter)
- Sometimes (once a month)
- Often (once a fortnight)
- Quite often (once a week)
- Always (daily)

The responses to the remainder of the interview questions were not captured in a word document during the interview but followed more of a story-telling process with the responses recorded via the audio recording. The audio and video on MeetingPlace were recorded and maintained on an internal CSIRO server for two weeks for the participants to be able to review if desired. Only the meeting participants (the researcher and the interviewee) could access the recordings. The audio recording was downloaded by the researcher in MP3 Format Sound (.mp3) to the researcher’s local laptop. The naming convention used for the file indicated the date of the interview but had no identifying features e.g. 10AugA.mp3. Each interview was then transcribed into a MS Word document for which the naming convention followed was “Transcript of interview 4AugB.doc”.

Once the interviews were transcribed, a constant comparative analysis of the data was undertaken. This form of analysis involves taking one piece of data and comparing it with all others that may be similar or different to determine relationships between the data (Pickard, 2007, p. 241). Themes or categories emerged from the raw data. All of
the responses – the raw data - were added to an MS Excel spreadsheet. Each piece of
data was compared to the other responses. Those that had a similar relationship were
colour coded the same colour. This was repeated until all responses were colour coded.
Relationships between similar pieces of data were easier to see with the colour coding
and the responses were then sorted with all those of the same colour co-located in a
column in another Excel worksheet. This sorted data was then compared against each
entry to confirm the similarity to other responses in the same colour/column. The next
step was to label the grouped responses with a meaningful category heading. This
constant comparative analysis ensured the categories and their labels emerged from the
raw data itself and were not predetermined. The findings were then written into a report
delivered to the CSIRO IM&T Library Services team via email as well as made
available for download from an internal SharePoint site. The findings of the Discovery
interviews are outlined in the next chapter of this thesis.

3.4.3.2 Dream and Design

Following completion of the Discovery phase, the Dream and Design phases of the
Appreciative Inquiry 4-D model were undertaken in a combined session at the CSIRO
Library Services Conference New Horizons held in Canberra over two days late in 2009.
The aim of the Dream session was as a team, to develop and agree on a set of principles
on which the progression of professional development within the CSIRO IM&T Library
Services team would be based. These were to be the provocative propositions that
idealized the future, providing a common vision for the professional development
process that the Library Services team would have in place. The outcome of the Design
phase was to make that shared vision a reality. This included developing action plans
outlining details (such as what, how, where, who and when) that were required in order
to support the key concepts of a professional development strategy for the CSIRO IM&T
Library Services team as identified in the Discovery and Dream phases of the AI cycle.

The structure for the Dream and Design session comprised two brief presentations,
followed by group activities designed to clarify specific approaches to address the issues
raised in the *Discovery* phase. The first presentation was from the Human Resources Officer for IM&T setting the scene in the broader context of professional development across CSIRO linking in with career development initiatives and the tools available to all CSIRO staff. The second presentation was a brief report from the researcher on the findings from the *Discovery* interviews and identification of the key concepts to be addressed in this session.

The *Dream* and *Design* session at the Library Conference enabled a move from reflection to action. There were ten tables with approximately six conference attendees at each table. The session ran for approximately an hour and a half. Each table group was asked to focus on completing two specific activities:

1. Develop and agree on one principle (i.e. a provocative proposition) on which the progression of professional development within the CSIRO IM&T Library Services team will be based.

2. Design action plans that the CSIRO IM&T Library Services team can implement to support the key themes that participants in the *Discovery* interviews had identified as important concepts to address in order for there to be a successful Professional Development process for the CSIRO IM&T Library Services team. These key themes were as follows:
   - Making the time
   - Recognising the value of coming together
   - Having access to a clear process for Professional Development
   - Putting direction into Professional Development
   - Maintaining our agility
   - Sharing our knowledge
   - Taking the opportunity to step up
• Taking a Library Services team approach to Professional Development
• Maximising available training tools
• Getting a good head start.

A representative from each table group shared their table’s principle and action plans with the broader group. While the participants were involved in another session at the conference, the butcher’s paper responses were analysed for the principle and for actions each group proposed for addressing the ten concepts. Actions identified included the appointment of Professional Development Champions in each team, the development of a Professional Development Portal as a single point of information, the implementation of sessions to share the knowledge within the CSIRO IM&T Library Services team and to undertake a gap analysis of current and future skills. The results were then presented back to the conference participants the following day for validation by the group. Copies were also provided for participants to take away with them.

3.4.3.3 Destiny

The final step in the AI cycle is the Destiny phase which links all the previous discussions together and provides an opportunity to review the changes that have been made. The Destiny phase is aligned with the evaluation stage of the action research cycle focusing on aspects to improve or further develop.

Library staff who had participated in the initial Professional Development Discovery interviews had been involved in the AI process from the beginning. As such, this group was targeted as participants in the Destiny phase. The total number of participants in the Professional Development Discovery interviews was 29. Of these, only 25 were available at the time of applying the Destiny phase due to retirement or being otherwise away during the period. An email was sent to each of the 25 Library staff members asking for their feedback on the process used for addressing Professional Development within the CSIRO IM&T Library Services team. The process had included the
Professional Development Interviews (the *Discovery* phase of Appreciative Inquiry); the conference session (a combination of the *Dream* and *Design* phases of AI) and the implementation of some of the actions from the conference session including the Professional Development Portal as a deliverable out of this process. The feedback from participants moved this action research project into the evaluation phase focusing on aspects to improve or further develop, which is aligned with the *Destiny* phase of AI.

The participants were sent a 12-question survey using a 5-point Likert type scale for responses ranging from Strongly Disagree to Strongly Agree. Additional comments/feedback was also encouraged with the provision of space for either typed or hand-written responses. To encourage respondents to give full and frank feedback, participants were instructed to send their completed surveys to an intermediary (a Human Resources officer with CSIRO IM&T) who collected all the responses received and removed any names or identifying features before forwarding the responses to the researcher. By the requested deadline, 16 survey responses were received (a return rate of 64%). Findings from the *Destiny* survey are outlined in the next chapter.

**3.5 Limitations of the research design**

The research design as outlined in this chapter does have a number of potential limitations which could impinge upon the information obtained. Specifically these limitations relate to the following:

3.5.1 Ethics

The *Discovery* questionnaire from Stage 1 could not be totally anonymous as the other person doing the interviewing knew their partner’s answers. However, to the researcher, the responses were anonymous as the participants did not put their names on the questionnaires. Although this was in favour of the ethics component of the research project it also resulted in a lack of ability to follow up with individuals on responses that either couldn’t be deciphered due to poor handwriting or on responses that needed more context to be understood and interpreted accurately as the words in the responses could
be interpreted a number of ways. For example, one response to Question 4a about how was trust and respected communicated was “Trust was implicit”. How is this response going to be utilised as a learning tool for the creation of better leadership and excellent change-ready teams? It would have been better if the individual who wrote this response could be contacted for further discussion and clarification about their answer. In the one-on-one Discovery interviews from Stage 2 of the research project this situation was very different as the researcher was able to follow-up on the spot for clarification or details that later assisted in the analysis of the responses and identification of emergent themes.

Another limitation from an ethical perspective was the relationship of the practitioner-researcher with the research community. Undertaking action research within one’s own organisation can be a delicate balance between the membership role a person has and the research role they are taking (Coghlan & Brannick, 2005, p. xii). If communication is not clear and the process transparent, there is potential for participants who are ultimately the recipients of the outcomes of the action research project, to be confused about the reason why the practitioner is undertaking research within their own organisation. They may question whether the research is being undertaken to address an issue that will then have practical outcomes for the organisation or whether the research is purely for the academic benefit of the practitioner-researcher. One of the attendees who chose not to participate in the change workshop’s Appreciative Inquiry session voiced their disapproval of the then Executive Manager, CSIRO IM&T Library Services “possibly gaining a personal benefit” by taking a formal research approach as part of the change process rather than “just getting on with the job of helping people through the change”. There are multiple potential benefits to be realised from undertaking practitioner research but the need to address an issue within the organisation is the ultimate driving force for action research within one’s own organisation. In the case of this action research study, the driving need was to explore and implement a positive change management process to enable change-ready teams that could confidently face a future of continuous change and to assist individuals to make the transition within their own roles and into the newly formed IM&T teams. That this need was addressed within a formal research framework of a Doctorate was a secondary component from which
experiences and knowledge gained through this research process could be shared with others within the LIM industry and the broader research community. This experience [negative comment from a participant] highlighted the need to be clear about why a particular research approach had been chosen, and for the process to be as transparent as possible when being undertaken within one’s own workplace.

3.5.2 Paired interviews

According to Faure (2006, p. 23) the appreciative interviews fulfill five important functions including setting a positive, energizing tone; valuing the participants; creating personal connections; reducing differences; and reducing anxiety. The experience obtained from undertaking the *Discovery* interviews in both Stage 1 and Stage 2 of this research project confirms this view. A positive outcome of the paired interviews from Stage 1 is that the process of the asking/responding in pairs was an energizing and enlightening experience for some participants. Participants in Stage 2 completed a survey as part of the *Destiny* phase and 44% of respondents agreed that they felt “re-energised with regards to professional development after the PD Interview and/or the conference session” and a further 19% strongly agreed with this statement. This is in line with Whitney (1998, p. 318) who claims that although organisations benefit from applying AI as means of addressing change, there are also many personal benefits for the individuals who participate in the process. Indeed, unsolicited verbal feedback after the Stage 1 workshop session from a number of participants was that they found it very interesting to hear how others viewed the current change underway in CSIRO IM&T and the opportunities that they saw coming out of it. These participants found it an enlightening experience to see the varied views that existed and perhaps understand that not everyone was thinking the same about the change occurring in IM&T, whether it be positive or not.

However, the limitation of the *Discovery* interviews in Stage 1 not being conducted by the researcher or by a trained interviewer was evident in the quality of the responses recorded. Indeed, the contrast with the one-on-one *Discovery* interviews conducted by
the researcher with sample group participants from Stage 2 was remarkable. Although the information gathered by participants in the paired interview was very good overall there were a few instances where the hand-written responses were either difficult to read or the context of the response was not clear. The workshop questionnaires came to the researcher who could only read the responses without the opportunity to follow up with individuals if a response was not understood. The influence of peers in the paired interview situation appeared in the case of two participants as the majority of their questionnaire responses were identical. Both the positive and negative responses were word-for-word. This did not happen in the one-on-one *Discovery* interviews from Stage 2 nor was it evident in the pilot study which also involved one-on-one interviews.

The difference in the quality of the responses from the different data collection techniques for the *Discovery* phase was evident. The pilot study and the *Discovery* interviews from Stage 2 both employed one-on-one interviews between the participant and the researcher who was able to ask for clarification if there was confusion over a response, or to ask the participant to expand on their response to give more details or context for their response. The one-on-one *Discovery* interviews were recorded and supported by written notes of the researcher improving the ability to correctly transcribe and understand context of the responses compared to the workshop paired interviews situation.

3.5.3 Time available

The limited time available for the *Discovery* session at the workshop in Stage 1 of the research project meant that the feedback about the findings from paired interviews wasn’t able to be shared during the session or in another session at the workshop. Instead, the analysis was undertaken and a report sent to the library community quite some time after the workshops had been completed. Just having the paired interviews did have positive outcomes as mentioned previously but the lack of time in the session to gather and feedback responses to the group meant that there was not the opportunity for broader sharing of positive experiences across the team and identifying common themes.
for discussion within the group. Reflecting the responses to the group would have been a useful means of testing the validity of the interpretation of their responses, i.e. to get the group to reflect on their realities to help reduce the impact of the researcher’s interpretation of reality. The energy generated by the *Discovery* interviews was not maintained during the delay between the workshop session and sharing of the discoveries within the broader library community. The knowledge gained from this experience was incorporated into Stage 2 of the research project with a much quicker turnaround in sharing outcomes with participants and the broader library community, making it easier to maintain the momentum and energy generated from the *Discovery* phase.

With these limitations in mind, it is still worth highlighting the benefits from undertaking action research within one’s own organisation. Where the researcher is an integrated part of the group being researched, they can bring to the research design a considerable tacit knowledge base from which to operate (Pickard, 2007, p. 139). It is this level of closeness and understanding that allows complexities to emerge in the research process and be explored further, which is not always the case in studies carried out by remote researchers who may not have the awareness of the subtle nuances and social realities of a particular situation (Gorman & Clayton, 2005, p. 14). The findings from the application of this research design are presented in the next chapter.
Chapter 4: Research Findings

“Could we change our attitude, we should not only see life differently, but life itself would come to be different. Life would undergo a change of appearance because we ourselves had undergone a change in attitude”

Katherine Mansfield (1888-1923)

4.1 Introduction

The dual nature of this research project focuses on the application of the Appreciative Inquiry technique and the practical outcomes of implementing that technique in CSIRO IM&T Library Services team. This chapter outlines the findings related to the practical outcomes of the two issues explored using the AI technique:

- Stage 1: The creation of exceptional change-ready teams; and
- Stage 2: Professional development for CSIRO IM&T Library Services staff in a changing world: the right skills for today and tomorrow.

Arising from these findings, the implications from the application of the Appreciative Inquiry technique within a LIM organisation will be discussed in detail in the next chapter.

The evaluative framework uses both quantitative measurement and qualitative responses to enable a ‘two-prong’ approach to interpreting the results. It examines the effectiveness of AI through evaluation of individual team members’ responses to specific scenarios. The inclusion of the tables of responses with a frequency percentage of 10 or more provides a level of indication of a “common view” shared by participants that emerged during data analysis. Responses with a frequency percentage less than 10 have not been included in this section as, although they are still of interest, the responses are at an individual level and do not reflect a widely held view. Complete tables of responses (including those with a frequency percentage less than 10) are provided in Appendix 8.
4.2 Stage 1 findings

Stage 1 focused on the application of the *Discovery* phase of the 4-D cycle. The findings from this Stage are derived from an analysis of the application of the *Discovery* phase of the Appreciative Inquiry cycle undertaken as part of change management workshops involving CSIRO Information Management & Technology (IM&T) Library and Records staff in February 2007.

4.2.1 Participants

Two workshops were held in Melbourne during February 2007 for the CSIRO IM&T Library and Records staff. With just over 100 attendees in total, the aim of the workshops was to bring together staff to discuss the future delivery of records and library services with the integration of records and library staff within the broader CSIRO IM&T business unit. As this was the first time the newly formed teams were meeting together, the workshop was also to be used as means of team building and getting to know colleagues. The purpose of the Appreciative Inquiry *Discovery* session at the workshops was to gain an understanding into the participants’ perceptions of what makes an exceptional change-ready team. As noted earlier, a total of 83 completed questionnaires were collected at the end of the two Appreciative Inquiry sessions. The gender of participants in the paired interview process was predominantly female (75%) with 16% male and 9% who did not identify gender (not answered). As shown in Table 3, the age range for the majority of participants was split evenly between the 41-50 (38.5%) and 51-60 (38.5%) age brackets.

<table>
<thead>
<tr>
<th>Age bracket</th>
<th>Percentage of respondents (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>21-30</td>
<td>2</td>
</tr>
<tr>
<td>31-40</td>
<td>11</td>
</tr>
<tr>
<td>41-50</td>
<td>38.5</td>
</tr>
<tr>
<td>51-60</td>
<td>38.5</td>
</tr>
<tr>
<td>&gt;60</td>
<td>6</td>
</tr>
<tr>
<td>Not specified</td>
<td>4</td>
</tr>
</tbody>
</table>

*Table 3 Age range of respondents*
The number of years with CSIRO (see Table 4) varied for respondents with 24% of respondents working 6-10 years as a CSIRO employee closely followed by 11-15 years (23%) and 16-20 years (23%). This fits with the age profile of the CSIRO IM&T Library and Records staff.

<table>
<thead>
<tr>
<th>Years with CSIRO</th>
<th>Percentage of respondents (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1</td>
<td>1</td>
</tr>
<tr>
<td>1-5</td>
<td>12</td>
</tr>
<tr>
<td>6-10</td>
<td>24</td>
</tr>
<tr>
<td>11-15</td>
<td>23</td>
</tr>
<tr>
<td>16-20</td>
<td>23</td>
</tr>
<tr>
<td>&gt;20</td>
<td>15</td>
</tr>
<tr>
<td>Not specified</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 4 Number of years with CSIRO

4.2.2 Responses

As noted in the previous chapter, the *Discovery* phase questions applied during the workshop were designed as a means of using recall and storytelling to share and gather information about positive experiences participants had within a team environment. Participants were asked to describe what, in their perception, contributed to making those experiences positive. The aim was to generate energy through getting people to recall positive team experiences they could then share with colleagues in their newly formed teams.

4.2.2.1 Positive experiences in exceptional teams

The opening question asked participants to think about their experience within a team environment, and to remember a time when they felt most alive, most engaged, most fulfilled or most excited about their involvement in that team. Experiences recounted by participants included a variety of work, social, sporting and familial team situations. The responses to this question (a total of 83) were grouped into themes relating to specific actions. There were 11 themes identified with a frequency (*f*) of three or more
responses. Responses with a frequency percentage (%) of 10 or more are provided in Table 5a. A complete table of responses (including those less than 10%) is provided in Appendix 8. The greatest response (43%) was for the theme “something new” referring to experiencing new ideas/new challenges/new opportunities/new environment or new people that made the team situation exciting. “Achieving something meaningful/valued as a group” was the next most common theme identified (28%) followed by “Expanding knowledge/skills/experience” (25%). (Note that the percentages in the tables below have been rounded out to the nearest whole number).

<table>
<thead>
<tr>
<th>Actions</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Something new (ideas/challenges/opportunities/new environment/new people)</td>
<td>36</td>
<td>43</td>
</tr>
<tr>
<td>Achieving something meaningful/valued as a group</td>
<td>23</td>
<td>28</td>
</tr>
<tr>
<td>Expanding knowledge/skills/experience</td>
<td>21</td>
<td>25</td>
</tr>
<tr>
<td>Being part of a network/supportive team</td>
<td>11</td>
<td>13</td>
</tr>
</tbody>
</table>

Table 5a Actions that made the team experience exciting/engaging/fulfilling

It is interesting to note the most frequent response listed in Table 5a was that it was “something new” that made the team experience exciting. This would indicate that change (i.e. new ideas, new challenges, new people or new environments) was exciting to almost half of the respondents. This was not a surprising result for the researcher who knew many of the Library staff were quite agile in a change situation but to have this articulated in the findings confirmed the researcher’s view and provided a challenge to a general misperception about this group being reluctant to embrace change and slow to adapt to new situations. This negative perception had been applied in a blanket-approach to all change situations and resulted in the group being viewed as collectively unresponsive or even hostile to change. It did not take into account the variation in individual’s approach to change nor did it take into account that there are different types of change, and the manner in which it is being introduced, that can influence the way in which staff will react.
The change situation that the Library and Records staff in CSIRO were in at the time of the workshops was a form of ‘imposed change’ as described by Curzon (1989, pp. 20-21) where the structure of the new teams had been determined by the management team addressing service delivery and budgetary requirements. Positions had been spilled and staff had to apply for new positions within the new structure. Anecdotal feedback from Library staff prior to the workshops in February 2007 indicated a level of change fatigue and low levels of morale. There were some staff losses through resignations and redundancies. This was an environment of considerable uncertainty. Staff who were appointed to positions in the new structure were the participants in the February 2007 change workshops where the new service delivery model was presented and discussed. A degree of resistance to change would be expected as a normal reaction when confronted with imposed change such as this. However, through use of the Appreciative Inquiry Discovery questions, the responses received challenged the misperception that collectively all Library and Records staff were resistant to change.

Although individuals bring different perspectives, experiences and skills to their teams it was the collective approach to achieving something meaningful that the participants felt made the team experience exceptional. This was evident from the second most frequent response – “Achieving something meaningful/valued as a group”. Similarly, the response – “Being part of a network/supportive team” – emphasised the individual being engaged as part of a broader collective. In describing their positive experience within an exceptional team environment, one of the respondents said that it was being “acknowledged as an individual to be chose[n] to be part of the team” that made it a fulfilling experience.

The next step in analyzing the responses was to identify feelings or emotions expressed in relation to being part of an exceptional change-ready team as the desire would be to generate similar types of emotions/feeling in participants in the newly formed teams. “Exciting”, “supported” and “challenged” ranked as the top feelings/emotions experienced during the times of exceptional teamwork (see Table 5b for responses about feelings/emotions with a frequency percentage (%) of 10 or more).
Table 5b Feelings/emotions experienced

Some of the emotions identified in the responses (see Appendix 8 for the complete list of themes) included “nervous/anxious” which when considered in isolation appear to be negative aspects of being part of an exceptional team. However, when these emotions are read in the context of the full response from the participant, it was an emotion expressed in relation to the excitement of stepping outside their usual comfort zone. For example, one participant described moving into a new service area as “initially scary but I was confident I could stretch myself.” Another talked about the excitement experienced with the “challenge of new role” but also described the “flip side” of this emotion as being the “fear of unknown”. Stepping out of one’s comfort zone can trigger types of emotions such as being anxious, nervous or scared which by themselves may be interpreted as negative but were in fact related to the positive experience of making a change by taking up opportunities to do something new and exciting. The emotions described in Table 5b are the sorts of emotions that would be ideal to see replicated in the newly formed teams. With the emotions/feeling identified, the focus was then on what actions were required in order to generate similar types of emotions/feeling in participants in the newly formed teams.
Participants were asked to identify what it was that made it possible for the team situation to be exciting/engaging/fulfilling. Eighty-three responses to this question were grouped into themes relating to specific actions. There were 37 themes identified with a frequency \( f \) of three or more responses. Responses with a frequency percentage \( \% \) of 10 or more are provided in Table 6. A complete list of themes is provided in Appendix 8. Teamwork with everyone putting in their best effort in a cooperative/collaborative manner rated as the top action (31%) to help make it possible for a team situation to be exciting/engaging/fulfilling. Support from the team manager and colleagues was the next most common action reported (23%). Trust or confidence in the manager/team leader (17%) and positive/open communication (17%) were also cited as key actions for creating exceptional teams.

<table>
<thead>
<tr>
<th>Actions</th>
<th>( f )</th>
<th>( % )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teamwork – all the team put in their best/cooperation/collaboration</td>
<td>26</td>
<td>31</td>
</tr>
<tr>
<td>Support from manager and other staff</td>
<td>19</td>
<td>23</td>
</tr>
<tr>
<td>Trust/confidence in manager/team leader</td>
<td>14</td>
<td>17</td>
</tr>
<tr>
<td>Positive/open communication/feedback</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td>Supportive work environment</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>Resources available</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>Team dynamics</td>
<td>8</td>
<td>10</td>
</tr>
</tbody>
</table>

Table 6 Critical actions that made it possible for the team to work together so exceptionally

As the focus of the Discovery interview was on what made exceptional teams it was reasonable that the most frequent response to what actions helped to make the team experience exciting was in fact the way the team pulled together and worked in a cooperative and collaborative manner with everyone putting in their best effort. Alstete (2001, p. 48) describes this situation as being due to the positive synergy generated in teams through the coordinated efforts of individuals. Higgs and Rowland (1992, p. 351) believe that teams only work effectively “when the effort and achievement of every individual member works to enhance the performance of the rest.” As such, the skills an individual brought to a team were identified as an important element of exceptional teams. As one respondent explained, “It was engaging because I was a specialist in a multidisciplinary team made up of people from completely different work groups. My
skills were important to the project and we all had a chance to make a difference…” The issue of trust helping to make an exceptional team was raised relatively frequently by participants. Interestingly, actions relating to trust were unevenly divided between “Trust/confidence in manager/team leader” with a frequency response of 17%, compared to “Trust/confidence in other team members” occurring with a frequency of only 5% (see Appendix 8). According to one respondent, trust in their exceptional team experience was a two-way action – “My manager displayed trust in me and my abilities. I trusted her and appreciated the responsibilities she allowed me to take on.” This two-way approach to trust in teams is supported by Simons and Peterson (2000) in their research on intragroup trust and the correlation with task and relationship conflict. According to Simons and Peterson (2000, p. 103) it can be explained thus: “when one person distrusts another, that person will interpret ambiguous conflict behaviors as sinister in intent and convey distrust through his or her conduct. The person whose behavior is interpreted as sinister, perceiving that he or she is distrusted, tends to reciprocate that distrust.” Although the focus of this statement is on distrust, the research study found overall that trust plays a pivotal role in team processes. Having trust in another team member from both a relationship (trust the individual) and task perspective (trust the work they are doing) enhances the team experience for members.

4.2.2.2 Recognising value

Participants were then asked to focus on some of the things that they valued deeply about themselves, the nature of their work, about the CSIRO IM&T team and about the organisation in general. This question was designed to explore, identify and celebrate self-values (Table 7), sources of pride (Table 8), what the participant valued the most about being part of the CSIRO IM&T team (Table 9), what they perceived their value was to the CSIRO IM&T team (Table 10), and the most important thing (or things) that the participant believed the organisation had contributed to their life (Table 11).

Self-value

In the paired interviews, participants were asked, “Without being humble, what do you value most about yourself as a person?” The 82 responses to this question were analyzed
and grouped into 25 themes with a frequency \( f \) of 3 or more responses. Responses with a frequency percentage \( \% \) of 10 or more are provided in Table 7. A complete list of themes is provided in Appendix 8. The personal trait that participants most highly valued was their honesty, their trustworthiness and their reliability \( (29\%) \). Linked closely to this was the second key value of having a “Good work ethic/commitment to work” \( (28\%) \). Being able to network and relate to people at all levels \( (21\%) \) as well as the ability to be empathetic towards other’s feelings \( (20\%) \) were actions valued by participants about themselves. Placing a value on their individual knowledge/experience/intelligence was also important to participants \( (18\%) \).

<table>
<thead>
<tr>
<th>Actions</th>
<th>( f )</th>
<th>( % )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honesty/trustworthy/reliability</td>
<td>24</td>
<td>29</td>
</tr>
<tr>
<td>Good work ethic/commitment to work</td>
<td>23</td>
<td>28</td>
</tr>
<tr>
<td>Easy to get on with/ability to relate to people at all levels</td>
<td>17</td>
<td>21</td>
</tr>
<tr>
<td>Empathetic/perceptive of other’s feelings</td>
<td>16</td>
<td>20</td>
</tr>
<tr>
<td>Knowledge/experience/intelligence</td>
<td>15</td>
<td>18</td>
</tr>
<tr>
<td>Team player</td>
<td>15</td>
<td>18</td>
</tr>
<tr>
<td>Being flexible in a changing environment/adaptable to change</td>
<td>14</td>
<td>17</td>
</tr>
<tr>
<td>Interpersonal skills</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td>Optimistic/positive/enthusiastic</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>Organisational skills</td>
<td>11</td>
<td>13</td>
</tr>
<tr>
<td>Professional skills/approach</td>
<td>11</td>
<td>13</td>
</tr>
<tr>
<td>Cooperative/helpful</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>Willing to have a go/willing to try new things</td>
<td>8</td>
<td>10</td>
</tr>
</tbody>
</table>

Table 7 Value most about self

The role trust plays in creating exceptional teams is a key issue for the CSIRO IM&T team and was made evident by the frequency of responses about trust received across a range of the questions during the *Discovery* interviews. Trustworthiness is a key value that was expressed previously as being important in a leader in order to make exceptional teams (see Table 6). Trustworthiness is again highlighted in the responses above but this time it is a value that staff perceive is important about themselves, not just in their team leaders. As discussed in Chapter 2, trust can potentially be harder to build
between team members who have never met face-to-face as has been the case for some of the staff working in CSIRO IM&T’s distributed, virtual team environment.

The level of experience and knowledge in the CSIRO IM&T Library and Records communities is significant as is evidenced by the fact that the majority of the respondents were over 40 years of age and had more than 11 years experience of working within the organisation. It would be interesting to see if there was a correlation between the theme - “work ethic response/commitment to work” - and the age of respondent potentially highlighting a generational difference in the things staff value most about themselves and their work. This would be a topic for further study perhaps as generational approaches to change is not within the scope of this research project.

An interesting value that appeared relatively frequently (17%) was “Being flexible in a changing environment/adaptable to change”. Considering the state of significant change occurring in IM&T at the time of the workshops, it was obviously a value about themselves that participants perceived as being important. Similar to the responses received for the first question, this self-value that CSIRO IM&T Library and Records staff had about being open to change challenged a general misperception about how staff in this group approached change.

**Sources of pride**

Participants were then asked, “What are some sources of pride for you in your work?” On analysis, the 81 responses to this question were grouped into 16 themes with a frequency (f) of three or more responses. Responses with a frequency percentage (%) of 10 or more are provided in Table 8. A complete list of themes is provided in Appendix 8. The level of responsiveness to requests from clients and colleagues and achieving results within timeframes was a key source of pride for respondents (42%). Receiving positive feedback on a job well done was also considered as a source of pride (35%). The strong service culture (20%) and team contribution (17%) were also mentioned relatively frequently as sources of pride.
Chapter 4: Research Findings

<table>
<thead>
<tr>
<th>Actions</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achieving results within timeframe/responsiveness to requests</td>
<td>34</td>
<td>42</td>
</tr>
<tr>
<td>Positive feedback from clients and/or colleagues on a job well done</td>
<td>28</td>
<td>35</td>
</tr>
<tr>
<td>Strong service culture/assisting clients &amp; colleagues</td>
<td>16</td>
<td>20</td>
</tr>
<tr>
<td>Team contribution/collaboration</td>
<td>14</td>
<td>17</td>
</tr>
<tr>
<td>Accuracy/attention to detail</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td>Willing to try new projects/seek new opportunities</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>Active participant in the research effort</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td>Providing a solution to a problem</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Mentoring colleagues/positive influence on others</td>
<td>8</td>
<td>10</td>
</tr>
</tbody>
</table>

Table 8 Sources of pride in work

The sources of pride listed in the table above indicate a strong sense of team “spirit” from workshop participants. Team spirit is an elusive but critical element of high-performing teams and is defined by Heerman (2003, p. 42) as existing when “the energy of the team exceeds the sum of individual energies, and the individuals’ drive to serve shapes the service level provided by the team.” The responses above reflect the strong service culture of the library and information roles especially evident from the sense of achievement and pride in meeting client’s research needs within set timeframes.

Value of IM&T

The next question participants discussed in the paired interviews was to identify what it was that they valued most about being a part of the CSIRO IM&T team. There were 82 responses to this question which were analyzed and grouped into 14 themes with a frequency (f) of three or more (see Appendix 8). Responses with a frequency percentage (%) of 10 or more are shown in Table 9. “Being part of a wider/bigger/broader team leveraging off the three professions” emerged as a clear theme (40%) while the opportunity to share and draw on the skills/expertise/knowledge of that larger team was also valued (27%).
Chapter 4: Research Findings

<table>
<thead>
<tr>
<th>Actions</th>
<th>$f$</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Being part of a wider/bigger/broader team leveraging off the three</td>
<td>33</td>
<td>40</td>
</tr>
<tr>
<td>professions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opportunity to share/draw on the broader range of skills, expertise,</td>
<td>22</td>
<td>27</td>
</tr>
<tr>
<td>knowledge in larger team</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Still to be determined – too early in the transition process to know</td>
<td>16</td>
<td>20</td>
</tr>
</tbody>
</table>

Table 9 Value most about being part of the CSIRO IM&T team

One of the interesting themes that emerged from the analysis of the responses was that some participants considered it was too early in the transition process for them to be able to identify what they valued most about being part of the CSIRO IM&T team (20%). Although a couple of the responses were quite blunt - “Don’t value being part of this team” - others justifiably commented that the IM&T team was only just being formed and that they needed to have more time within the new structure in order to have experiences that they could then relate to a value. For example, responses included:

- “Not sure yet, it has been work as usual up to this point”
- “At present we have not worked in this team”
- “Yet to be revealed”
- “Unknown factor”
- “Too early. Feel strongly about membership of [current team]. Want to translate but it is too soon to tell.”

Although it may appear that the top two themes in the table above are the same, there are distinct differences particularly relating to the “leveraging” component of the first theme. This is a focus on the operational benefits of the three professional groups coming together as one team – benefits such as budget, critical mass, project teams encompassing staff from each professional area, and smoother workflows for information requests covering the spectrum of information services provided by IM&T staff. As one of the respondents said “We are part of a larger team and a larger purpose” while another described the value of being part of the CSIRO IM&T team as “Able to be part of a big team with a ‘big picture’ perspective”.

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*Note: The table above includes values for the number of responses ($f$) and their corresponding percentage (%).*
The second theme of “Opportunity to share/draw on the broader range of skills/expertise/knowledge in larger team” was more aligned with recognising the value of different backgrounds, experiences, and strengths of team members. The opportunity to share or draw on these aspects was frequently mentioned by respondents in answering this question. This value was described by one of the participants as “More colleagues and access to people with more and wider variety of skills and outlooks – learning from other people with different experience and outlook”. Being able to draw on the diversity of skills, backgrounds and experiences within the broader IM&T is certainly an aspect that participants in this research study valued.

There are two crucial elements worth identifying here – one element is the diversity of the skills, backgrounds, perspectives, experiences of the team members, and the other equally important element has been expressed in the theme as “the opportunity to share or draw on” this diversity within the team. This latter element implies the ability to share information, discuss and debate within the team. It is this ability to debate issues utilising the diversity within the team that provides exposure to new information from people with different views, backgrounds and experience and may lead to team members rethinking their point of view on a particular topic or issue. Learning from others this way can strengthen the decision-making within a team, making it a more comprehensive process as it encompasses multiple opinions, knowledge and experience of team members (Simons, Pelled & Smith, 1999, p. 664).

*Value to IM&T*

Continuing on the topic of value, the next question for participants was “What do you see is your value to CSIRO IM&T and in what ways do you envisage contributing your best?” Three participants did not answer this question. As a result, 80 responses were analyzed and grouped into 13 themes. Respondents clearly saw their specific skills such as technical or subject expertise as being of value to CSIRO IM&T (35%) and they envisaged contributing their best through sharing that knowledge/ skills/ experiences with other members of the IM&T team (65%). Table 10 provides an overview of the themes with a frequency percentage of 10 (%) or more. A complete list of themes is provided in Appendix 8.
**Actions**

<table>
<thead>
<tr>
<th>Actions</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sharing my knowledge/skills/experience with other members of IM&amp;T team</td>
<td>52</td>
<td>65</td>
</tr>
<tr>
<td>Specific skills</td>
<td>28</td>
<td>35</td>
</tr>
<tr>
<td>Willingness to contribute</td>
<td>23</td>
<td>29</td>
</tr>
<tr>
<td>Team participant</td>
<td>19</td>
<td>24</td>
</tr>
<tr>
<td>Willingness to explore new opportunities</td>
<td>16</td>
<td>20</td>
</tr>
<tr>
<td>Strong client interaction</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td>Dedication/commitment to service</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td>Being positive/positive approach</td>
<td>10</td>
<td>13</td>
</tr>
<tr>
<td>Flexibility and adaptability</td>
<td>10</td>
<td>13</td>
</tr>
</tbody>
</table>

Table 10 What do you see is your value to CSIRO IM&T and in the ways in which you envisage contributing your best

The most frequent response about what participants saw as their value to the CSIRO IM&T team was their willingness to share their knowledge/skills/experiences with other members of the IM&T team. This reflected the theme of “Opportunity to share/draw on the broader range of skills/expertise/knowledge in larger team” previously identified as a value that participants saw in joining the CSIRO IM&T team. Not only did they see the value to themselves of being able to learn from others, they also saw their own value to IM&T as willing to share that knowledge and experience with their new colleagues.

The themes listed in the table above are positive actions that participants envisaged were the ways they could contribute their best to the newly formed CSIRO IM&T team. Sharing with colleagues, exploring new opportunities, participating in the teams’ activities, interacting with clients and having a positive, flexible approach certainly sound like prime ingredients for an exceptional team – and these ideas were coming from the new team members themselves. Scott (2003, p. 243) believes that workers need to assess their own capabilities in terms of what value they as an individual bring to an organisation or a team and how to maximize that value in order to compete within the workforce effectively. In asking participants to assess the value they bring to a team or an organisation, it encourages some form of self-realisation – “finding our purpose in the life of work” - and a greater likelihood of aligning with the mission of the team which is ultimately to create value for stakeholders (Scott, 2003, p. 243-244).
**Value of the organisation**

The next question was to encourage participants to think about the value of the organisation to them personally and to identify the most important thing (or things) that the organisation had contributed to their life. There were 11 themes with a frequency ($f$) of three or more (see Appendix 8) identified from the analysis of 82 responses. Responses with a frequency percentage (%) of 10 or more are provided in Table 11. Opportunities for professional development, a career and the opportunity to learn rated as the most common response (60%) while the security of a regular salary (“remuneration”) was the second most frequent response (37%). The next theme identified was the opportunity to work somewhere meaningful (23%). The responses from participants in this theme talked about the pride of working with CSIRO and contributing to society.

![Table 11 The most important thing this organisation has contributed to your life](image)

The opportunity for professional development was by far the most important thing that participants felt that the organisation had added to their lives. The value placed on the opportunity to learn and develop a career is evident in the responses received. For many the organisation has provided the chance to learn new skills in new roles, sometimes moving beyond their original professional boundaries. Remuneration was another important element but was usually linked to other responses such as work satisfaction. The value of the social aspect of the work environment is also highlighted from the responses. Studies have shown that humour used effectively (and appropriately) in the workplace can have a positive impact on team members and team performance (Avolio,
Howell & Sosik, 1999). The authors (1999, p. 225) suggest that humour contributes to a positive atmosphere in a team, thus stimulating higher levels of collective productivity from team members.

Common feelings and emotions emerged from the participants’ stories about the most important things the organisation had contributed to their lives. The most frequently expressed feeling was “supported” and related to stories about being supported in both a professional capacity (e.g. ability to undertake professional development opportunities) and personally (e.g. the interaction gained through social interactions and friendships with work colleagues). A sense of security was a feeling identified in 37% of the responses received and was particularly related to obtaining a regular income.

This section of the Discovery questionnaire required participants to think deeply about themselves and their current work environment in order to highlight what it was that participants valued about themselves, the new IM&T team and the organisation as a whole. The questions were designed to bring forward positive thoughts about what works well from their individual perspective (value about themselves) and what they can then carry forward into the collective team experience. Sharing their values and seeing that other participants valued similar behaviour, skills, or other elements about the organisation, enhanced the sense of team bonding that was a key aspect of the conference session. The next step was to discover examples of participants’ positive leadership experiences and identify potential common elements.

4.2.2.3 Leadership

Seeking to identify positive leadership qualities, participants were asked to describe a leader who had a positive influence on them and their work. Responses provided information about specific instances in which the participant experienced this positive influence, outlining what that leader did and how they interacted with the participant. Actions and feelings/emotions were identified.
The 81 responses to this question were analyzed and grouped into 23 themes with a frequency \( f \) of three or more responses (see Appendix 8). Responses with a frequency percentage \( \% \) of 10 or more are provided in Table 12a. The most frequent response about positive leadership qualities experienced was about a leader who promoted the professional and/or personal development of staff. Indeed, the provision of, and support for, professional development appears as a key theme across a number of the questions from the Appreciative Inquiry sessions.

<table>
<thead>
<tr>
<th>Actions</th>
<th>( f )</th>
<th>( % )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promoted professional and/or personal development of staff</td>
<td>25</td>
<td>31</td>
</tr>
<tr>
<td>Supportive/encouraging</td>
<td>21</td>
<td>26</td>
</tr>
<tr>
<td>Positive role model/led by example</td>
<td>17</td>
<td>21</td>
</tr>
<tr>
<td>Respected/value opinion and ideas of others</td>
<td>17</td>
<td>21</td>
</tr>
<tr>
<td>Demonstrated belief/showed confidence in staff ability</td>
<td>16</td>
<td>20</td>
</tr>
<tr>
<td>Trusted staff/gave responsibility</td>
<td>14</td>
<td>17</td>
</tr>
<tr>
<td>Related as an equal</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td>Positive/effective feedback provided</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td>Mentored</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>Recognised/acknowledged/rewarded work</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td>Respected staff as a person</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>Listened</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>Had open door policy</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>Good at identifying people’s strengths and weaknesses</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Level of autonomy given</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Ability to respond appropriately/diplomatically to difficult situations</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Shared workload</td>
<td>8</td>
<td>10</td>
</tr>
</tbody>
</table>

**Table 12a Positive leadership qualities experienced**

The responses received to this question align with the leadership attributes identified through other studies such as the research undertaken by Young, Hernon and Powell (2006). In their study exploring the perceptions of Gen-X librarians about the attributes essential for library leaders, the authors (2006, p. 491) found that the majority of the most favourably scored attributes related to communication and interpersonal skills. The leadership qualities listed in Table 12a also demonstrate a strong emphasis on communication and interpersonal skills in developing effective working relationships.
with team members. Ferguson (2003, p. 30) believes it is essential for a leader to shift from the traditional hierarchical role to a place instead at the nexus of change which entails mentoring, cultivating trust, listening, mediating and encouraging their team members. Ferguson’s view is reflected in the responses above from the workshop participants talking about the positive leadership experiences.

The feelings/emotions that participants mentioned in their experience of working with a leader who had a positive influence on them and their work are listed in Table 12b which shows those responses with a frequency percentage of 10 or more. Being supported (53%), encouraged (40%) and listened to (30%) rate as the feelings most frequently experienced in this situation.

<table>
<thead>
<tr>
<th>Feelings/Emotions</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supported</td>
<td>43</td>
<td>53</td>
</tr>
<tr>
<td>Encouraged</td>
<td>32</td>
<td>40</td>
</tr>
<tr>
<td>Listened to</td>
<td>24</td>
<td>30</td>
</tr>
<tr>
<td>Appreciated/valued</td>
<td>15</td>
<td>19</td>
</tr>
<tr>
<td>Trusted</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td>Confident</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td>Positive</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>Respected</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>Included/involved</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Understood</td>
<td>8</td>
<td>10</td>
</tr>
</tbody>
</table>

Table 12b Feelings/emotions experienced

The feelings listed in the table above provide a form of guideline for IM&T team leaders to aim for in achieving similar types of feelings and emotions in their newly formed teams. Similarly, the leadership qualities as outlined in Table 12a are clearly characteristics valued by the participants. IM&T team leaders would do well to try and incorporate these qualities into their own leadership style to enhance the development of exceptional teams.
4.2.2.4 Trust and respect

Participants were next asked to think about a time that they were part of a team that had a high level of respect and trust among members. The two-part question was aimed at identifying how trust and respect was communicated within that team (Table 13) as well as the actions that made it possible to establish trust within that group (Table 14).

While analyzing the 81 responses to this question, it became apparent that interpretation of the question was mixed with some participants describing actions such as being “Trusted to get on with the job/not micromanaging” (23%) while other participants described specific communication activities that teams used such as “Through regular team meetings” (9%); “Verbally” (9%); “Email” (6%); and “Annual Performance Assessments (APAs)” (4%). This made the analysis of these responses slightly more challenging for the researcher particularly where a participant responded only with specific communication activities but did not provide additional information about how “email” for example was used in communicating trust and respect within the team. This occurred in six of the responses and resulted in only a specific communication activity being recorded.

The total responses were grouped into 20 themes with a frequency \((f)\) of three or more (see Appendix 8). These themes related to specific communication activities and other activities that communicated trust and respect within the team. Responses with a frequency percentage \((\%)\) of 10 or more are provided in Table 13. Open communication (19%); acknowledgement of a job well done (16%); and having team opinions sought and valued (15%) were common themes that emerged as ways in which trust and respect was communicated within teams.
Chapter 4: Research Findings

Table 13 How trust and respect was communicated

<table>
<thead>
<tr>
<th>Actions</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trusted to get on with the job/not micromanaging</td>
<td>19</td>
<td>23</td>
</tr>
<tr>
<td>Good/honest/open communication in team</td>
<td>15</td>
<td>19</td>
</tr>
<tr>
<td>Thanks received/acknowledgement/rewards</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td>Team opinions/ideas/contributions sought and valued</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>Ability to contribute ideas/opinions without fear of reprisal</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td>Open and active listening</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td>Being given opportunity to take on new tasks/responsibilities</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>Positive reinforcement between all members of the team</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>Everyone contributed equally to the team/willingness to help each other and share workload</td>
<td>9</td>
<td>11</td>
</tr>
</tbody>
</table>

As mentioned previously, trust in fellow team members is crucial for the success of any team. It is particularly important in the virtual team environment where the social cues such as body language, or the ability to form casual acquaintances or to have informal conversations just through the act of sharing a physical space of an office or tea room are not available to help build up a sense of bonding and trust. Participants in the workshop were a mix of staff that were part of teams that were co-located, or teams that had some members co-located, or teams that had all members geographically remote from each other. In all cases though, participants belonged to the broader virtual team that made up their functional area of either Records or Library Services and were part of the overall CSIRO IM&T business unit. In this way, retelling of past experiences where trust and respect in a team was established was important in order to gain an understanding of the types of actions that would be ideal to carry forward into the newly formed IM&T teams.

Participants in the workshop responded that one of the key ways in which trust and respect was shown was through being “trusted to get on with the job/not micromanaging”. As one participant stated, “I was shown how to do/asked to do and was allowed to get on with it, without any hovering.” Another participant described the way trust and respect was communicated as follows, “Expectations were clearly established but follow-up was not required because team members trusted that each person would contribute and follow through. Confidence in team members’ skills was
often communicated.” This is reflected by another response that trust was established “by meeting targets”. This is in accordance with Cascio and Shurygailo (2003, p. 373) findings that trust is “rooted in the belief that team members are dependable – that they will deliver what they promise.”

“Thanks received/acknowledgement/rewards” is one of the actions listed in Table 13 that would seem a simple way to create a level of trust and respect among team members. This in line with the views of Wittenborg (2003, p. 9) who, in reflecting on leadership attributes, believes staff that thrive in times of change get significant satisfaction through acquiring new knowledge and new practical skills but recognises that staff also need to be rewarded in other ways. The reward does not necessary need to be financial judging by the range of acknowledgements mentioned by workshop participants such as “a simple thank you”; “recognition at [a] meeting”; acknowledging and giving people credit for their intellectual input”; and “positive feedback on APA [Annual Performance Appraisal]”.

Table 14 lists the specific aspects that were present within the team that made it possible to establish trust within that group. Of the 17 themes identified with a frequency (f) of three or more from the 79 responses received, the most frequent was “Respect for each person’s abilities” (27%) followed by “Good/open communication” (19%). Table 14 provides a list of actions with a frequency percentage (%) of 10 or more. A complete list of themes is provided in Appendix 8. Non-judgmental/positive behavior of all team members including team leaders was also identified as an important aspect of an exceptional team.
Table 14 What made it possible to establish trust in that group

One of the key themes to emerge when asked what made it possible to establish trust in a team was “Respect for each person’s abilities”. This was quite a common view among participants. Many of the views shared were about recognising and respecting an individual’s abilities whether they were related to a particular information management skill such as cataloguing or whether the abilities related to a personal trait such as strong work ethic. According to the participants, trust was established through respecting the different abilities that individuals brought to the team.

“Good/open communication in team” was key action mentioned by participants. Studies have shown that communication is a crucial element in the receptivity of staff to change which in turn relates to the success or failure of organisational change processes (Frahm & Brown, 2007, p. 370). At the time of the workshops, open communication was a hot topic. In a change situation such as this in CSIRO where positions were restructured and in some cases, made redundant, communication had to occur within the boundaries of fair dealing and respect for people in all roles, particularly those in positions that were not being carried forward into the new structure. However, limitations in the flow of communication were clearly identified as a source of frustration for a wide range of participants in the change process. Senior managers were participants on general discussion email lists and communication was often managed in a top-down manner.

<table>
<thead>
<tr>
<th>Actions</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respect for each person’s abilities</td>
<td>21</td>
<td>27</td>
</tr>
<tr>
<td>Good/open communication</td>
<td>15</td>
<td>19</td>
</tr>
<tr>
<td>Non-judgemental/positive behaviour</td>
<td>13</td>
<td>17</td>
</tr>
<tr>
<td>Team interaction</td>
<td>13</td>
<td>17</td>
</tr>
<tr>
<td>Shared values/beliefs/purpose/goals/vision</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td>Honesty among team members</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td>Equality in sharing workload/spirit of cooperation</td>
<td>10</td>
<td>13</td>
</tr>
<tr>
<td>Attitude/behaviour/skills of team leader</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>Prior experience/history of achievements</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>Strong team relationship established</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Getting to understand each team member – their strengths, weaknesses,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>skills, work style</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
particularly in relation to the change process underway. While this did ensure a consistent approach to messages going out about the change process it caused some disruption with the flow of information particularly from middle-managers in the speed of responses to queries and in the handling of time-critical communiqués that were ‘lost’ in some cases due to delays caused by the approval process.

4.2.2.5 Positive thoughts for the future

The final question was designed to end the session with positive thoughts and generate energy and hope for the future development of the newly formed CSIRO IM&T team. The question was: “If you were granted three unconditional wishes to heighten the vitality and health of the CSIRO IM&T team, what would they be?” By making the wishes unconditional, the participants were not restricted by limiting factors such as having to stay within the current budget allocation. Three participants did not answer this question. Analysis of the 80 responses received identified 15 common themes with a response frequency ($f$) of three or more. A list of key factors that the participants considered essential for the future health and vitality of the CSIRO IM&T team are provided below in Table 15. A complete list of themes is provided in Appendix 8.

The top three wishes participants had for improving the health and vitality of the IM&T team were: “Open communication” (38%); “Increased resources [funding and staff]” (34%); and “Increased professional development opportunities” (30%). An increase in the opportunities for knowledge-sharing, particularly with team members meeting face-to-face was identified as a common wish (23%). Having a clear vision of the future of IM&T and specifically the future of library and records services that was shared and understood was also a common wish (23%) of workshop participants. Understanding the direction library services are developing is the first step in being able to identify skills (both professional and personal) that will be required by library staff into the future and is an important element in developing exceptional change-ready teams (Parry, 2008, p. 41).
Chapter 4: Research Findings

<table>
<thead>
<tr>
<th>Actions</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open communication</td>
<td>30</td>
<td>38</td>
</tr>
<tr>
<td>Increased resources [funding and staff]</td>
<td>27</td>
<td>34</td>
</tr>
<tr>
<td>Increased professional development opportunities</td>
<td>24</td>
<td>30</td>
</tr>
<tr>
<td>Increased opportunities for knowledge sharing/Ability for groups to come together</td>
<td>18</td>
<td>23</td>
</tr>
<tr>
<td>Clear vision of future</td>
<td>14</td>
<td>18</td>
</tr>
<tr>
<td>Professional representation at senior management level/management support</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td>Increase level of trust and respect</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>Equal recognition and appreciation of the three professional areas</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td>Build strong relations within the team</td>
<td>10</td>
<td>13</td>
</tr>
<tr>
<td>Be positive/increased optimism/constructive behaviour</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>More cross-team engagement</td>
<td>8</td>
<td>10</td>
</tr>
</tbody>
</table>

Table 15 Best wishes for CSIRO IM&T team

Looking at the list of wishes the Library and Records staff have for the newly formed IM&T grouping provides an insight into participants’ “ideal” future for the team. Many of these “wishes” are actions that have been identified through the previous questions as aspects of the participants’ prior experience in exceptional teams. This is the essence of what the *Discovery* phase of the AI cycle is all about – identifying “the best of what is” to carry forward into the future of the newly formed teams, learning from prior positive experiences. The actions listed in the table above provide a blue-print for the management team about factors that staff perceive are of importance for the IM&T team to function successfully. A team working to address these factors would be well placed to meet the challenges that change brings.

4.2.2.6 Common characteristics of exceptional teams

In an analysis across the responses to the entire *Discovery* interview questions, there were a number of key characteristics of exceptional teams that participants appear to emphasize in their responses to the various interview questions. These characteristics include:

1. Open communication – the ability to voice ideas and opinions as well as to learn from mistakes without fear of a “hostile reaction”
2. Trust and respect shared within teams particularly demonstrated through an absence of micromanagement, entrusting staff with responsibilities and a demonstrated history of “doing what they say they will do”

3. Sharing skills, knowledge, information, and best-practice among team and across teams using technology to maximise contact between members of virtual teams

4. A common vision for the future development of library and records services developed with input from all levels of staff

5. Support given through funding of resources required to provide exceptional service i.e. funding for human, technology and information resources

6. Valuing the information profession and the service provided including recognition for great work

7. Opportunities for professional development to continue to keep the service at the leading edge.

Following the cyclical nature of action research, these key themes provided the opportunity to then engage in new discussions for further positive development of exceptional change-ready teams, forming the basis of Stage 2 of this research project. The next section of this chapter presents the findings from Stage 2 where the full 4-D model of Appreciative Inquiry was applied to the theme of “Increased professional development opportunities” that emerged from Stage 1 of this research project.

### 4.3 Stage 2 findings

As discussed in the previous chapter, Stage 2 of this research project aimed to utilise the full 4-D model of the Appreciative Inquiry technique with participants from the CSIRO IM&T Library Services team to focus on the issue of “increased professional development opportunities” as a means of creating exceptional change-ready teams. Following discussions with the CSIRO IM&T Library Services Management team after a further restructure of the teams at the end of 2008, it was confirmed that the management team wanted to take an inclusive approach to establishing a professional development strategy for library staff. As discussed previously in the literature review, professional development is a key means of enabling staff to be agile with regards to
keeping skills relevant in a rapidly changing information environment. Three key areas that professional development can contribute to in order to achieve effective change within an organisation is outlined by Smith (2004, p. 149) as creating an organisational environment supportive of learning and development; developing and sustaining an orientation towards learning and skill growth from the individual’s perspective; and empowering staff with the skills and knowledge required for working in the changing environment. As such, the affirmative topic identified for the focus of the application of the Appreciative Inquiry 4-D model in Stage 2 of this research project was defined as “Professional Development for CSIRO Library Services Staff in a Changing World: The Right Skills for Today and Tomorrow.” Figure 4 provides an overview of the application of the Appreciative Inquiry 4-D model addressing this topic in Stage 2 of this research project.
4.3.1 Participants

There were 29 participants in the Professional Development *Discovery* interviews encompassing Library staff from a wide variety of sites and from across the Information Support, Library Collection, and Information Specialists teams. The majority of participants had also been involved in the Appreciative Inquiry *Discovery* paired questions in Stage 1 of the research project. There were a small number of participants though for whom this was the first experience with the Appreciative Inquiry technique.

The number of years working within the library and information industry (total years not just those with CSIRO) varied for interview participants with the majority (45%) of participants having >20 years experience in the industry (see Table 16). This fits with the age profile of the CSIRO IM&T Library Services team and indicates significant levels of experience from which the *Discovery* interviews can draw in identifying positive approaches to professional development.

<table>
<thead>
<tr>
<th>Years</th>
<th>Percentage of respondents (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5</td>
<td>10</td>
</tr>
<tr>
<td>6-10</td>
<td>14</td>
</tr>
<tr>
<td>11-15</td>
<td>24</td>
</tr>
<tr>
<td>16-20</td>
<td>7</td>
</tr>
<tr>
<td>&gt;20</td>
<td>45</td>
</tr>
</tbody>
</table>

*Table 16 Number of years in the Library and Information Industry*

4.3.2 Discovery

As the *Discovery* interview was focused on discovering positive approaches to professional development (PD), the interviews began by finding out participants’ opinions of what type of activity they considered constituted professional development within the Library and Information Management (LIM) industry. Participants were asked to think about all the different types of professional development activities they were aware of and create a list of those activities they considered relevant to a person working in the LIM industry.
Responses to this question were grouped into themes relating to specific professional development activities. There were 30 themes with a frequency ($f$) of three or more responses identified. Those with a frequency percentage ($\%$) of 10 or more are provided in Table 17. The frequency percentage is calculated based on how many participants had included that particular activity in their list of types of professional development activities relevant for a person working within the LIM industry.

<table>
<thead>
<tr>
<th>Activity</th>
<th>$f$</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading relevant literature/information sources</td>
<td>29</td>
<td>100</td>
</tr>
<tr>
<td>Conferences – attending</td>
<td>26</td>
<td>90</td>
</tr>
<tr>
<td>Vendor training</td>
<td>23</td>
<td>79</td>
</tr>
<tr>
<td>Academic study – initial qualifications plus further study</td>
<td>23</td>
<td>79</td>
</tr>
<tr>
<td>Training on the job /in house training</td>
<td>17</td>
<td>59</td>
</tr>
<tr>
<td>Workshops</td>
<td>16</td>
<td>55</td>
</tr>
<tr>
<td>Professional association/society membership</td>
<td>16</td>
<td>55</td>
</tr>
<tr>
<td>Team meetings</td>
<td>15</td>
<td>52</td>
</tr>
<tr>
<td>Networking with colleagues inside and outside of the organisation (informal peer networking)</td>
<td>14</td>
<td>48</td>
</tr>
<tr>
<td>Self-paced/self-directed training, “exploratory play”</td>
<td>11</td>
<td>38</td>
</tr>
<tr>
<td>Conferences – presenting</td>
<td>11</td>
<td>38</td>
</tr>
<tr>
<td>Secondments</td>
<td>11</td>
<td>38</td>
</tr>
<tr>
<td>Personal development workshops/courses</td>
<td>9</td>
<td>31</td>
</tr>
<tr>
<td>Participation in external industry groups</td>
<td>9</td>
<td>31</td>
</tr>
<tr>
<td>Seminars</td>
<td>8</td>
<td>28</td>
</tr>
<tr>
<td>Participation on working groups</td>
<td>8</td>
<td>28</td>
</tr>
<tr>
<td>Mentorship programme</td>
<td>7</td>
<td>24</td>
</tr>
<tr>
<td>Project work (i.e. the opportunity to be part of a project)</td>
<td>6</td>
<td>21</td>
</tr>
<tr>
<td>Visiting other libraries</td>
<td>6</td>
<td>21</td>
</tr>
<tr>
<td>Taking on responsibilities outside of work with skills transfer to work environment</td>
<td>5</td>
<td>17</td>
</tr>
<tr>
<td>Social activities/events with colleagues</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>Job rotation</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>Formal courses in support tools (e.g. Access, Word, Excel)</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>Continuing Professional Development scheme with ALIA</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>Learning from clients</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Job exchanges</td>
<td>3</td>
<td>10</td>
</tr>
</tbody>
</table>

Table 17 Professional development activities mentioned most frequently
The activity that was included most frequently (and in fact was mentioned by all participants) was “Reading relevant literature/information sources”. This activity encompassed reading journal articles (usually online set up via alerts), subscribing to email discussion lists, RSS feeds, and newsletters, reading and posting to blogs or web forums, as well as reading documents such as conference reports or team minutes added to the CSIRO IM&T Library Services team Wiki or circulated by colleagues. Attending conferences (mentioned by 90% of participants), participating in vendor training (79%), undertaking formal studies (79%) and taking up in-house training opportunities provided by colleagues (59%) were the next most frequent responses.

4.3.2.1 Essential PD activities

Of the professional development activities they had provided, participants were then asked to identify those activities that they considered essential for a person working within the library environment. Essential in this context meant identifying which professional development activity at the very least should a person working within a library do to ensure they keep up to date with developments in the industry. Responses with a frequency percentage (%) of 10 or more are listed in Table 18. A complete list of activities is provided in Appendix 8.

<table>
<thead>
<tr>
<th>Activity</th>
<th>( f )</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading relevant literature/information sources</td>
<td>21</td>
<td>72</td>
</tr>
<tr>
<td>Academic study – initial qualifications plus further study</td>
<td>18</td>
<td>62</td>
</tr>
<tr>
<td>Training on the job /in house training</td>
<td>17</td>
<td>59</td>
</tr>
<tr>
<td>Vendor training</td>
<td>16</td>
<td>55</td>
</tr>
<tr>
<td>Team meetings</td>
<td>12</td>
<td>41</td>
</tr>
<tr>
<td>Self-paced/self-directed training, “exploratory play”</td>
<td>10</td>
<td>34</td>
</tr>
<tr>
<td>Networking with colleagues inside and outside of the organisation (informal peer networking)</td>
<td>8</td>
<td>28</td>
</tr>
<tr>
<td>Conferences – attending</td>
<td>7</td>
<td>24</td>
</tr>
<tr>
<td>Workshops</td>
<td>7</td>
<td>24</td>
</tr>
<tr>
<td>Personal development workshops/courses</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>Participation in external industry groups</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>Seminars</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>Job rotation</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>Professional association/society membership</td>
<td>3</td>
<td>10</td>
</tr>
</tbody>
</table>
Table 18 Professional development activities listed as essential in order of frequency

Not surprisingly, reading relevant literature/information sources was the activity most frequently rated as being essential (72%). Formal studies (62%) particularly initial qualifications in either a library degree or certificate were closely followed by training on the job/in house training (59%). One of the participants commented that it is “essential to get knowledge of developments in librarianship such as Open Access, legislation changes, changes in the digital environment and the impact on information (e.g. newspapers online and potential charges)”. Another clarified their response to the question by saying “Exposure to the broader professional community is essential – be aware of what’s happening outside your individual situation”.

4.3.2.2 Current PD activities

The next step was to seek an indication of the types of professional development activities that participants had themselves undertaken within the past year. Table 19 provides an overview of these activities mentioned with a frequency percentage (%) of 10 or more. A complete list is provided in Appendix 8.
Table 19 Professional development activities undertaken by survey participants within the past year

The table above provides a snap-shot of the types of professional development activities undertaken by library staff. Keeping up to date with relevant literature and other sources such as blogs tops the list as the most frequent professional development activity undertaken by CSIRO IM&T Library Services team members within the past year.

4.3.2.3 Frequency of PD activities

It was also useful to gain a rough estimation of time spent on those professional development activities participants had indicated that they had undertaken within the past year. Table 20 provides the estimated frequency of activities using the following scale:

- A = Always (at least once per day)
- B = Quite often (at least once a week)
- C = Often (at least once a fortnight)
- D = Sometimes (at least once a month)
- E = Occasionally (at least once a quarter)
- F = Twice per year (at least twice in a year)
- G = Rarely (at least annually if that)

<table>
<thead>
<tr>
<th>Activity</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading relevant literature/information sources*</td>
<td>10</td>
<td>12</td>
<td>4</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Conferences – attending</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>20</td>
</tr>
<tr>
<td>Vendor training*</td>
<td>-</td>
<td>1</td>
<td>5</td>
<td>6</td>
<td>8</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Training on the job/in house training*</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Team meetings</td>
<td>1</td>
<td>2</td>
<td>7</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Networking with colleagues</td>
<td>6</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Self-paced/self-directed training, “exploratory”</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 20 Frequency of activities undertaken by survey participants within the past year.
### Table 20 Estimated frequency of activities undertaken by participants within the past year

Activities highlighted with an asterisk (*) in the table above are the top five activities listed most frequently by participants as essential professional development activities for a person working within the library and information management profession. It is important to note that while academic study was not undertaken by most of the participants within the past year, 19 of the 29 interview participants indicated that they had completed their initial qualifications prior to last year. Seven of those participants also indicated that they had completed further study prior to last year. So although academic study is not undertaken as frequently as other professional development activities listed above, some level of academic study during information professional’s career is considered essential.

According to many of the participants, professional development is a personal responsibility. Saying “yes” when opportunities come up was strongly supported with comments such as “Put yourself outside your comfort zone as opportunities present in order to grow professionally and personally”; “Grab opportunities – say ‘yes’ when
asked as people may ask you because they identify a particular skill set that you may not identify in yourself”; and “Take advantage of every opportunity that comes your way.”

The importance of undertaking professional development activities in a change period (as was being experienced by the CSIRO IM&T Library Services team at the time of the Discovery interviews) was highlighted by one participant who commented “when things change you have to learn to cope with that new environment; it can be a catalyst for learning/development.”

**Question 2 – From your experience, remember a time when you felt most engaged or most fulfilled with regards to professional development.**

The Discovery interview participants were asked to recall a time in their career when they felt most engaged or most fulfilled with regards to professional development. Participants were asked to identify what made it possible to be feeling so switched on with regards to professional development at that time. Table 21 provides a list of responses with a frequency percentage (%) of 10 or more. A complete list of activities is provided in Appendix 8.

<table>
<thead>
<tr>
<th>Activity</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Getting involved in a project</td>
<td>5</td>
<td>17</td>
</tr>
<tr>
<td>Conference – attending</td>
<td>5</td>
<td>17</td>
</tr>
<tr>
<td>First starting out working in a library</td>
<td>5</td>
<td>17</td>
</tr>
<tr>
<td>Networking and sharing knowledge with colleagues</td>
<td>5</td>
<td>17</td>
</tr>
</tbody>
</table>

Table 21 Situations where participants felt most engaged or fulfilled with regards to PD

Many of the activities related to being involved in something new – a new project, attending a conference for the first time, or first starting work in the library industry. This is understandable as the energy and engagement level would be expected to be higher at the beginning of something new whether it is a project or new job. Interaction with colleagues and sharing knowledge also rated as one of the more frequent situations where participants felt most engaged with regards to professional development.
Question 3 – Focus for a moment on a specific professional development activity that has had a positive benefit for you and your work.

The third question in the interview was closely linked to the previous question and asked participants to focus on a specific activity that has had a positive benefit for them and/or their work. Participants were asked to identify the professional development activity; to provide an indication of how they undertook that activity (e.g. in-person, online, self-funded, work-funded); and to describe specific instances in which that professional development activity was of a benefit to them and/or their work. Table 22 provides the list of responses with a frequency percentage (%) of 10 or more. A full list of activities is provided in Appendix 8.

<table>
<thead>
<tr>
<th>Activity</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sharing knowledge with colleagues/learning from colleagues</td>
<td>9</td>
<td>31</td>
</tr>
<tr>
<td>Participate in a project/in a working group</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Workshops</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Conferences</td>
<td>3</td>
<td>10</td>
</tr>
</tbody>
</table>

Table 22 Specific PD activity that has had a positive benefit for participants

The library profession is all about data, information and knowledge - seeking, organising, and disseminating information and data to assist in the creation of knowledge. It is not surprising, therefore, to see from the responses received that “Sharing knowledge with colleagues/learning from colleagues” rates as one of the most frequently mentioned professional development activities that has had a positive benefit for participants. The other activities that are considered as having the most positive benefits include participation in a project or working group; workshop; or conference. Again, these last three activities are related to sharing their own knowledge (in the delivery of conference papers for example) or learning from others knowledge and experience (attending workshops and conferences).
**Question 4 – Think about a time when you were part of a team that had a high level of professional development.**

The *Discovery* interview participants were asked to think about a time when they were part of a team that had a high level of professional development. The aim of this question was to discover positive experiences that people had within a team environment and to consider how those experiences might be utilised for the CSIRO IM&T Library Services team overall in developing a Professional Development strategy. Participants were asked to provide details of how professional development was undertaken (e.g. Online, in-person, individual, team-based, self-fund, work-funded, combination etc). Professional development activities were undertaken in a variety of ways with an even split of those participants talking about a combination of methods (online and in-person) and those participants who said that while in that team environment, most of the professional development opportunities were undertaken in-person. Several participants when providing examples that were “mostly in-person” activities noted that their examples occurred at a time when there were limited tools for online training unlike the powerful training tools such as MeetingPlace and WebEx available for utilisation now. These training tools are essential for virtual teams and the online approach is now the most likely avenue for professional development activities to be undertaken particularly in a geographically dispersed team such as CSIRO IM&T Library Services. Participants outlined multiple ways that the outcomes from professional development activities were shared among the teams (see Table 23).

<table>
<thead>
<tr>
<th>How PD outcomes were shared among the teams</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal knowledge-sharing sessions with colleagues (in-person or online)</td>
<td>13</td>
<td>45</td>
</tr>
<tr>
<td>Information added to Intranet/Wiki/Shared folders</td>
<td>12</td>
<td>41</td>
</tr>
<tr>
<td>Reports at team meetings</td>
<td>10</td>
<td>34</td>
</tr>
<tr>
<td>Informal discussions</td>
<td>9</td>
<td>31</td>
</tr>
<tr>
<td>Emails to team members</td>
<td>4</td>
<td>14</td>
</tr>
</tbody>
</table>

Table 23 Professional Development outcomes shared within a team environment
In most of the responses received, it was a combination of ways of sharing outcomes within the team – for example, a team member that went to a training course may have provided a brief verbal report at a team meeting, added their written report to the Wiki and then also scheduled a series of more in-depth knowledge-sharing sessions with colleagues on specific tips and techniques learnt from the course.

**Question 5: Professional Development for CSIRO IM&T Library Services team three years down the track**

The final question was designed to end the Discovery interviews with positive thoughts and ideas for the strategic development of professional development within the CSIRO IM&T Library Services team. The question was: “Keeping in mind the positive experiences you have just described, look three years into the future and outline what you think needs to be in place for a successful Professional Development process for the IM&T Information Services team”. There were 10 concepts that emerged encompassing a number of ideas that participants suggested in order to have a successful Professional Development process in place for all library staff.

<table>
<thead>
<tr>
<th>Concepts</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Making the time</td>
<td>25</td>
<td>86</td>
</tr>
<tr>
<td>Recognising the value of coming together</td>
<td>24</td>
<td>83</td>
</tr>
<tr>
<td>Having access to a clear process for Professional Development</td>
<td>23</td>
<td>79</td>
</tr>
<tr>
<td>Putting Direction into Professional Development</td>
<td>17</td>
<td>59</td>
</tr>
<tr>
<td>Maintaining our agility</td>
<td>13</td>
<td>45</td>
</tr>
<tr>
<td>Sharing our knowledge</td>
<td>12</td>
<td>41</td>
</tr>
<tr>
<td>Taking the opportunity to step up</td>
<td>11</td>
<td>38</td>
</tr>
<tr>
<td>Taking a Library Services team approach to Professional Development</td>
<td>9</td>
<td>31</td>
</tr>
<tr>
<td>Maximising available training tools</td>
<td>5</td>
<td>17</td>
</tr>
<tr>
<td>Getting a good head start</td>
<td>4</td>
<td>14</td>
</tr>
</tbody>
</table>

Table 24 Concepts that need to be in place for a successful Professional Development process

It is also worthwhile to note that during the discussion around this question, many participants commented that they thought there had been good progress made over the
past year with the range of professional development opportunities available for staff with events such as the Library Services Conference, vendor training and training/information sessions by colleagues using MeetingPlace being established.

Having gained a snapshot of professional development activities, perceptions of essential activities and a menu of concepts that needed to be in place in order for a professional development process to be successful, the next step was to work through the *Dream, Design* and *Destiny* phases to turn ideas into reality where possible. To do this, the *Library Conference: New Horizons in October 2009* was utilised to undertake the *Dream* and *Design* phases.

### 4.3.3 Dream and Design

Approximately 60 staff from across the three library teams – Information Specialists, Library Collection and Information Support – participated in the CSIRO IM&T Library Services Conference “New Horizons” in Canberra held over two days late 2009. A session was scheduled to continue working on the affirmative topic of “Professional Development for CSIRO Library Services Staff in a Changing World: the Right Skills for Today and Tomorrow” undertaking the *Dream* and *Design* phases of the AI 4-D model. The session had been scheduled for the second day of the conference prior to lunch but ended up being presented on the first day due to technical problems preventing another presentation from going ahead. This change in time was actually a benefit as there was a presentation that same morning from the Chief Information Officer (the Director of IM&T) on the strategic plan for IM&T where library staff’s role in the new arena of eResearch and data management were highlighted. Although professional development had already been identified as a priority for the newly formed IM&T teams, the overview of the strategic plan provided by the CIO reinforced the importance of professional development for library staff to keep up with changes in the information environment, making sure skills and knowledge matched the level of change occurring within the profession and the broader information industry.
In order to set the scene within the broader context of professional development support and opportunities across CSIRO, the Human Resources (HR) Officer for IM&T gave a short presentation to the group at the beginning of the Professional Development session linking in with the career development initiative across CSIRO and the tools available to staff e.g. Personal Development Plans. The HR Officer remained throughout the session to provide assistance if required during the facilitation of the group work aspect of the session and also to answer any queries that may have pertained to the broader career development initiatives at the organisational level.

The *Discovery* interviews undertaken with a sample of the CSIRO IM&T Library Services team had generated the following key concepts that participants indicated needed to be in place in order for there to be a successful Professional Development process for the CSIRO IM&T Library Services team:

- Making the time
- Recognising the value of coming together
- Having access to a clear process for Professional Development
- Putting direction into Professional Development
- Maintaining our agility
- Sharing our knowledge
- Taking the opportunity to step up
- Taking a Library Services team approach to Professional Development
- Maximising available training tools
- Getting a good head start

There were 10 tables with approximately six conference attendees at each table. Each table group was assigned one of the key concepts above and was asked to focus on completing two specific activities following the *Dream* and *Design* phases of the Appreciative Inquiry cycle. These activities included working through the *Dream* phase to develop and agree on one principle (i.e. a provocative proposition) on which the progression of professional development within the CSIRO IM&T Library Services team will be based. As part of the *Design* phase, participants were to design action plans
to enable the CSIRO IM&T Library Services team to achieve the major concepts as identified in the PD interviews.

The energy level in the room was quite intense in a positive way as the table groups started working on their tasks and sharing ideas. Once the tasks had been completed, a representative from each table group shared their table’s principle and action plans with the broader group. This was a useful process of raising awareness of issues and actions that different groups had proposed. It also ensured ownership of the ideas put forward by each table to their colleagues.

Provocative propositions - The principles on which the progression of professional development within the CSIRO IM&T Library Services team would be based were identified from an analysis of the contents of butchers papers gathered from each table. There were two instances where the principles were along the similar lines and so those principles were merged resulting in a total of seven principles. The principles formed the provocative propositions of the Dream stage of the AI cycle and were written in the present tense to focus on the possibility of an actualized reality. The results were:

- Each person is responsible for their own professional development
- Professional development is included in APAs
- We develop networks internally and externally and will collaborate across professional boundaries
- We work in an environment that supports and enables professional development
- Everyone has equal access to professional development opportunities
- We have the required skills to be agile and flexible
- Everyone has something worth sharing

These principles were fed back to the group the following day for validation by the group. No changes were suggested by the conference participants. Copies were also provided for participants to take away with them.
Chapter 4: Research Findings

The actions – As part of the Design phase of the AI cycle, the aim was to work with the library services staff to develop and implement a “group-owned” strategy for encouraging library staff to engage in individual professional development to assist in developing the level of change-readiness of the team. The action plans created by the conference participants included:

1. The appointment of Professional Development (PD) Champions – at least one from each team, to coordinate PD information across teams, to develop the PD Portal, and coordinate a PD agenda item at team meetings. Seven team members volunteered during the feedback session at the conference to be PD Champions. A meeting with the PD Champions was held after the conference to run through the PD Portal and provide demonstrations in how to add information. PD Champions were charged with providing demonstrations in their team and to keep a watching brief for items to add to the PD Portal, particularly the PD Calendar. The facility to set up alerts for changes to the PD Portal provided an easy way for all library staff to keep up to date with any changes to the site.

2. The development of one point for PD Information (i.e. a PD Portal) - this task was to be undertaken by the researcher and the PD Champions. The SharePoint site developed for the dissemination of information about the PD project was further developed to become the PD Portal for use by all CSIRO IM&T Library Services team members. The following features as identified by the conference participants during the Design discussions were incorporated in the PD Portal:
   a. The principles on which the progression of professional development within the CSIRO IM&T Library Services team will be based
   b. Current in-house opportunities (secondments, projects etc)
   c. Calendar of PD events
   d. Types of PD activities listed and essential activities as identified during the Discovery interviews
   e. Process for accessing PD opportunities (study support, secondments, conferences, workshops, training courses etc)
   f. Set up alerts to be notified of new items or changes to the site.
3. Implementing sessions to share the knowledge within the Library Services team – this was to be coordinated through a member of the Management team and the PD Champions. A calendar of knowledge-sharing sessions to which everyone can contribute and participate was produced and added to the PD Portal.

4. Identify key skill sets – this was an activity to be undertaken by the teams and their team leaders to do a gap analysis of current and future skills. The results could then be added to the PD Portal.

The CSIRO IM&T Library Services team now had a path forward for implementing a professional development strategy incorporating the actions listed above and based on the principles as determined by the team itself. The project then moved into the Destiny phase of the AI cycle.

4.3.4 Destiny

The process so far undertaken had included the PD Interviews (Discovery phase of Appreciative Inquiry); the conference session (combination of the Dream and Design phases of AI) and the development of the PD Portal as a deliverable out of this process. The next step was the Destiny phase which was the evaluation phase to link the previous discussions together and review the changes that had been made. Seeking and obtaining feedback from participants through the survey moved this action research project into the evaluation phase focusing on aspects to improve or further develop which is also aligned with the purpose of the Destiny phase of AI.

Participants in the initial Discovery interviews on professional development were targeted for the Destiny phase as they had been involved in every phase of the 4-D cycle focused on professional development. Participants were sent a Word document containing a 12-question survey using a 5-point Likert type scale for responses ranging from Strongly Disagree to Strongly Agree. Additional comments/feedback on improving the process was also encouraged with the provision of space for either typed or hand-
written responses. A total of 16 survey responses were received by the requested deadline (a return rate of 64%). Table 25 provides the collation of the responses received.

<table>
<thead>
<tr>
<th>Response</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Uncertain</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I enjoyed participating in the Professional Development (PD) interview</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>(6%)</td>
<td></td>
<td>(6%)</td>
<td>(56%)</td>
<td>(38%)</td>
</tr>
<tr>
<td>Participating in the PD interview made me think about what I am doing</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>with regards to my own professional development</td>
<td>(6%)</td>
<td>(6%)</td>
<td>(0%)</td>
<td>(50%)</td>
<td>(44%)</td>
</tr>
<tr>
<td>I felt re-energised with regards to professional development after the</td>
<td>0</td>
<td>1</td>
<td>5</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>PD Interview and/or the conference session</td>
<td>(6%)</td>
<td>(6%)</td>
<td>(31%)</td>
<td>(44%)</td>
<td>(19%)</td>
</tr>
<tr>
<td>I feel that my experiences and ideas discussed in the PD Interview and/or</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>the conference session has helped in the development of a CSIRO Library</td>
<td>(6%)</td>
<td>(6%)</td>
<td>(19%)</td>
<td>(56%)</td>
<td>(25%)</td>
</tr>
<tr>
<td>Staff team approach to addressing professional development</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am satisfied with the Professional Development (PD) Portal available</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td>for all CSIRO Library Staff to utilise</td>
<td>(6%)</td>
<td>(6%)</td>
<td>(0%)</td>
<td>(69%)</td>
<td>(25%)</td>
</tr>
<tr>
<td>I will use the PD Portal</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(6%)</td>
<td>(6%)</td>
<td>(19%)</td>
<td>(62%)</td>
<td>(19%)</td>
</tr>
<tr>
<td>I understand the range of professional development opportunities</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>available for CSIRO Library Staff ranging from self-learning to formal</td>
<td>(6%)</td>
<td>(6%)</td>
<td>(13%)</td>
<td>(56%)</td>
<td>(31%)</td>
</tr>
<tr>
<td>training opportunities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I find the PD Portal simple to use</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>12</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>(6%)</td>
<td>(6%)</td>
<td>(12.5%)</td>
<td>(75%)</td>
<td>(12.5%)</td>
</tr>
<tr>
<td>The content on the PD Portal is not very useful to me</td>
<td>3</td>
<td>9</td>
<td>3</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>(19%)</td>
<td>(56%)</td>
<td>(19%)</td>
<td>(6%)</td>
<td>(0%)</td>
</tr>
<tr>
<td>I believe professional development opportunities are there for everyone</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td>in the CSIRO Library Staff team to utilise</td>
<td>(6%)</td>
<td>(6%)</td>
<td>(0%)</td>
<td>(69%)</td>
<td>(25%)</td>
</tr>
<tr>
<td>I am comfortable applying for professional development opportunities</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(6%)</td>
<td>(6%)</td>
<td>(12%)</td>
<td>(69%)</td>
<td>(19%)</td>
</tr>
<tr>
<td>Professional development is important to me</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>(6%)</td>
<td>(6%)</td>
<td>(6%)</td>
<td>(63%)</td>
<td>(31%)</td>
</tr>
</tbody>
</table>

Table 25 Responses to the *Destiny* evaluation survey
One of the key premises of the Appreciative Inquiry technique is to generate energy through sharing of stories, empowering people to turn ideas into reality. The level of responses in the ‘Agree’ and ‘Strongly Agree’ categories received for the following – “Participating in the PD interview made me think about what I am doing with regards to my own professional development” and “I felt re-energised with regards to professional development after the PD Interview and/or the conference session” – confirm that the premise was actualised. Perhaps the most telling feedback relating to the overall satisfaction with the AI technique using the 4-D model was as follows:

“I very much supported and enjoyed the workshop and presentation about Professional Development at the Library Conference in October, 2009, as well as the interview process…Initially I felt more comfortable discussing my experiences and suggestions one-on-one and welcomed the opportunity to do that. At the Conference it was interesting and informative to gain perspective and insight from colleagues across the various divisions and to hear the numerous suggestions and ideas raised, particularly the points made in relation to ‘maintaining our agility’.”

The feedback in the evaluation survey closes the AI and action research cycle but as both AI and action research are circular in nature, they lead to areas that need further focus. The comments received on the survey provide details of the areas that require further development:

_Time allocation for professional development_ - the time available for staff to undertake professional development was a common topic in the feedback received. One respondent would like to see the time mandated by management in order to make the time available: “I believe it is very important to allow staff to allocate specific time on a weekly basis to use for PD. This needs to be encouraged, if not mandated by management, not seen as an add-on activity that you fit in whenever you get a spare moment, or in your own time.”

_Broadening the range of professional development opportunities available_ – Although respondents praised the professional development opportunities available to the CSIRO IM&T Library Services team members, there was feedback to perhaps expand the Calendar of PD Events to incorporate events that might be considered of more lateral interest, for instance writing courses.
Sharing knowledge within the teams – Some of the CSIRO Library Services functional groups have added Professional Development or Sharing our Knowledge sessions to their regular team meetings. This has not been across the board though and is often within the functional group rather than available for all the CSIRO Library Services team. The Share our Knowledge (SOK) list on the PD Portal has not been utilised as much as had been anticipated from the ideas generated at the Dream and Design session at the Library Conference. This is explained by one participant as follows: “Perhaps one area that we could expand is getting knowledgeable people in our teams to share even small tips/techniques or bigger tool/issue information, across teams in a MeetingPlace environment. I know it can be hard to get people to put their hand up, and sometimes we think everyone else already ‘knows that’. However, could be useful.” As participants in the initial PD Discovery interviews had indicated that “Sharing knowledge with colleagues/learning from colleagues” (31%) was the activity mentioned most frequently (31%) as having a positive benefit (see Table 16) this is an issue that requires further promotion and encouragement from team members as well as team leaders to fully utilise this avenue of professional development – both in giving the presentation as well as learning from the presentation.

Suggestions for improving the layout/location of the PD Portal – constructive feedback was provided on ways to improve the layout of the PD Portal. Interestingly, the participant who had ticked ‘Disagree’ to the statement “I am satisfied with the Professional Development (PD) Portal available for all CSIRO Library Staff to utilise” wanted to provide an explanation to their choice in the written feedback section:

“I noted that I was dissatisfied with the portal but it’s not the portal per se but a feeling that it may not be sufficient. Also it doesn’t seem to be used fully utilised. For example there are no nominations for a SOK session (guilty also). We may need “encouragement “– perhaps by way of the PD champions running a MeetingPlace session on how to add things to the portal and guidance on the thinking on what goes where….Perhaps a lack of SharePoint training is also hindering development and full collaboration. “

With these areas of further development identified and the infrastructure underpinning the professional development strategy in place, members of the CSIRO IM&T Library Services team have now been empowered to seek and undertake professional
development opportunities, a critical factor for enhancing the change-readiness of the individual as well as the overall team.

This chapter presented the findings related to the practical outcome of applying the AI technique on two affirmative topics - the creation of exceptional change-ready teams; and professional development for CSIRO Library Services staff in a changing world: the right skills for today and tomorrow. The findings outlined in this chapter provide a useful framework for establishing exceptional teams within LIM organisations and in general. The next chapter will discuss the outcomes from this research project applying the Appreciative Inquiry technique within a LIM organisation.
Chapter 5: Analysis and Discussion

“When one door closes another door opens; but we so often look so long and so regretfully upon the closed door, that we do not see the ones which open for us”

Alexander Graham Bell (1847-1922)

5.1 Introduction

The challenge with this action research project is that the research is comprised of two interrelated yet different studies. The research is focused on the application of the Appreciative Inquiry technique but it is also important to look at the practical outcomes of the topics that have been used in exploring the application of AI. The topics on which this research focused were the development of exceptional change-ready teams and professional development as a means of enabling change-ready teams. The dual aspect of this action research project is reflected in the initial research questions which asked:

- How can Appreciative Inquiry be used as a positive change management technique for LIM organisations?
- How effective the Appreciative Inquiry approach to change management might be for organisations relying upon virtual teams?

These questions will be addressed in this chapter, where the practical outcomes of applying AI provide evidence to demonstrate how AI can be used as a positive change management technique for LIM organisations.

5.2 Using AI in LIM organisations

As previously discussed, LIM organisations and the staff who provide the library and information services within those organisations are experiencing exponential change related predominantly to technological, social and economic developments. Answering the research question “How can Appreciative Inquiry be used as a positive change management technique for LIM organizations?” required the application of this technique to change topics within a real LIM organisation in order to have practical outcomes from the process. Evaluating the practical outcomes from the application of AI
was important in better understanding the role of AI and its effectiveness as a change management tool. As such, this research project focused on applying the positive change management technique of Appreciative Inquiry to practical issues being addressed by the Library Services team within CSIRO Information Management & Technology (IM&T).

5.2.1 Implementing the AI process

In the creation of CSIRO IM&T in June 2006, one of the aims was the development of new cross-functional teams (including virtual teams) that would be able to meet change in the information management environment in a proactive way. According to the founders, Appreciative Inquiry was “designed around the idea that organizations are made and imagined, and can be remade and reimagined” (Cooperrider, Barrett & Srivastva, 1995, p. 181). With this in mind, implementing the Appreciative Inquiry process within CSIRO IM&T during a time of major change provided means of enabling the teams to build on their positive experiences in making change-ready exceptional teams.

Action research has been defined as “a process in which the researcher is not solving a problem for the other/s but with the others in joint learning” (Ottosson, 2003, p.91). This creates potential ethical challenges. The practitioner-researcher is often an active participant in action research within their own work environment, not just a passive observer. When the researcher is in direct line management with participants, as was the case in this research project (particularly during the application of Stage 1 of the project), it may have an impact on what the participant is willing to disclose. Reflexivity is where the researcher is cognizant of their relationship with the research participants, the research community with whom the outcome is to be shared as well as the motivations for why they chose that particular research topic (McCabe & Holmes, 2009, p. 1522). The respondent may say something simply because they think it is what their manager wants to hear rather than answer the question truthfully. In Stage 1 of the project, this situation was minimized through the use of the paired interview process with work colleagues and the relative anonymity of the written responses once collected.
by the researcher. The use of a facilitator could possibly have helped to minimize the
effect of the manager/researcher on the participants’ responses but the experience from
this study was that the involvement of the manager/researcher in the AI session was
valued rather than viewed as a hindrance. By actively seeking and implementing a
positive change management approach, the manager/researcher demonstrated their
desire to take an inclusive and generative means of bringing about change,
acknowledging and building on the strengths that existed in the team members.
Participants’ past experiences and current skills were shared, acknowledged and
considered an integral element to build on in moving forward with the new service
delivery model.

In Stage 2 of this project, the researcher was not in direct line management of any of the
participants although the potential still remained for participants to respond in the way
that they thought the researcher might want them to respond. The Professional
Development *Discovery* interviews were undertaken using the online collaborative tool,
MeetingPlace, with the interaction between the researcher and the participants being
audio combined with a shared view of the questionnaire and the document used to
capture responses to Question 1. Fontana and Frey (2008, p. 150) describe this as
engaging in “virtual interviewing” where face-to-face interaction is eliminated and
establishing an interviewer-interviewee relationship is “difficult if not impossible.”
However, the experience from this study was that the level of familiarity between the
researcher and the participants helped to ‘break the ice’ at the beginning of the
interview. An interviewer-interviewee relationship was readily established in a relaxed
atmosphere encouraging people to talk, share ideas and think about professional
development prior to the broader team discussion at the Library Conference in Canberra
later that year.

The researcher also needs to have confidence that their interpretation of the responses
written in the questionnaire or voiced in the interview is correct. This is why the raw
data was analysed a number of times to look at the associated answers that a participant
gave to other questions and to see if context can be established. Feeding back the results
of the analysis to the participants is an important means of verification of the analysis.
This was done through reports made available to all members of the CSIRO IM&T Library Services team on the outcomes of Stage 1 and Stage 2 of this research project. There are, however, times when context may not be easily established and the possibility of reflexivity – i.e. that the interpretation of the response is from the researcher’s view of reality - is high. An example is the following response to Question 1 of the *Discovery* interviews in Stage 1 of this research project: “Manager led by example. He expected more than one thought was possible. Not to let him down one stretched beyond known capabilities. He protected his people. He took the flack for mistakes and supported you no matter what.” A common theme that appears to emerge from this response and from others is the feeling of being challenged. Is then, the phrase, “one stretched beyond known capabilities” the same as being challenged? Being challenged can be interpreted in different ways – it can be challenging in a positive sense of driving someone to achieve or it may mean that the person extended themselves not for a positive sense of achievement for themselves but simply so they didn’t let their manager down. An advantage of action research projects, such as this, is that the researcher is also a participant in the community with which the research is being undertaken. The practitioner-researcher gains an insight into the mindset of staff by reading the full responses from participants about what they think makes exceptional teams. In this way, the raw responses were read from the position as the manager of the team (in Stage 1) and a colleague (in Stage 2) who took value in reading all the raw responses but also from the position as the researcher in then undertaking more detailed analysis of the raw data to identify common themes. This relationship with the research participants and topic was a positive aspect of undertaking action research within one’s own organisation and is an aspect that Van der Haar and Hosking (2004, p. 1027) consider to be one of the positive qualities of the Appreciative Inquiry process.

5.2.3 Stage 1 outcomes

The purpose of the *Discovery* phase in the Appreciative Inquiry model is to recognise and evoke the positive potential of the team or organisation through inquiry (Van Vuuren & Crous, 2005, p. 406). In Stage 1 of this research project, the application of the *Discovery* phase in exploring “what gives life” to exceptional change-ready teams
provided a window to the thoughts and perceptions of the participants from the newly formed IM&T Library and Records teams about what they considered were the critical characteristics of exceptional teams. When a new team is formed, members bring their history about how they operated in their previous teams with them (Kreigel & Brandt, 1996, p. 124). Acknowledging this history and learning about positive team experiences provides a strong foundation on which to build the new team. By applying the Discovery phase during the change workshops in Melbourne, the newly formed teams were able to:

- Share stories about exceptional team experiences and identify what actions made that experience so exciting/engaging/fulfilling
- Identify the critical actions that made it possible for a team to work together so exceptionally
- Discover what participants valued about themselves and the organisation
- Gain an insight to the sources of pride in their work and in what way they envisaged contributing their best to the newly formed IM&T team
- Identify leadership characteristics valued by participants
- Share positive experiences in the ways trust and respect were developed and communicated in teams.

The final question of the paired Discovery interview was designed to end the session with positive thoughts (or ‘best wishes’), generating energy and hope for the future development of the newly formed CSIRO IM&T team. The aim was to encourage thinking about some of the positive aspects to the change currently underway. In line with the social constructionism principle of AI, by having “conversations that matter” and sharing stories through the paired interview process, had the potential to shift participants’ view of reality or at the very least to understand that not everyone was thinking the same about the change occurring in IM&T, whether it be positive or not. Unsolicited verbal feedback at the end of the workshop session supported the positive aspect of sharing stories about experiences where things had worked well and also the element of self-discovery in encouraging people to think about their self-value and what
value they saw themselves bringing to the new teams. That some participants might have then carried this positive mind-set into the following workshop sessions outlining the new service delivery model was a potential added benefit.

A key outcome of the *Discovery* interview was the emergence of seven characteristics of exceptional teams that were valued by CSIRO IM&T Library and Records staff:

1. Open communication – the ability to voice ideas and opinions as well as to learn from mistakes without fear of a “hostile reaction”
2. Trust and respect shared within teams particularly demonstrated through an absence of micromanagement, entrusting staff with responsibilities and a demonstrated history of individuals “doing what they say they will do” (this applies to staff and management)
3. Sharing skills, knowledge, information, and best-practice among team members and across teams using technology to maximise contact between members of virtual teams
4. A common vision for the future development of library and records services developed with input from all levels of staff
5. Support given through funding of resources required to provide exceptional service – i.e. funding for human, technology and information resources
6. Valuing the information profession and the service provided, including recognition for ‘great work’
7. Opportunities for professional development to continue to keep the service at the leading edge.

These characteristics and other data gathered from the *Discovery* phase in Stage 1 of this research project provided an opportunity to address future change by building on these identified values for exceptional teams.
5.2.4 Stage 2 outcomes

Following the cyclical nature of action research, Stage 2 of this research project built upon experiences and outcomes from Stage 1. Creating a professional development strategy for the CSIRO IM&T Library Services team was a positive step towards achieving one of the key characteristics of an exceptional change ready team as identified by the team members in Stage 1. The professional development strategy was intended to enable staff to be agile with regards to keeping skills relevant in a rapidly changing information environment. This is supported by survey findings that indicate that library staff experience a high level of motivation and job satisfaction when they have support (moral and financial) for professional development and work in an environment that fosters teamwork and embraces change (Markgren, Dickinson, Leonard & Vassiliadis, 2007, p. 75). As such, the affirmative topic investigated was “Professional development for CSIRO Library Services Staff in a changing world: the right skills for today and tomorrow”. Through the application of the full 4-D model, a professional development strategy was created by harnessing the experiences, energy and enthusiasm of the CSIRO Library Services team itself.

Through the application of the Appreciative Inquiry 4-D model, the following outcomes were achieved:

**Discovery phase**

- Identified a broad range of professional development activities that could be undertaken by a person working with the LIM industry
- Presented a list of “essential” professional development activities that anyone working in LIM industries should undertake at the very least to keep up to date with developments in the industry
- Provided a snapshot of the types of professional development activities, and the frequency of those activities, currently undertaken by a sample group of CSIRO Library Services staff
- Identification of professional development activities highly rated as being engaging and having the most positive benefit for participants
• Acknowledgement of the ways in which professional development outcomes can be shared within a team environment
• Identification of 10 key concepts that need to be in place in order for a successful professional development process to occur.

**Dream and Design phase**

• Creation of a set of seven key principles on which the progression of professional development within the CSIRO IM&T Library Services team will be based
• Development and implementation of a “group-owned” strategy for encouraging library staff to engage in professional development through the following actions:
  - Appointment of Professional Development Champions in each team
  - Development of the Professional Development Portal on SharePoint as a source for professional development information including PD principles, types of PD activities (including those considered essential), and a calendar of PD events
• Suggestions for knowledge-sharing sessions to which everyone could contribute and participate via the online collaborative tool, MeetingPlace
• Call for teams to do a gap analysis of current and future skills.

**Destiny**

• Identification of areas that required further development including:
  - Time allocation for professional development.
  - Broadening the range of professional development opportunities available.
  - Sharing knowledge within the teams.
  - Suggestions for improving the Professional Development Portal.

Through the application of Appreciative Inquiry, the CSIRO IM&T Library Services team was able to take a positive approach to addressing the issue of professional development. The team now has a path forward for implementing a professional
development strategy incorporating the actions and the principles as determined by the team itself. As an illustration of social constructionism in action, AI enables participants to create new organisational realities together (McNamee, 2002, p. 36). In this case study, AI was applied to lay the foundation for creating the organisational reality of exceptional change-ready teams.

5.2.5 Results

In order to positively state that exceptional change-ready teams were created, some element of comparison would need to be made of the ‘before’ and ‘after’ status of the team. In the case of the CSIRO Library Services team, at the time of the workshops in Melbourne in 2007, the teams were in the process of being formed and staff were just getting familiar with how the new structure and service delivery model were supposed to operate and the implications of the new model on them personally. The ‘before’ picture of the teams was a group of people somewhat uncertain about the changes that were being imposed through the restructure and creation of the CSIRO IM&T team consisting of IT, Library and Records staff. But through data gathered from the AI session at the workshop, it was also evident that along with this quite reasonable uncertainty there was also a great deal of positive team experience that could be built upon in the formation of the new teams. A list of ‘key ingredients’ or characteristics for exceptional teams as perceived by the library and records staff was one of the valuable outcomes of the workshop session. As well as encouraging a positive mind-set to the changes, the Appreciative Inquiry session provided the opportunity for team leaders to understand more about what their team members valued about themselves and the organisation. Practical ideas for enhancing team leadership could be drawn from previous positive experiences of team members.

The ‘after’ picture is taken three years after the workshops. During this time there have been further changes to the staffing structure but essentially the service delivery model was implemented and operational across the teams. Teams have been formed, roles clarified, and services in place. The Professional Development Portal has been created
as a means of providing a source of information about professional development opportunities. The teams are operating in a cohesive and effective way, taking pride in the level of service quality they provide to research clients.

Change is still occurring within the Library Services team in CSIRO in order to keep services aligned with developments in technology that impact on how services are delivered and the way research clients seek, use and share information. Understanding the need for change and having the skills to be able to make the change operational will assist the change-readiness of the library services staff. Readiness for change is the “cognitive precursor to the behaviors of either resistance to, or support for, a change effort” (Armenakis, Harris & Mossholder, 1993, p. 681). Creating change-ready teams is a means of minimizing the likelihood of resistance to change through enabling staff to be prepared for change. This includes Professional Development as a means of staying alert to the changes within the library industry as well as within the client environment. Keeping skills current with changes in technology and its impact on service delivery is a key element to enabling staff to feel empowered to meet some of the changes within LIM organisations.

In applying the AI technique within a LIM organisation to specifically focus on the creation of exceptional change-ready teams, there were a number of valuable outcomes that add to the body of knowledge that exists about AI and its use in LIM organisations:

- Critical elements of exceptional change-ready teams as perceived by participants were identified
- The role of Professional Development as a key requirement for effectively coping in a rapidly changing environment was highlighted
- Participation in this research project generated increased interest and triggered a self-reflection over roles and participation in an ongoing change process within the organisation
- In general, the reflective process was a positive experience for participants with over 60% saying that they felt ‘re-energised’ through participating in the process
• The AI technique was effectively employed within an LIM organisation that operates predominantly within a virtual team environment
• A framework for implementing a Professional Development strategy within an LIM organisation with a diverse and geographically distributed team was developed.

The following section will discuss the outcomes of the AI implementation focused on the two research questions:

• How can Appreciative Inquiry be used as a positive change management technique for LIM organisations?
• How effective the Appreciative Inquiry approach to change management might be for organisations relying upon virtual teams?

Both questions will be addressed through examination of the quantitative and qualitative data gathered throughout the AI implementation and assessed against the criteria of effectiveness.

5.3 The implementation of AI with CSIRO IM&T virtual teams

Managing change in teams can be challenging due to variances in personalities, skills and levels of understanding of the change process that team members possess. This challenge can be compounded for leaders of geographically dispersed teams who don’t have the convenience of being able to pick up on the day-to-day informal, social interactions that occur when co-located. By taking an Appreciative Inquiry approach, team leaders create an environment that encourages collaborative participation in which every person in the team can have a voice and where there is a true exchange of ideas, opinions and feelings in a positive and constructive way (Anderson et al. 2008, p. 42). The experience from the application of AI within the CSIRO IM&T Library Services team – a virtual team located across Australia – demonstrated the value this technique had in creating an element of appreciation of other’s views and experiences during a major change process. By employing the AI Discovery interviews, a framework for positive dialogue between team members, some of whom had never met face-to-face,
was enabled. In this case, the topic was exploring exceptional teams and the values, experiences and views shared by participants during the AI process provided opportunities to identify the critical elements of exceptional teams and incorporate these elements into the newly formed teams. In this way, the attraction of AI for LIM organisations with virtual teams is that this change management approach combines inquiry with practical action within a positive framework that generates team interaction and activity regardless of where the team members are physically located (Patton 2003, p. 88). That is not to say, though, that applying AI within a virtual team doesn’t have its challenges.

5.3.1 Challenges experienced

In applying AI within the library services team in CSIRO to address the topic of exceptional change-ready teams, a number of challenges were experienced. These challenges are outlined here in order to inform others so that they can learn from the experiences of this research and make the most of applying AI within their own organisation:

1. *The importance of the questions being as clear as possible.* Avital (2002, para. 2) sums this issue up very effectively: “The importance of asking the ‘right’ questions is intuitively clear if one can envision how questions both enable and constrain what would be explored, and how questions not asked represent areas not explored.” Having the questions open-ended encouraged participants to give comprehensive responses in the story-telling approach that AI takes but the questions still need to be clear in order to elicit comprehensive responses relevant to the topic being explored. For example, in the Stage 1 paired interviews, the multiple aspects to Question 1, 2d, 3 and 4a (see Appendix 2) resulted in a mix of responses where some participants responded to all aspects of the questions whereas other participants may have only focused on one aspect of the questions. Interpretation of Question 4a “How was trust and respect communicated” resulted in a level of confusion as some participants took this literally and responded to the “how” component of the question with answers such as “email”, “verbally” “letter” whereas others explained how they saw the
process of trust in a team being communicated through such actions as being “trusted to get on with the job/not micromanaging”.

2. **Being able to manage the sheer volume of data generated.** Related to the above point made with regard to comprehensive responses, the volume of the data generated from the Discovery phase interviews can be overwhelming. As the Discovery phase takes a storytelling approach, there were often multiple answers to each question – i.e. not just one answer per person per question – which made the analysis more challenging than perhaps would be the case with a questionnaire or interview with fixed multiple choice answers from which participants must choose, thereby providing neat categories for analysing responses. The initial analysis of the raw data resulted in a large volume of information. Several passes at coding were then undertaken to continue to reduce the volume of data into manageable and meaningful themes. The issue the researcher struggles with is whether the coding applied results in the loss of context and the richness of the raw response. For example, the theme identified from the Discovery paired interviews in Stage 1 as “Willing to speak out” might cover an answer that was “I care therefore I’m willing to speak out for others, not just myself” which is in effect a more powerful and emotive response that gives a clearer picture into the respondent’s view of their reality. The danger is that if one tries to continually reduce the number of themes, it may result in a loss of useful information.

3. **Appreciative Inquiry is not always rose-coloured.** Some of the responses to various questions particularly at the Discovery paired interviews in Stage 1 clearly demonstrated a degree of disengagement that a small number of participants had with the structural changes underway. However, it should be noted that a number of those participants with negative comments in their responses did also have some positive responses to other questions. As mentioned previously, a number of workshop attendees chose not to participate in the Appreciative Inquiry session – out of the 111 attendees, only 18 people chose not to participate in the Appreciative Inquiry session. The withdrawal of dissatisfied members who are unable to feel included by the AI approach was identified as one of the challenges in utilising AI
by Egan and Lancaster (2005, p. 42). However, as those who chose not to participate in the AI interviews did not have to provide a reason, it is unknown whether they withdrew from the process due to a lack of faith in the AI approach, disinterest with the session, or perhaps as a silent protest demonstrating a level of resistance to the change process that was underway in IM&T.

4. *Keeping the momentum going.* Perhaps the greatest challenge with following the AI cycle lies in keeping the momentum going after group sessions where so much energy is generated. When the teams go back to their day-to-day work, the ideas developed through the AI sessions need to translate from ideas to action plans into realities. Time delays and budget restrictions can endanger the success of using the AI approach if action plans get stymied due to lack of resources to support them. This is where AI sessions or ‘summits’ that work through the full 4-D model with all stakeholders, including those with the power to financially back the actions arising from the *Design* phase, have the advantage over an AI process that is stretched out over time and over distances with virtual teams. Appointing champions, such as the case with the Professional Development strategy within the library services team in CSIRO, can help keep the momentum going so that action plans are properly resourced.

### 5.4 The effectiveness of the AI process

Findings from the literature and experiences from the application of this technique within the library services team in CSIRO indicate that AI is a viable technique to use in taking a positive approach to change management in LIM organisations with virtual teams. The application of AI as a positive change management tool for the CSIRO IM&T Library Services team revealed the following advantages in using this technique:

*Positive energy was generated* – the Appreciative Inquiry process created energy through members of the CSIRO IM&T Library Services team remembering and sharing positive experiences. Hall & Hammond (n.d.) refer to this as ‘honouring the past’ to create energy that can be harnessed as teams move into the future. Studies have
demonstrated that there is a correlation between positive employees and positive organisational change particularly when employees are given the opportunity to become aware of their thinking patterns that challenge their ability to be positive at work during times of organisational change (Avey, Wernsing & Luthans, 2008). Such awareness comes through the “conversations that matter” approach that Appreciative Inquiry advocates and was evident in the feedback from participants either during or after the Discovery interviews. Building on the positive energy generated from the AI approach, staff became aware of their thinking patterns. Avey, Wernsing and Luthans (2008, p. 65) consider that this type of awareness may lead staff to intentionally choose more positive and resilient ways of dealing with stress and resistance to change.

AI was generative and inclusive – innovative ideas were generated within the group discussions and were subsequently “owned” by the participants. This was particularly evident in Stage 2 of the research focusing on the development of the Professional Development strategy. The principles developed were constructed by the group as were the action plans. Together the team created a shared vision of the strategy they wanted to have in place. This is reinforced by Cooperrider, Barrett and Srivastva (1995, p. 189) stating that the inclusive approach of AI enables participants to collectively develop “a horizon of confident construction which energizes, intensifies, coordinates, and provokes action in the present.”

AI was flexible – AI was flexible in that it was applied to different topics (i.e. exceptional teams and then professional development) and with different groups (i.e. the combined teams from library and records in Stage 1 and then just the CSIRO IM&T Library Services team in Stage 2). There were a variety of means to conduct the AI sessions including in-person and remotely. During this research project, use of online collaboration products such as MeetingPlace to conduct the Appreciative Inquiry interviews remotely demonstrated just how valuable these tools are when applying Appreciative Inquiry to a virtual team such as the CSIRO IM&T Library Services team with members located across Australia. The flexibility with AI also extended to the ability to apply just the Discovery phase or the full 4-D model. This is reflected by Whitney and Trosten-Bloom (2003, pp. 218-219) who put forward that AI is a broad
framework not a rigid path to follow. The application of the Discovery phase in Stage 1 of this research provided a useful starting point for people to prompt participants to think of the positive about the change situation that was occurring. This was in line with Sullivan’s (2004, p. 227) recommendation for libraries to begin any change process with an exploration of “the best” of what exists. Negatives tend to come easily but thinking about the positives created a mind shift in the participants’ approach to the situation.

Appreciation of multiple realities - the social constructionism element of AI provided an opportunity to gain an understanding of the group’s perceived reality of what makes an exceptional, change-ready team. Through dialogue, participants in the AI sessions in both stages of this research learnt about their fellow team members’ view of the world and then working together, they created a shared vision of the future. As du Toit (2003, p. 34) explains, “Through the sharing of knowledge, individuals in organizations create the organizational reality they will experience.” Creating, communicating a vision and empowering people to act on that vision is one of the critical elements for successful change management (Kotter, 1995, p. 103).

A disadvantage of the Appreciative Inquiry approach is that it is not a crisis management tool (Elliott, 1999, p. 53). Although it can help to provide a new view of the issues behind a crisis, AI takes time to conduct properly which is time a crisis situation often can’t afford. The better approach would be to harness AI before a situation becomes a crisis. Although perhaps not a disadvantage it is still important to note that if the Discovery only phase is utilized at the beginning of a change process as it was in Stage 1 of this research, there is an element of “what happens next?” The Discovery sessions created considerable energy but without the Dream, Design and Destiny phases to follow through on that energy, the outcomes tended to lack direction to be carried forward into actions. As a result of the experiences from both stages of this research, the recommendation is where possible, opt to take the time and apply the full 4-D cycle instead of just the Discovery phase in order to create positive energy and continue the momentum to develop actions and deliver practical outcomes.
5.5 Final reflections on the outcomes

Evaluation of the AI process has shown that it has indeed met the goal of an effective intervention strategy in that staff showed a positive acceptance of change and, as noted earlier, are operating in a more cohesive and effective manner, taking pride in the quality of the service they provide to their users. The research design of focusing on two clear aspects, the implementation of AI in a specific situation at CSIRO and evaluation of its effectiveness as a change management tool, enabled a clearer picture to be developed of the strategy’s overall effectiveness as a practical tool for change management in the workplace. The end result has been positive in that AI does appear to offer real potential as a change management approach that works effectively in the virtual team environment and that it can be an effective approach for LIM organisations to discover the “hidden power” to achieve their dreams of success (Donovan, 2006, p. 11). The findings from this research project address the initial research questions as evidenced in the outcomes detailed below:

- Proves the usefulness of the theoretical AI model and its application in a practical situation highlighting aspects relevant for the practitioner-researcher
- Change is imperative for LIM organisations and by employing AI, a positive approach to change can be achieved as it is a technique to engage people in the change process and encourages contribution and participation
- Recommends the AI 4-D model be adopted by LIM organisations as a means of effectively addressing issues within the organisation and profession
- Highlights the potential this change management technique has for organisations with virtual teams as it is flexible enough to work well with a variety of communication methods (email, MeetingPlace, in-person)
- Demonstrates the effectiveness of applying the complete 4-D model of AI in comparison with the application of the Discovery phase only
- Provides an applied example of a Discovery questionnaire for exceptional change-ready teams which could be readily adapted by other LIM organisations.
The discussions provided in this chapter indicate that AI should be utilised by LIM organisations, particularly those with virtual teams, as this approach to positive change management encourages people to learn through dialogue, stimulating creativity and creating a shared vision (Akdere, 2005, p. 23). The next chapter considers further the practical implications, limitations, and the contribution this research makes to the existing body of knowledge. Future research opportunities and recommendations based on the findings from this research are also provided.
Chapter 6: Conclusion

“Life is either a daring adventure or nothing. To keep our faces toward change and behave like free spirits in the presence of fate is strength undefeatable”
Helen Keller (1880-1968)

6.1 Introduction

According to Johnson and Leavitt (2001, p. 130) Appreciative Inquiry is “an approach that is uniquely suited to organisations that seek to be collaborative, inclusive, and genuinely caring for both the people within the organisation and those they serve.” This is a clear description that could apply to most, if not all, LIM organisations. As has been emphasized throughout this thesis, AI is a broad framework not a rigid path to follow (Whitney & Trosten-Bloom, 2003, pp. 218-219). AI is meant to be flexible to apply to different organisations and situations. Studying an organization operating at its best provides an opportunity to learn about what is required for that organization to continue to grow and change in positive ways (Whitney, Trosten-Bloom & Rader, 2010, p. 6). In determining the potential of AI as a positive change management tool for library managers, particularly those with virtual teams, this action research project digressed from the traditional top-down, problem-solving approach that is often applied with mixed success within LIM organisations.

6.2 Review of the research process

In their study on AI, Egan and Lancaster (2005, pp. 39-40) interviewed AI practitioners and found that one of the most significant contributions of AI was not just the development of practical skills but an improvement in the application of interpersonal skills as well leading to a culture of cooperation. This was particularly associated with the benefits of participants sharing positive experiences and the active listening process that the Discovery phase interviews encourage. Use of the Discovery phase was overall a positive and productive activity for participants. Verbal feedback from participants supported the positive aspect of sharing stories about experiences where things had worked well and also in an aspect of self-discovery in encouraging people to think about their self-value and what value they see themselves bringing to the new teams. As a
member of the management team, the researcher gained significant insight into what participants saw as the key factors relating to successful teams and exemplary leadership qualities as had been experienced by participants. The descriptions of what participants valued about themselves, the organisation and what they saw they had as being of value to the new teams, provided an opportunity to manage future change building on these strengths and identified values.

6.3 Limitations

As discussed in Chapter Three, there were a number of potential limitations associated with the research design including the use of paired interviews for the Discovery phase and the subsequent quality of data gathered. In this research project, a failure of Stage 1 was not having a follow-up session immediately after the Appreciative Inquiry session at the change workshops to reflect the findings back to the participants and validate the findings within the group environment while the energy level from participation in the workshop was still quite high. If the time had been available in Stage 1 to conduct this follow-up session during or immediately after the workshops, further discussions may have been generated and the positive mind-set that had been demonstrated during the workshop session could possibly have been reinforced. One of the key limitations of this research is that the study was undertaken within the parameters of the Research Support Services review within CSIRO where there were certain elements that could not be changed (such as budgets) and within an environment of considerable change prior to the application of Appreciative Inquiry. Although the questionnaires and interview tools developed as part of this research can be utilised by other LIM organisations, the results from this research are specific to the IM&T Library Services team within CSIRO at a particular stage in a major restructure process. Although the details may not necessarily be replicated elsewhere it should be noted that the principles and the process as demonstrated by this research are widely applicable to other LIM organisations.
6.4 Responding to the research questions

Investigating the potential for the application of AI for libraries was the focus of this action research project. The dual purpose of this study was to explore the concept of change management in LIM organisations with the CSIRO IM&T Library Services team as a case study and to assess the potential of Appreciative Inquiry (AI) as a positive change management tool for library managers more generally, especially those working with virtual teams. This section will address the research questions and outline the contribution this research makes to the current body of knowledge.

6.4.1 How can Appreciative Inquiry be used as a positive change management technique for LIM organisations?

Despite its popularity in other disciplines, it would appear that very few LIM organisations have utilised AI as a change management technique. This research applying AI within the CSIRO IM&T Library Services team during a period of significant and sustained change, has demonstrated how AI can be used as a positive change management technique for LIM organisations. The application of the AI technique was used in this case to address the affirmative topic of exceptional teams with a focus on professional development as a means of enhancing the level of change-readiness of team members. AI has been shown here to be a useful technique that works with the mix of generations currently working in the LIM environment, and can be employed in a variety of ways – in-person or virtually – to assist taking a positive approach to organisational change, exploring and understanding what staff value in their workplace (Gursoy, Maier & Chi, 2008). The combination of the outcomes of this research and a review of the literature provide clear options for how AI can be used by LIM organisations to shift the focus of conversation to positive questions and create an appreciative culture within their organisation. Stamps and Lipnack (2004, p. 31) provide the following observation which is directly applicable to LIM organisations:

“Where the focus is on people creating purposeful and relationship-rich virtual teams and networks, the action-research methodology of Appreciative Inquiry provides a strong and continuously improving developmental process that scales from very small associations to very large interventions.”
6.4.2 What is the role of Appreciative Inquiry in change management for virtual teams?

AI as a positive change management approach is applicable to a wide range of issues within different sized groups ranging from small to large, and including virtual teams. As a large research organisation, CSIRO has changes occurring on a multitude of levels from the enterprise down to individual projects. This can involve members from teams that are not co-located as is the case for many teams within the CSIRO Information Management & Technology (IM&T) group. This research applied AI within the CSIRO IM&T Library Services team which is a virtual team with staff geographically distributed across Australia at a variety of CSIRO facilities. As evidenced from this research, the role AI has in change management for virtual teams is to foster a culture of cooperation and appreciation in teams where members may not have the opportunity to interact face-to-face. This type of appreciative culture incorporates the crucial elements of communication and trust within the virtual team as previously discussed in Chapter Two. The storytelling and inclusive approach of AI encourages engagement within the group environment, building a sense of community and trust (Morris, 2004, p. 22). Traditionally this has been challenging to develop within virtual teams but the advantage of AI is that it is a generative and inclusive process regardless of where participants are geographically located. Innovative ideas are generated through positive dialogue where participants in AI learn more about their fellow team member’s view of the world. As demonstrated in this research, this dialogue can be undertaken in-person as they were at the Discovery session at the change workshops in Stage 1, or virtually using online collaboration tools such as MeetingPlace as occurred in the Discovery interviews in Stage 2. The innovative ideas generated by AI’s positive dialogue are collectively owned by the virtual team members who, although geographically separated, can work together to create a shared vision of the future.
6.4.3 Contribution of this research to the current body of knowledge

In applying the AI technique within a LIM organisation to specifically focus on the creation of exceptional change-ready teams, there were a number of valuable outcomes that add to the body of knowledge that exists about AI and its use in LIM organisations. This includes:

- Identifying critical elements of exceptional change-ready teams as perceived by library and records staff within a diverse and geographically-dispersed research organisation
- Highlighting the role of professional development as a key requirement for staff to cope effectively in a rapidly changing environment
- Participation in this research project generated increased interest and triggered a self-reflection over roles, level of change-readiness and participation in the ongoing change process. In general, the reflective approach that AI initiates was a positive experience for participants with over 60% saying that they felt ‘re-energised’ through participating in the process
- Developing a framework for implementing a professional development strategy within an LIM organisation with a heavy reliance on virtual teams.

Furthermore, the findings from this project address the initial research questions, and highlight:

- The usefulness of the theoretical AI model and its application in a practical situation, proving particularly relevant for the practitioner-researcher
- That by taking an AI approach, a positive approach to change may be achieved, engaging people with the change process and encouraging contribution and participation in the generation of a collective view of a desired future for the organisation
- That the AI 4-D model can be adopted by LIM organisations
- The potential this change management technique has for organisations with virtual teams as it is flexible enough to work well with a variety of communication methods (email, MeetingPlace, in-person).
• The effectiveness of applying the complete 4-D model of AI in comparison with the application of the Discovery phase only

• The usefulness of a well thought out Discovery questionnaire for exceptional change-ready teams which could be readily adapted by other LIM organisations.

As a result of undertaking this research, a number of possible future research opportunities emerged.

6.5 Future research opportunities

Action research is a cycle of action and reflection leading to further action. During the process of undertaking this study, opportunities for future research were identified. Exploration of different affirmative topics that could be addressed using AI would provide greater opportunities to investigate how the technique may be used to address those issues in a positive and constructive approach. During the course of this research a number of possible topics for further exploration emerged including:

• Using AI to generate meaningful dialogue on generational approaches to change

• Using AI as a personal development tool for the individual as this has not yet been fully explored (Bloom, 2002)

• Researching whether the problem-solving mind-set of particular personality styles possibly derails the effective use of AI as positive change management tool.

More specifically, future research opportunities exist for LIM organisations to undertake action research using an AI approach. These opportunities include addressing broader organisational issues such as succession planning, proactive client services, and innovative or magnetic work environments. Change circumstances specific to libraries such as the effective utilization of physical library space or simply keeping ahead of the rapidly changing technologies that underpin library services are also valid opportunities for future research employing AI. The changing role of library staff particularly into areas such as data management would also be a suitable research topic to explore using the AI approach. AI is flexible enough to deal with a broad range of topics of importance to LIM organisations; can handle a variety of participants from the whole organisation
down to small teams; and can utilise collaborative online technology to make the process an inclusive one for virtual team members.

In his article on transformational change through Appreciative Inquiry, Faure (2006, p. 22) states that change management “approaches that include the alignment of objectives, work processes, and reward and punishment systems can be successful but may still run into opposition if the people affected feel manipulated or imposed upon.” AI is a means to engage people in the change process, encouraging contribution from all stakeholders within the change process. With AI celebrating just over 30 years since its initial development, there is a considerable amount of literature and anecdotal evidence available on the success of its application in a broad range of organisations and addressing a multitude of affirmative topics. What is lacking is evidence of the application of this positive change management technique within LIM organisations.

6.6 Recommendations

Encouraged by the successful application of Appreciative Inquiry within a large variety of organisations including this case study, the potential utilisation of AI by LIM organisations is clear. This research leads to the following recommendations:

- That managers, team leaders and change agents in CSIRO consider AI as a potential change management tool where appropriate and that information about the application of AI within the organisation is shared
- That the Appreciative Inquiry 4-D model be actively engaged by LIM organisations and individuals more broadly as the information sciences field continues to undergo rapid and large-scale change
- That LIM organisations or individuals utilising the Appreciative Inquiry process, publish their findings and share their experiences with other LIM professionals
- That leaders of virtual teams incorporate the use of AI, including application of the 4-D model. Failing that, simply adopting an appreciative mindset in their every day work environment will be a positive approach to empowering staff and developing a strong working relationship within their teams.
6.7 Conclusion

This study evolved in response to a direct need to manage the significant and prolonged change that library services, along with other research support services, in the Commonwealth Scientific and Industrial Research Organisation (CSIRO) were experiencing. In seeking a positive change management approach, this study followed the call by Maureen Sullivan (2004) for LIM organisations to explore AI as a change management tool focusing on the strengths, values and ‘best’ of what exists and incorporate this into the change process. This project engaged participants from the library and records teams from the CSIRO Information Management & Technology (IM&T) business unit distributed across Australia. This team of library and information professionals have experienced first-hand how social, technological and economic developments have “catapulted and enhanced the complexity of change” (Knight, 2009, p. 54).

As Dority (2006, p. 3) states: “Things change. No matter how much our directors love us, no matter how great a job we do, circumstances, and management, change. Budgets get cut, people move on, organizations’ priorities (and staff needs) change.” In managing this ever-present issue of change, team leaders are encouraged to consider alternatives to the problem-solving way of thinking, and move towards adopting an Appreciative Inquiry approach which engenders a generative and inclusive process for positive change management.

As demonstrated by this research, Appreciative Inquiry is a technique that can be harnessed by individuals, team leaders and whole organisations to move forward by building on ‘what gives life’ and viewing change as an opportunity to develop professionally and personally. These opportunities include addressing issues such as succession planning, creating an innovative work environment, proactive client services, effective utilization of physical library space or simply keeping ahead of the rapidly changing technologies that underpin library services. The changing role of library staff particularly into areas such as data management would also be a suitable research topic to explore using the AI approach. By following the AI 4-D model – Discover, Dream,
Design and Destiny – library staff can be empowered to respond positively to the changing environment in which library services operate and carry the ‘best of what was’ into creating a strong future of exceptional teams and exceptional services.
References


References


Calabrese, R. L., Goodvin, S. & Niles, R. (2005). Identifying the attitudes and traits of
teachers with an at-risk student population in a multi-cultural urban high school. 


Hallam, G. (2007). Don't ever stop! The imperative for career-long learning for the library and information profession. *Information Online: 13th Exhibition and


Knight, J. (2009). The contemporary library and information services manager: Skills


Appendix 1: Questionnaire from Pilot Study

*Taking a Positive Approach to Change Management in Library and Information Management Organisations: The Role of Appreciative Inquiry*

**Participants’ details:**
Name:

Gender: Male / Female

Time with CSIRO: < 1 year 1-5 years 6-10 years 11-15 years 16-20 >20 years

**Questions:**
1. Looking at your experience within a CSIRO library, remember a time when you felt most alive, most engaged, most fulfilled, or most excited about your involvement in the organisation’s library services.
   - Describe how you felt about it.
   - What made it exciting/engaging/fulfilling?
   - What made this situation possible?

2. Focus for a moment on some of the things you value deeply about yourself, about the nature of your work, about your library service and about CSIRO.
   - Without being humble, what do you value most about yourself as a person?
   - What are some sources of pride for you in your work?
   - What do you value most about being a part of CSIRO’s library services?
   - What do you see is your value to the organisation and in what ways do you contribute your best?
   - What is the most important thing this organisation has contributed to your life?

3. What do you appreciate most about CSIRO’s library services? In what ways does it excel?

4. Describe a leader who has had a positive influence on you and your work.
   - What did that person do?
     How did that person interact with you?
   - Describe some specific instances in which you experienced this positive influence.

5. Think about a peak experience in your professional work. What was it about your situation, organisation, colleagues or yourself that enabled this to occur?

6. If you were granted three unconditional wishes to heighten the vitality and health of CSIRO’s library services, what would they be?

Thank you for participating in this interview.
Appendix 2: Questionnaire for Discovery session at Change Workshops

Taking a Positive Approach to Change Management in Library and Information Management Organisations: The Role of Appreciative Inquiry

**Discovering positive ways to assist virtual teams in preparing for, and implementing, change.**

**Participants’ details (please circle):**

Gender: Male / Female

Age: < 20 21-30 31-40 41-50 51-60 >60

Time with CSIRO: < 1 year 1-5 years 6-10 years 11-15 years 16-20 >20 years

**Questions:**

1. Looking at your experience within a team environment, remember a time when you felt most alive, most engaged, most fulfilled, or most excited about your involvement in that team.

- Describe how you felt about it.
- What made it exciting/engaging/fulfilling?
- What made this situation possible?

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_______________________________________________
(Continued over page)
2. Focus for a moment on some of the things you value deeply about yourself, about the nature of your work, about the CSIRO IM&T team and about the organisation in general.

- Without being humble, what do you value most about yourself as a person?
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
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- What are some sources of pride for you in your work?
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- What do you value most about being a part of the CSIRO IM&T team?
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
• What do you see is your value to CSIRO IM&T and in what ways do you envisage contributing your best?

_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________

• What is the most important thing this organisation has contributed to your life?

_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________

3. Describe a leader who has had a positive influence on you and your work.

• What did that person do?
• How did that person interact with you?
• Describe some specific instances in which you experienced this positive influence.

_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
4. Think about a time when you were part of a team that had a high level of trust and respect among the members.

- How was trust and respect communicated?

- What made it possible to establish trust in that group?
5. If you were granted three unconditional wishes to heighten the vitality and health of the CSIRO IM&T team, what would they be?

1._____________________________________________________________________
_______________________________________________________________________

2._____________________________________________________________________
_______________________________________________________________________

3._____________________________________________________________________
_______________________________________________________________________

Thankyou for participating in this interview

(Additional page overleaf if required)
Please use this page if more space is required to answer the questions on the previous pages.
Appendix 3: Information Sheet for Discovery session at Change Workshops

FACULTY OF SCIENCE AND AGRICULTURE
School of Information Studies

Locked Bag 675 Tel: +61 2 6933 2584
Wagga Wagga NSW 2678 Fax: +61 2 6933 2733
Australia ABN: 83 878 708 551

Taking a Positive Approach to Change Management in Library and Information Management Organisations: The Role of Appreciative Inquiry

Principal Investigator: Mrs Tricia Kelly
Executive Manager, Library Services CSIRO
PO Box 5545 Telephone: (07) 4923 8144
CQ Mail Centre QLD 4702 Fax: (07) 4923 8222

Course: Tricia is a CSU student undertaking the Doctor of Information Management (5901M)
Host Institution: The School of Information Studies, Charles Sturt University.

Information about this research project
This study, “Taking a Positive Approach to Change Management in Library and Information Management Organisations: The Role of Appreciative Inquiry”, aims to investigate the application of a change management technique called “Appreciative Inquiry” within library and information management organisations. This technique seeks to identify the best in people and their organisations and use this as a strategy for effective change management. The methodology used in this research project is paired interviews with individuals working within a Library and Information Management (LIM) organisation, such as the CSIRO Information Management & Technology group. This interview is part of the Discovery phase of Appreciative Inquiry and will be used to identify themes and concepts that form the basis for the development of the subsequent phases of Dream, Design and Destiny.

Information about the process
In this paired interview, you will be asked a series of questions relating to your role as an information professional working within a library and information management organisation, particularly within the virtual team environment. The interview will take approximately half an hour for you to complete, and then approximately half an hour for you to then interview a work colleague using the questions provided. With your permission (please see the note below), the interview will be recorded on paper and transcribed into an electronic copy. Details gathered during the interview will be analysed for common themes. As this is a sharing exercise, details will not be confidential but any identifying details will be removed prior to publication of results. The transcripts will be stored securely until five years after the research project has been completed at which time they will be destroyed.
Please note
You are under no obligation to participate in the project and may withdraw from the project at any time. Non-participation or withdrawal will not result in any penalty or discriminatory treatment. If you agree to participate in this project, please read and sign the attached consent form and return it to the Principle Investigator at the address listed above.

NOTE: Charles Sturt University’s Ethics in Human Research Committee has approved this study. If you have any complaints or concerns about the ethical conduct of this project, you may contact:

The Executive Officer
Ethics in Human Research Committee
Academic Secretariat
Charles Sturt University
Private Mail 29
Bathurst NSW 2795

Phone: (02) 6933 4628
Fax: (02) 6933 4194
Appendix 4: Participant’s Consent Form (Change Workshops)

FACULTY OF SCIENCE AND AGRICULTURE
School of Information Studies

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Australia ABN: 83 878 708 551

PARTICIPANT’S CONSENT FORM

Taking a Positive Approach to Change Management in Library and Information Management Organisations: The Role of Appreciative Inquiry

Course: Doctor of Information Management (5901M)  
Charles Sturt University

Principal Investigator: Mrs Tricia Kelly  
Executive Manager, Library Services  
PO Box 5545 Telephone: (07) 4923 8144  
CQ Mail Centre, QLD, 4702 Fax: (07) 4923 8222

1. The purpose of the research has been explained to me, and I have read and understood the information sheet given to me.

2. I understand that I am free to withdraw my participation in the research at any time, and that if I do I will not be subjected to any penalty or discriminatory treatment.

3. I permit the investigator to record my interview responses on paper and then in electronic format as part of this project.

4. I understand that as this is an information sharing exercise, details will not be confidential but that neither my name nor any other identifying information will be used or published without my written permission.

5. Charles Sturt University’s Ethics in Human Research Committee has approved this study.

I understand that if I have any complaints or concerns about this research I can contact:

The Executive Officer  
Ethics in Human Research Committee  
Academic Secretariat  
Charles Sturt University  
Private Mail 29 Phone: (02) 6338 4628  
Bathurst NSW 2795 Fax: (02) 6338 4194

Signed by: .......................................................... Date: .....................................................
Appendix 5: Questionnaire for Discovery Interviews (Stage 2 of the research project)

Taking a Positive Approach to Change Management in Library and Information Management Organisations: The Role of Appreciative Inquiry

Doctor of Information Management (5901M) Principal Investigator: Tricia Kelly
Charles Sturt University CSIRO IM&T

Professional development and exceptional change-ready teams: the right skills for today and tomorrow

Years working within the Library & Information industry (total years not just those in CSIRO)
< 1 year 1-5 years 6-10 years 11-15 years 16-20 >20 years

Questions:
1. As this interview is focused on discovering positive approaches to professional development (PD), it would be very useful to begin by finding out your opinion of what constitutes professional development within the Library and Information Management (LIM) profession.
   - Think about all the types of professional development and create a list of those you consider relevant to the LIM profession.
   - Out of these, which would you consider essential for the LIM profession?
   - How often do you undertake each of these types of professional development
     - Never
     - Rarely (annually if that)
     - Occasionally (once a quarter)
     - Sometimes (once a month)
     - Often (once a fortnight)
     - Quite often (once a week)
     - Always (daily)

2. From your experience, remember a time when you felt most engaged or most fulfilled with regards to professional development.
   - Describe this situation.
   - What made this situation possible?

3. Focus for a moment on a specific professional development activity that has had a positive benefit for you and your work.
   - What was that professional development activity?
   - How did you undertake that professional development activity? (in-person, online, self-funded, work-funded)
   - Describe some specific instances in which this professional development activity was of a benefit to you and/or your work

4. Think about a time when you were part of a team that had a high level of professional development.
   - How was professional development undertaken? (online, in-person, individual, team-based, self-fund, work-funded, combination etc)
• How was professional development outcomes shared amongst the team?
• How was professional development enabled in an equitable way for all?

5. Keeping in mind the positive experiences you have just described, look 3 years into the future and outline what you think needs to be in place for a successful PD process for the IM&T Information Services team.

Thankyou for participating in this interview
Appendix 6: Information Sheet (Stage 2)

INFORMATION STATEMENT

Taking a Positive Approach to Change Management in Library and Information Management Organisations: The Role of Appreciative Inquiry

Professional Development and exceptional change-ready teams: the right skills for today and tomorrow

Principal Investigator: Mrs Tricia Kelly
CSIRO IMT Telephone: (07) 4923 8144
PO Box 5545 Fax: (07) 4923 8222
CQ Mail Centre QLD 4702

Information about this research project - Professional development can assist library staff to have the right skills to be able to manage changes with aspects of their role particularly technological changes. This study aims to address the issue of professional development for members of the CSIRO library community, applying a specific positive change management technique called “Appreciative Inquiry”. The aim of this exercise is to identify the best experiences of professional development and use these in developing a strategy for professional development for the CSIRO Information Services team. The methodology involves interviews with individuals from across the CSIRO library community. This interview is part of the Discovery phase of Appreciative Inquiry and will be used to identify themes and concepts that form the basis for the development of the subsequent phases of Appreciative Inquiry.

Information about the process - In this interview, you will be asked a series of questions relating to your experiences with professional development as a member of the library profession. The interview will take approximately an hour to complete and will be conducted using MeetingPlace. With your permission (please see the note below), the interview will be recorded via MeetingPlace and transcribed into an electronic copy. Access to the interview recording will be restricted to the Principal Investigator. The MeetingPlace server automatically wipes all meeting recordings every 2 weeks and once this occurs, the meeting recordings are no longer accessible by anyone. The audio recording from the interviews will be copied to the Principal Investigator’s computer where it will be used for transcription purposes. The transcripts will be stored securely by the Principal Investigator until five years after the research.
project has been completed at which time they will be destroyed. Details gathered during the interview will be analysed for common themes. The compilation of responses will be kept anonymous as any identifying details will be removed prior to publication of results.

Please note - You are under no obligation to participate in this activity and may withdraw from the project at any time. Non-participation or withdrawal will not result in any penalty or discriminatory treatment. If you agree to participate in this activity, please read and sign the attached consent form and return it to Tricia Kelly at the address listed above.

NOTE: Charles Sturt University’s Ethics in Human Research Committee has approved this study. If you have any complaints or concerns about the ethical conduct of this project, you may contact:

The Executive Officer
Ethics in Human Research Committee
Academic Secretariat
Charles Sturt University
Private Mail 29
Bathurst NSW 2795
Phone: (02) 6933 4628
Fax: (02) 6933 4194
Appendix 7: Participant’s Consent Form (Stage 2)

FACULTY OF EDUCATION
School of Information Studies
Locked Bag 675 Tel: +61 2 6933 2584
Wagga Wagga NSW 2678 Fax: +61 2 6933 2733
Australia ABN: 83 878 708 551

PARTICIPANT’S CONSENT FORM

Taking a Positive Approach to Change Management in Library and Information Management Organisations: The Role of Appreciative Inquiry

Professional Development and exceptional change-ready teams: the right skills for today and tomorrow

Course: Doctor of Information Management (5901M)
Charles Sturt University

Principal Investigator: Mrs Tricia Kelly
CSIRO Information Management & Technology (IMT)
PO Box 5545 Telephone: (07) 4923 8144
CQ Mail Centre, QLD, 4702 Fax: (07) 4923 8222

1. The purpose of the research has been explained to me, and I have read and understood the information sheet given to me.

2. I understand that I am free to withdraw my participation in the research at any time, and that if I do I will not be subjected to any penalty or discriminatory treatment.

3. I permit the investigator to record my interview responses using MeetingPlace as part of this project.

4. I understand that this is an information sharing exercise but that neither my name nor any other identifying information will be used or published without my written permission.

5. Charles Sturt University’s Ethics in Human Research Committee has approved this study.

I understand that if I have any complaints or concerns about this research I can contact:
The Executive Officer
Ethics in Human Research Committee
Academic Secretariat
Charles Sturt University
Private Mail 29 Phone: (02) 6338 4628
Bathurst NSW 2795 Fax: (02) 6338 4194

Signed by: ...................................................... Date:.........................................................
Appendix 8: Tables of responses with a frequency > 2

Findings from Stage 1 of the research project:

<table>
<thead>
<tr>
<th>Actions</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Something new (new ideas/challenges/opportunities/new environment/new people)</td>
<td>36</td>
<td>43</td>
</tr>
<tr>
<td>Achieving something meaningful/valued as a group</td>
<td>23</td>
<td>28</td>
</tr>
<tr>
<td>Expanding knowledge/skills/experience</td>
<td>21</td>
<td>25</td>
</tr>
<tr>
<td>Being part of a network/supportive team</td>
<td>11</td>
<td>13</td>
</tr>
<tr>
<td>Exciting because the work was important (for Chief/senior people)</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Involvement in/contribution to the science of CSIRO</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Professionally respected/recognised</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Had ownership of situation/initiative and autonomy in decision-making</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Felt positive about contributing which lead to wanting to engage/contribute even more</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Finding a positive outcome for the client</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Contributing towards humanity/society/local community</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 5a Actions that made the team experience exciting/engaging/fulfilling

<table>
<thead>
<tr>
<th>Feelings/Emotions</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exciting</td>
<td>25</td>
<td>30</td>
</tr>
<tr>
<td>Supported</td>
<td>21</td>
<td>25</td>
</tr>
<tr>
<td>Learning</td>
<td>20</td>
<td>24</td>
</tr>
<tr>
<td>Challenged</td>
<td>14</td>
<td>17</td>
</tr>
<tr>
<td>Cooperative</td>
<td>12</td>
<td>14</td>
</tr>
<tr>
<td>Contributing</td>
<td>11</td>
<td>13</td>
</tr>
<tr>
<td>Positive/optimistic</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>Trusted</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>Engaged</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>Fulfilled</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>Valued</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>Respected</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>Happy</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>Important</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Proud</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Achieving</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Appreciated</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Energised</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Involved/included</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Motivated/inspired</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Responsible</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Encouraged</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Enthusiastic</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Interested</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Rewarding</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Invigorated/exhilarating</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Safe/secure/protected</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Dedicated/committed</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Confident</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Needed</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>----------------------------</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>Professional</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Stimulated</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Willing</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Nervous/anxious</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Belonging</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Independent</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Satisfied</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

### Table 5b Feelings/emotions experienced

<table>
<thead>
<tr>
<th>Actions</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teamwork – all the team put in their best/cooperation/collaboration</td>
<td>26</td>
<td>31</td>
</tr>
<tr>
<td>Support from manager and other staff</td>
<td>19</td>
<td>23</td>
</tr>
<tr>
<td>Trust/confidence in manager/team leader</td>
<td>14</td>
<td>17</td>
</tr>
<tr>
<td>Positive/open communication/feedback</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td>Supportive work environment</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>Resources available</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>Team dynamics</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Opportunities to develop professional skills</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Consistent direction/clear goal</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Shared values</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Trusted to do the right thing/get the job done</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Willingness to consult others and share knowledge/ideas</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Ability to contribute</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Right mix of skills of team members</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Good interpersonal skills</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Respect for ability of other team members</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Self-motivation</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Trust/confidence in team members</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>The people involved in research teams</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Willingness to support each other</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Strong client relationship</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Variety in work and the people</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Good humour shared amongst group</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Experience/skills valued by team</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

### Table 6 Critical actions that made it possible for the team to work together so exceptionally

<table>
<thead>
<tr>
<th>Actions</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honesty/trustworthy/reliability</td>
<td>24</td>
<td>29</td>
</tr>
<tr>
<td>Good work ethic/commitment to work</td>
<td>23</td>
<td>28</td>
</tr>
<tr>
<td>Easy to get on with/ability to relate to people at all levels</td>
<td>17</td>
<td>21</td>
</tr>
<tr>
<td>Empathetic/perceptive of other’s feelings</td>
<td>16</td>
<td>20</td>
</tr>
<tr>
<td>Knowledge/experience/intelligence</td>
<td>15</td>
<td>18</td>
</tr>
<tr>
<td>Team player</td>
<td>15</td>
<td>18</td>
</tr>
<tr>
<td>Being flexible in a changing environment/adaptable to change</td>
<td>14</td>
<td>17</td>
</tr>
<tr>
<td>Interpersonal skills</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td>Optimistic/positive/enthusiastic</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>Organisational skills</td>
<td>11</td>
<td>13</td>
</tr>
</tbody>
</table>
Appendix 8

<table>
<thead>
<tr>
<th>Professional skills/approach</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooperative/helpful</td>
<td>11</td>
<td>13</td>
</tr>
<tr>
<td>Willing to have a go/willing to try new things</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>Willing to listen/to understand other points of view</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Tenacious/determined/self-motivated</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Loyalty/integrity</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Creativity</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Happy to share knowledge/skills</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Proud of being part of CSIRO</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Keen to improve skills and learn</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Straight-forward/open/direct</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Work independently/take the initiative</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Good sense of humour</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Understand challenges of working across enterprise/visionary</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Live by my founded values/true to own beliefs</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Passionate about profession and information</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

**Table 7 Value most about self**

<table>
<thead>
<tr>
<th>Actions</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achieving results within timeframe/responsiveness to requests</td>
<td>34</td>
<td>42</td>
</tr>
<tr>
<td>Positive feedback from clients and/or colleagues on a job well done</td>
<td>28</td>
<td>35</td>
</tr>
<tr>
<td>Strong service culture/assisting clients &amp; colleagues</td>
<td>16</td>
<td>20</td>
</tr>
<tr>
<td>Team contribution/collaboration</td>
<td>14</td>
<td>17</td>
</tr>
<tr>
<td>Accuracy/attention to detail</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td>Willing to try new projects/seek new opportunities</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>Active participant in the research effort</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td>Providing a solution to a problem</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Mentoring colleagues/positive influence on others</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Completing complex challenges successfully</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Working to the best of my ability</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Specific skills (cataloguing; web development; high standard in writing; searching/information retrieval; knowledge management)</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Analytical skills/analysis of information</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Working for CSIRO</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Proactivity</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Independence</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

**Table 8 Sources of pride in work**

<table>
<thead>
<tr>
<th>Actions</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Being part of a wider/bigger/broader team leveraging off the three professions</td>
<td>33</td>
<td>40</td>
</tr>
<tr>
<td>Opportunity to share/draw on the broader range of skills/expertise/knowledge in larger team</td>
<td>22</td>
<td>27</td>
</tr>
<tr>
<td>Still to be determined – too early in the transition process to know</td>
<td>16</td>
<td>20</td>
</tr>
<tr>
<td>Support network of professional colleagues</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Purposeful work meeting the information needs of scientists</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Value specific functional area (i.e. Records or Library Services)</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>New opportunities/new tasks/new projects</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Opportunities for learning</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>
Appendix 8

| Share problems/solutions/resources   | 5  |
| Being at the forefront of change relating to information management | 6  |
| Good leadership                     | 5  |
| Quality of people in IM&T/CSIRO     | 4  |
| Able to communicate ideas/share values | 5  |
| Opportunity to raise profile of professional area/information management | 3  |
| Providing a valuable service/making a valuable contribution | 4  |

Table 9 Value most about being part of the CSIRO IM&T team

<table>
<thead>
<tr>
<th>Actions</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sharing my knowledge/skills/experience with other members of IM&amp;T team</td>
<td>52</td>
<td>65</td>
</tr>
<tr>
<td>Specific skills</td>
<td>28</td>
<td>35</td>
</tr>
<tr>
<td>Willingness to contribute</td>
<td>23</td>
<td>29</td>
</tr>
<tr>
<td>Team participant</td>
<td>19</td>
<td>24</td>
</tr>
<tr>
<td>Willingness to explore new opportunities</td>
<td>16</td>
<td>20</td>
</tr>
<tr>
<td>Strong client interaction</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td>Dedication/commitment to service</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td>Being positive/positive approach</td>
<td>10</td>
<td>13</td>
</tr>
<tr>
<td>Flexibility and adaptability</td>
<td>10</td>
<td>13</td>
</tr>
<tr>
<td>Willingness to learn new skills/technologies</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Capable of innovating/creative solutions/fresh ideas</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>A little too early in transition to be able to provide more details</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Completing tasks to best of my ability</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 10 What do you see is your value to CSIRO IM&T and in the ways in which you envisage contributing your best

<table>
<thead>
<tr>
<th>Actions</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional development/career/opportunity to learn</td>
<td>49</td>
<td>60</td>
</tr>
<tr>
<td>Remuneration</td>
<td>30</td>
<td>37</td>
</tr>
<tr>
<td>Work somewhere meaningful</td>
<td>19</td>
<td>23</td>
</tr>
<tr>
<td>Meeting/working with a diversity of people/ideas</td>
<td>15</td>
<td>18</td>
</tr>
<tr>
<td>Social interactions/fun/friendships</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td>Work satisfaction/sense of achievement</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td>Supportive work environment</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>Sense of belonging/belonging to a team</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>New challenges/opportunities</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Ability/opportunity to use skills to the fullest</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Assertiveness/confidence</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 11 The most important thing this organisation has contributed to your life

<table>
<thead>
<tr>
<th>Actions</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promoted professional and/or personal development of staff</td>
<td>25</td>
<td>31</td>
</tr>
<tr>
<td>Supportive/encouraging</td>
<td>21</td>
<td>26</td>
</tr>
<tr>
<td>Positive role model/led by example</td>
<td>17</td>
<td>21</td>
</tr>
<tr>
<td>Respected/value opinion and ideas of others</td>
<td>17</td>
<td>21</td>
</tr>
<tr>
<td>Demonstrated belief/showed confidence in staff ability</td>
<td>16</td>
<td>20</td>
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</table>
Table 12a Positive leadership qualities experienced

<table>
<thead>
<tr>
<th>Feelings/Emotions</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supported</td>
<td>43</td>
<td>53</td>
</tr>
<tr>
<td>Encouraged</td>
<td>32</td>
<td>40</td>
</tr>
<tr>
<td>Listened</td>
<td>24</td>
<td>30</td>
</tr>
<tr>
<td>Appreciated/value</td>
<td>15</td>
<td>19</td>
</tr>
<tr>
<td>Trusted</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td>Confident</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td>Positive</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>Respected</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>Included/included</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Understood</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Equal</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Responsible</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Recognised/rewarded</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Believed</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Professional</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>No example provided</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Friendly</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Willing</td>
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<td>4</td>
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</table>

Table 12b Feelings/emotions experienced

<table>
<thead>
<tr>
<th>Actions</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trusted to get on with the job/not micromanaging</td>
<td>19</td>
<td>23</td>
</tr>
<tr>
<td>Good/honest/open communication in team</td>
<td>15</td>
<td>19</td>
</tr>
<tr>
<td>Thanks received/acknowledgement/rewards</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td>Team opinions/ideas/contributions sought and valued</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>Ability to contribute ideas/opinions without fear of reprisal</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td>Open and active listening</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td>Actions</td>
<td>f</td>
<td>%</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>---</td>
<td>-----</td>
</tr>
<tr>
<td>Respect for each person’s abilities</td>
<td>21</td>
<td>27</td>
</tr>
<tr>
<td>Good/open communication</td>
<td>15</td>
<td>19</td>
</tr>
<tr>
<td>Non-judgemental/positive behaviour</td>
<td>13</td>
<td>17</td>
</tr>
<tr>
<td>Team interaction</td>
<td>13</td>
<td>17</td>
</tr>
<tr>
<td>Shared values/beliefs/purpose/goals/vision</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td>Honesty among team members</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td>Equality in sharing workload/spirit of cooperation</td>
<td>10</td>
<td>13</td>
</tr>
<tr>
<td>Attitude/behaviour/skills of team leader</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>Prior experience/history of achievements</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>Strong team relationship established</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Getting to understand each team member – their strengths, weaknesses,</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>skills, work style</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Encouraging work environment</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Confidence that everyone will do their job properly</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Culture of information/knowledge sharing in team</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Personality of team members and/or leader</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Demonstrated trustworthiness</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Willingness to respect other people’s opinions/preferences</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Table 14 What made it possible to establish trust in that group
## Appendix 8

### Actions

<table>
<thead>
<tr>
<th>Actions</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open communication</td>
<td>30</td>
<td>38</td>
</tr>
<tr>
<td>Increased resources [funding &amp; staff]</td>
<td>27</td>
<td>34</td>
</tr>
<tr>
<td>Increased professional development opportunities</td>
<td>24</td>
<td>30</td>
</tr>
<tr>
<td>Increased opportunities for knowledge sharing/Ability for groups to come together</td>
<td>18</td>
<td>23</td>
</tr>
<tr>
<td>Clear vision of future</td>
<td>14</td>
<td>18</td>
</tr>
<tr>
<td>Professional representation at senior management level/management support</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td>Increase level of trust and respect</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>Equal recognition and appreciation of the three professional areas</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td>Build strong relations within the team</td>
<td>10</td>
<td>13</td>
</tr>
<tr>
<td>Be positive/increased optimism/constructive behaviour</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>More cross-team engagement</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Flexibility/Ability to move between roles</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Encouraging a creative and productive environment</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Get systems in place that support IM service</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Effective and timely decision-making</td>
<td>6</td>
<td>8</td>
</tr>
</tbody>
</table>

### Table 15 Best wishes for CSIRO IM&T team

*Findings from Stage 2 of the research project (application of the full 4-D cycle)*

<table>
<thead>
<tr>
<th>Activity</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading relevant literature/information sources</td>
<td>21</td>
<td>72</td>
</tr>
<tr>
<td>Academic study – initial qualifications plus further study</td>
<td>18</td>
<td>62</td>
</tr>
<tr>
<td>Training on the job /in house training</td>
<td>17</td>
<td>59</td>
</tr>
<tr>
<td>Vendor training</td>
<td>16</td>
<td>55</td>
</tr>
<tr>
<td>Team meetings</td>
<td>12</td>
<td>41</td>
</tr>
<tr>
<td>Self-paced/self-directed training, “exploratory play”</td>
<td>10</td>
<td>34</td>
</tr>
<tr>
<td>Networking with colleagues inside and outside of the organisation (informal peer networking)</td>
<td>8</td>
<td>28</td>
</tr>
<tr>
<td>Conferences – attending</td>
<td>7</td>
<td>24</td>
</tr>
<tr>
<td>Workshops</td>
<td>7</td>
<td>24</td>
</tr>
<tr>
<td>Personal development workshops/courses</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>Participation in external industry groups</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>Seminars</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>Job rotation</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>Professional association/society membership</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Participation on working groups</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Mentorship programme</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Learning from clients</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Secondments</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Project work (i.e. the opportunity to be part of a project)</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Visiting other libraries</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Formal courses in support tools (eg. Access, Word, Excel)</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Taking on responsibilities outside of work – skills transfer to the work environment</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Job exchanges</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Conferences – presenting</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Social activities/events with colleagues</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Continuing Professional Development scheme with ALIA</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Conferences – organising | 0 | 0
Work retreats (e.g. weekend retreats; leadership retreats) | 0 | 0
Writing papers for publication | 0 | 0
Work experience placement | 0 | 0

Table 18 Professional development activities listed as essential in order of frequency

<table>
<thead>
<tr>
<th>Activity</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading relevant literature/information sources</td>
<td>28</td>
<td>97</td>
</tr>
<tr>
<td>Conferences – attending</td>
<td>23</td>
<td>79</td>
</tr>
<tr>
<td>Vendor training</td>
<td>22</td>
<td>76</td>
</tr>
<tr>
<td>Training on the job /in house training</td>
<td>17</td>
<td>59</td>
</tr>
<tr>
<td>Team meetings</td>
<td>13</td>
<td>45</td>
</tr>
<tr>
<td>Networking with colleagues inside and outside of the organisation (informal peer networking)</td>
<td>13</td>
<td>45</td>
</tr>
<tr>
<td>Self-paced/self-directed training, “exploratory play”</td>
<td>11</td>
<td>38</td>
</tr>
<tr>
<td>Workshops</td>
<td>11</td>
<td>38</td>
</tr>
<tr>
<td>Personal development workshops/courses</td>
<td>8</td>
<td>28</td>
</tr>
<tr>
<td>Seminars</td>
<td>8</td>
<td>28</td>
</tr>
<tr>
<td>Conferences – presenting</td>
<td>8</td>
<td>28</td>
</tr>
<tr>
<td>Professional association/society membership</td>
<td>7</td>
<td>24</td>
</tr>
<tr>
<td>Participation on working groups</td>
<td>7</td>
<td>24</td>
</tr>
<tr>
<td>Participation in external industry groups</td>
<td>5</td>
<td>17</td>
</tr>
<tr>
<td>Project work (i.e. the opportunity to be part of a project)</td>
<td>5</td>
<td>17</td>
</tr>
<tr>
<td>Taking on responsibilities outside of work where skills transfer to work</td>
<td>5</td>
<td>17</td>
</tr>
<tr>
<td>Social activities/events with colleagues</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>Learning from clients</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Secondments</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Visiting other libraries</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Job rotation</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Conferences – organising</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Academic study – initial qualifications plus further study</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Mentorship programme</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Work retreats (e.g. weekend retreats; leadership retreats)</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Writing papers for publication</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

Table 19 Professional development activities undertaken by survey participants within the past year
<table>
<thead>
<tr>
<th>Activity</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Getting involved in a project</td>
<td>5</td>
<td>17</td>
</tr>
<tr>
<td>Conference – attending</td>
<td>5</td>
<td>17</td>
</tr>
<tr>
<td>First starting out working in a library</td>
<td>5</td>
<td>17</td>
</tr>
<tr>
<td>Networking and sharing knowledge with colleagues</td>
<td>5</td>
<td>17</td>
</tr>
<tr>
<td>Secondment</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Self-education with a purpose</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Specific situation not identified</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Had control over PD budget</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Conference – presenting</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Personal development workshop</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

Table 21 Situations where participants felt most engaged or fulfilled with regards to PD

<table>
<thead>
<tr>
<th>Activity</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sharing knowledge with colleagues/learning from colleagues</td>
<td>9</td>
<td>31</td>
</tr>
<tr>
<td>Participate in a project/in a working group</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Workshops</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Conferences</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Vendor training</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Secondment (external)</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Further study</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Self-paced/self-directed training, “exploratory play”</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Teaching others in the industry</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>External involvement</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Visiting other libraries</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

Table 22 Specific PD activity that has had a positive benefit for participants