

Thesis Consent Form - print and digital formats

1. THESIS INFORMATION

Author of Thesis: Tabalala, Liviaana Laqai
Title of Thesis: Restructuring the university library to meet a customer service environment: a NZ perspective
Degree: Master of Library and Information Studies
School/Faculty: School of Information Management, Victoria University of Wellington
Date of Award: August, 2002
(month, year)

2. FAIR USE

This thesis may be consulted for the purposes of research or private study provided that due acknowledgement is made where appropriate.

In accordance with the Fiji Copyright Act (1999), this thesis may be copied for the purposes of research or private study, or criticism, review and news reporting inclusive of not more than 10% of the work. As the owner of the intellectual content I grant copying at a higher percentage of 20 %.

3. DECLARATION

In compliance with USP requirements and where applicable:

- a print copy of my thesis is deposited in The University of the South Pacific Library's Pacific Collection.
- a digital copy is
 - created in microfilm or microfiche format for preservation purposes
 - created for archival and preservation purposes
 - made available on the USP Intranet
 - made available on the Internet

Signature : Tabalala

Date : 08/02/2021

**Restructuring the University Library to Meet a Customer
Service Environment : a New Zealand Perspective**

by
Liviana Laqai Tabalala

Submitted to the School of Information Management,
Victoria University of Wellington
in partial fulfilment of the requirements for the degree of
Master of Library and Information Studies

August 2002

Acknowledgements

I would like to extend my gratitude to my supervisor, Philip Calvert, for his assistance during the course of my undertaking of this research.

I am also deeply grateful to the following New Zealand University Librarians and their delegates for providing me with the information and data that has formed the findings of this research:

- Tony Millett (Administration Services Manager) of the University of Waikato Library
- Alan Smith (University Librarian) of Victoria University of Wellington Library
- Gail Pattie (University Librarian) of the University of Canterbury Central Library
- Carol Catley (Human Resources and Staff Development Librarian) of the University of Auckland Library
- Barbara Taylor (University Librarian) of the Auckland University of Technology Library

I would like to acknowledge the financial assistance given to me by the University of the South Pacific, which enabled me to carry out this study and the help and support rendered by my work colleagues at USP Library.

Last but not the least, thank you to my husband, Iosefo Bele and daughter Lusiana for your support during the whole time I was carrying out this study.

TABLE OF CONTENTS

ABSTRACT	1
CHAPTER 1 INTRODUCTION	2
<i>1.0 Introduction to the Problem</i>	2
<i>1.1 Rationale</i>	3
<i>1.2 Wider Importance</i>	3
<i>1.3 Research Goals</i>	4
<i>1.3.1 Study Objectives</i>	4
<i>1.3.2 Research Questions</i>	4
<i>1.4 Definitions</i>	5
CHAPTER 2 LITERATURE REVIEW	7
<i>2.0 Overview</i>	7
<i>2.1 Organisational Patterns in Academic Libraries: a Historical Preview</i>	11
<i>2.2. Interests in Organisational Structure</i>	11
<i>2.2.1 Structural Changes in Large North American University Libraries</i>	12
<i>2.3 Traditional Organisational Structures of Academic Libraries</i>	15
<i>2.3.1 Features of Structure</i>	17
<i>2.4 Internal and external environments of information services</i>	18
<i>2.4.1 External Environment</i>	19
<i>2.4.2 Internal Environment</i>	24
<i>2.5 Forces Causing Organisation Change</i>	24
<i>2.5.1 New Information Technology</i>	25
<i>2.5.2 Implications for Organisation Structure</i>	29
<i>2.5.3 The New Learning Paradigm in Higher Education</i>	48
<i>2.5.4 Implication for Libraries</i>	50
<i>2.5.5 Implications for Organisation Structure</i>	52
<i>2.5.6 Summary</i>	55

CHAPTER 3 METHODOLOGY	56
<i>3.0 Choice of Method</i>	<i>56</i>
<i>3.1 Type of Method</i>	<i>56</i>
<i>3.2 Reasons for Choice of Method</i>	<i>56</i>
<i>3.3 Population</i>	<i>58</i>
<i>3.3.1 Selection of Participants</i>	<i>58</i>
<i>3.4 Final Response Rate</i>	<i>60</i>
<i>3.5 Collection of Research Data</i>	<i>60</i>
CHAPTER 4 DATA ANALYSIS	62
<i>4.1 Approach Used & Reason</i>	<i>62</i>
<i>4.1 Analysis</i>	<i>63</i>
<i>4.2 Data Presentation</i>	<i>64</i>
<i>4.3 Data Collected</i>	<i>66</i>
<i>4.4 Analysis of Data for Question One</i>	<i>73</i>
<i>4.4.1 Analysis of Data for Questions Two and Three</i>	<i>83</i>
<i>4.4.2 Analysis of Data for Question Four</i>	<i>89</i>
<i>4.4.3 Analysis of Data for Question Five</i>	<i>93</i>
<i>4.4.4 Analysis of Data for Question Six</i>	<i>96</i>
<i>4.4.5 Analysis of Data for Question Seven</i>	<i>99</i>
<i>4.4.6 Analysis of Data for Question Eight</i>	<i>103</i>
<i>4.4.7 Analysis of Data for Question Nine</i>	<i>106</i>
CHAPTER 5 CONCLUSION	109
6.0 References	111
APPENDIX	118

ABSTRACT

Rapid environmental changes are forcing organisations of all types to rethink their organisational structures in order to provide greater effectiveness and efficiency. University libraries are not exempted from this. A variety of pressures (such as changing demands of users, reductions in staffing levels caused by financial stringency, increase use of computing resources, and the need for staff to be responsible for their own work) that have accounted for the reshaping of other organisations have also affected academic libraries. Today, greater emphasis is placed upon the modification of the actual organisation structure of university libraries, as most restructured organisations move away from rigid hierarchies to flatter, more flexible structures. Taking into account this restructuring trend, and specifically the omission of any New Zealand (NZ) university libraries experiences in the literature of academic librarianship, this study proposed to explore if and how university libraries in NZ are changing their organisational structures. The author prepared a list of ten questions as the basis for the telephone interviews with the participants to the study. Data from the interviews were tape recorded, transcribed and then analysed and the findings reported. The author found out that NZ university libraries are restructuring in their "own" ways. All the restructuring efforts reported so far seem to be following the models reported so far in the literature.

Keywords: Restructuring, University Library, New Zealand, Customer Service, and Environment

Restructuring the University Library: a New Zealand Perspective

Chapter 1 Introduction

1.0 Introduction to the Problem

The literature on academic librarianship over the past decade shows a growing trend in emphasis placed upon the modification or changing of the traditional organisation structure of university libraries. This process is also known as "restructuring". Scattered among the numerous restructuring efforts documented so far, are not only the discussions of the various factors and reasons underlying such a change, but also the ways university libraries are going about the change(s). However, the case studies do not as yet document any New Zealand experiences.

Taking into account this restructuring trend, and specifically the omission of any New Zealand experiences, this study, conducted over two trimesters proposed to explore if and how university libraries in New Zealand are changing their organisational structures.

Firstly, the author wanted to know whether New Zealand university libraries are changing their organisational structures. Secondly, the author wanted to find out how university libraries in New Zealand are changing their organisational structures, if they were doing so. Thirdly, the author wanted to find out the underlying reason(s) for the restructure, if any were being carried out. Fourthly, the author wanted to find out whether

there were any common characteristics underlying the changes. Finally, the author wanted to find out whether the changes (if any) have been successful.

The literature of academic librarianship has been filled with articles discussing restructuring, but have the organisational structures of university libraries actually changed over the past decade? There has been a great deal written about the need to modify structures, but are new models emerging that will allow university libraries to be successful in the future? This study will explore if there are new models emerging in the study of New Zealand university libraries.

1.1 Rationale

1.2 Wider Importance

This study is significant because the author believes that the exploration of how university libraries in New Zealand are changing their organisational structures will not only add to the already existing body of knowledge in the literature about restructuring university libraries, but also provide libraries that are considering restructuring with further understanding of how certain libraries are carrying out this process, thus providing other alternatives, approaches and models that would be worth exploring.

1.3 Research Goals

1.3.1 Study Objectives

The objectives of this study are as follows:

- To identify the factors and reasons encouraging organisational change in university libraries in New Zealand;
- To explore how university libraries in New Zealand are changing their organisational structures as a result of the factors and reasons outlined;
- To identify any common characteristics underlying these changes;
- To assess if the changes have been successful;
- To propose a list of factors or recommendations that other academic libraries could use as a "road map" or "guide" to effectively administer planned restructuring programmes.

1.3.2 Research Questions

The problem statements to be investigated will be further developed into the following research questions:

1. Will organisation restructuring make academic libraries in NZ more able to deliver a customer service environment?

2. What new models have arisen (out of the study of the restructuring efforts of academic libraries in NZ) that other libraries can implement in order to create a customer service environment?

According to Gorman and Clayton (1997) “research questions can be divided into four types: exploratory, explanatory, descriptive, and predictive.” (p. 96). This study will use the exploratory type in its attempt to answer the research questions. It will use in-depth interviewing in the data collection techniques.

No hypotheses is given because this kind of research often does not need them.

1.4 Definitions

For the purpose of this study, the following definitions will be used:

Organisational structure: as defined by Moran (2001) “is one of the interrelated components that define any organisation, referring to the definition of individual jobs and their relationship to each other as depicted on organisation charts and descriptions.” (p. 103).

Thus an organisation’s structure is the source of how responsibility is distributed, how individual positions are coordinated, and how information is officially disseminated.

When an organisation's structure is changed, the process is referred to as restructuring or reorganisation.

Restructuring as further defined by Moran occurs when an organisation's structure is changed. This process is referred to as restructuring or reorganisation. The terms restructuring, reorganisation, and organisation change will be used interchangeably in this study, but they will be taken to mean the same thing.

The terms 'university library', 'academic library', and 'research library' will also be used interchangeably in this study to mean a library in an academic institution. The terms 'customers' and 'users' will also be used synonymously to represent the users of an academic library.

Chapter 2 Literature Review

2.0 Overview

A look at the literature on academic librarianship over the past decade or so reveals the growing trend in emphasis placed upon modifying, changing or restructuring the organisation structure of university libraries. Various authors have mentioned that the need for such a change has come about because of the major trends and influences that university libraries have been faced with in the last few decades.

Neal and Steele (1993) for example mention that "the current organisational structure of many academic research libraries have been in place essentially since the 1960s." (p. 81). They believe that although there have been new units and activities added and significant internal changes implemented, the general organisational philosophy and superstructure remain unchanged.

However, they argue that the rapid changes facing research libraries such as automation of services and operations coupled with "changes in the information, scholarly and economic environments must encourage a fresh and critical look at long-standing and increasingly dysfunctional structures." (p. 82). They believe that the research library in order to remain an important part of the university "must create a working environment where both the employee and user recognise and accept new power to exercise creativity and implement change." (p. 82).

Apart from Neal and Steele, Wilson (1998) strongly advocates the redesigning of the university library in the digital age. His paper outlines the forces that are currently affecting academic libraries in the United Kingdom and proposes a strategy whereby the transformation from the handling of artefacts to the handling of electronic resources may be effected with maximum benefit to the information user.

Wilson believes "that customer wants will change significantly as a result of increasing access to electronic sources of information." (p. 17). Because of the latter, he proposes that academic libraries be redesigned. He mentions that university libraries were designed primarily for the acquisition and handling of physical artefacts, but the rapid growth of electronic resources has called that design into question.

According to Wilson:

"goals must be reformulated in the direction of supporting access to information rather than the acquisition of information and in the direction of pro-active support of the information user, rather than passive provision of self use resources in the library, and that the "front-line" will operate increasingly in network communication with the users, rather than in face-to face communication and that, consequently, performance will be judged by abilities to operate in the context and to help meet organisational goals in satisfying the new customer wants." (p. 17).

The above points according to him mean that the redesign of academic library systems is a must. However, Wilson also mentions that the structure of library systems is still geared to acquiring objects, organising them and making them generally available and accessible.

Wilson reports however, that scholarly publication and, indeed many other forms of publication, are increasingly moving towards electronic delivery to the end user. Under these circumstances, Wilson asks how the university library can redefine its role. Wilson challenges the university library in the digital age to reshape so that they will be able to improve the services they provide to today and tomorrow's users.

Moran (2001) also believes that it is imperative for university libraries to examine and reshape their organisations. She attributes this to the fast-paced and vast changes that have been part of the academic library environment in the past few decades, two of which she mentions as increasing use of electronic materials in libraries coupled with changes in higher education. She believes that the above changes have produced the need for librarians to reconsider not only their systems and the roles they play, but to also look at the organisation structure of the university library itself.

Moran questions whether the organisation structures of university libraries have actually changed over the past decade as a result of the large number of academic librarianship articles discussing reorganisation. She also questions whether given the great deal written

about the need to modify structure, new models are emerging that will allow university libraries to be successful in the future.

Her paper describes some of the factors leading to changes in the organisational structures of academic libraries and provides an overview of trends, excluding convergence, discernible in North America. The paper includes suggestions for steps to be taken to facilitate successful reorganisations, and comments on possible future developments that might radically alter the organisational structures of academic libraries.

This issue of restructuring the university library will be explored in this Literature Review. It will focus on the following headings:

- 2.2 Organisational patterns in academic libraries: a historical preview
- 2.3 Traditional organisational structure of academic libraries
- 2.4 Internal and external environments of information services
- 2.5 Forces of organisation change, its impact on academic libraries and its organisation structure

2.1 Organisational patterns in academic libraries : a historical preview

2.2 Interest in organisational structure

The interest in organisational structure in academic libraries is a relatively recent occurrence. Dunlap (1976) mentions that it was only in the late 1930s and early 1940s that great attention was given to library organisation. Until then, most academic libraries were so small, so there was less need for formal organisations.

Dunlap also reports that in the 1940s the typical university library was organised along departmental lines. Work was divided among a number of departments reporting directly to the university librarian. After the end of World War II, university libraries grew larger and the number of people reporting directly to the chief librarian became difficult to manage. The librarian was thus immersed in operational duties with little time left for planning and institutional relationships.

In order to reduce the library director's span of control, larger university libraries began experimenting with grouping the departments into various divisions, where only the division heads reported directly to the university librarian. At first, there was considerable difficulty with these reorganisations. She reports that between 1941 and 1950 three different types of divisional reorganisations were attempted at Illinois, Columbia and Harvard.

After a period of experimenting with different organisational forms, Dunlap reports that one type became uniformly adopted by university libraries. By 1952, almost all academic libraries in the US had adopted a bifurcated functional structure, where all activities were grouped under the categories of technical services and reader services. Smaller libraries continued to be organised on a departmental basis. The narrower span of control in these smaller organisations made this pattern possible.

2.2.1 Structural changes in large North American university libraries : a case model

Because of space limitations, the structural changes happening in the large North American university libraries over the past few decades will be discussed here as a model to show some examples of the changes in organisational patterns that have taken place in certain university libraries.

Moran (2001) reported an overview of the structural changes in the large North American libraries and contributed her ability to do so by "looking at the various collections of organisation charts that have been collected and published by the Office of Management Studies of the Association of Research Libraries." (p. 105)). She mentions that ARL has published four such collections in the years between 1973 and 1996. Characteristics of the main features of the organisational charts for the four collections are summarised as follows:

1973 charts

- Bifurcated system similar to that described by Dunlap;
- Narrow span of control of director;
- Hierarchical organisation structures.

Although some university libraries were beginning to experiment with automation, there was little evidence of this on the charts with only a few libraries showing a data control or a library systems department.

1986 charts

- Very hierarchical organisation structures;
- Alternative arrangements such as use of committees for decision making and multiple reporting relationships;
- Greater diversity of functions such as new departments for preservation, collection development, planning and automation.

Apart from the above, Moran mentions that the charts showed evidence that libraries were beginning to restructure. This was revealed by the 25% of university libraries that had interim charts because of reorganisation efforts and the 33% that had just completed organisational changes such as establishing new posts, or significantly altering the director's span of control. She thus states that it is clear that by the mid 1980s the traditional organisational structure used since the 1950s in large North American libraries was beginning to lose its dominance.

1991 charts

- New functions added apart from traditional ones (for example systems and automation departments);
- Appearance of co-ordinators, units or specialists with responsibilities for microcomputers;
- Participative management as shown by use of committees.

1996 charts

- Reorganisation common among libraries.

Moran reports that apart from contributing organisational charts, libraries were asked to respond to a survey about restructuring. Seventeen out of the fifty-three libraries that responded mentioned they were in the process of or had recently completed a library wide reorganisation. A further thirty-four libraries were engaged in reorganising or had recently reorganised specific units, most often reference, cataloguing, acquisitions, inter library loan, circulation or reserve.

Moran mentions that declining resources and the need for greater productivity precipitated much of this reorganisation. Many university libraries reported losing staff positions, both support and professional.

The survey results according to Moran showed that:

“the most common outcomes of the reorganisation had been 'combining of units within the libraries, new partnerships with other university units, greater emphasis on networked information, new and expanded user services, elimination of some services, and a decreased emphasis on catalogue maintenance and on the collection of print materials.”
(p. 106).

While the bifurcated pattern of organisation remained in place in some libraries, it was being replaced in others by more decentralised structures where the director's span of control was wider.

Although the charts in this volume clearly show structural changes, these changes according to Moran continued to be incremental. The charts and the survey results demonstrated that although many North American university libraries were feeling the need to restructure, most had merely reorganised around the edges instead of completely discarding their old structure and beginning anew. Libraries were experiencing with a variety of forms to increase coordination and flexibility.

2.3 Traditional organisational structure of academic libraries

In the overview to this Literature Review, writers such as Neal and Steele, and Wilson note that the general organisational structure of university libraries remain unchanged and that they are still very much geared to the role of a library as one of acquiring, organising

and making information available and accessible. Moran questions whether the organisation structures of university libraries have actually changed over the past decade as a result of the large number of academic librarianship articles discussing reorganisation.

It is therefore worthwhile to discuss the typical staffing or administrative structures of academic libraries and to analyse some of its features before discussing the factors that are producing the need to re-look at this basic structure.

Brophy (2000) gives a typical example of this structure as one where:

"the University Librarian is the senior manager, with responsibilities both for the strategic direction of the library and for representing the library in the university and the wider community; a Deputy University Librarian (sometimes more than one) has responsibility for the overall operation of the library, usually including specific responsibilities such as planning, finance, buildings, etc.; Section heads which have responsibility for an operational section, such as reader services and technical services; Unit heads (very often called Senior Assistant Librarians) are in charge of operational units such as interlibrary loans, the issue desk or cataloguing; Subject librarians, without managerial responsibilities, have a role involving liaison with academic departments and providing expertise in particular subject areas; Assistant Librarians, the most junior grade of professionally qualified staff, are deployed throughout the library to provide additional support, and share a range of common duties such as enquiry desk work; Senior Library

Assistants, not qualified in librarianship, have supervisory responsibilities, for example in the circulation section, usually gaining the position on the basis of long experience; Library Assistants are the front-line troops of the library, responsible for work not requiring a professional qualification, including staffing the issue desk, reshelving and tidying books, acquisitions and cataloguing processes; Specialist staff, for example where the library runs a bindery or has significant special collections; increasingly, IT specialists, or at least a Library Systems Officer - who sit outside the formal hierarchy because their responsibilities cross at sectional boundaries; and manual staff, including caretakers and cleaners; in many institutions staff at these grades come under a central Estates Department rather than under the control of the University Librarian." (pp. 92-93).

2.3.1 Features of this structure

In the above structure, hierarchical management and related bureaucratic forms are seen as the ideal way of managing the organisation. Howard (1981) states that:

"characteristics of this model include a hierarchy of authority, division of labour, rules and regulations, hiring and promotion on the basis of technical competence, impersonality of personal relations, and a system of discipline and control." (p. 425).

As a result, hierarchies are used to control operations. These hierarchies are based on formal authority introduced by a top-down process based on distinctions between

managers and the managed. The result is a tall vertical organisation structure with many layers of management and managers at all levels in the hierarchy.

Honea (1997) mentions that the organisational principles of the typical academic library are essentially those founded by Frederick Taylor at the opening of the last century. He reports that "the hierarchical structure communicates the concept of formal organisation: lower skills at lower levels and higher skills at higher levels, with an inverse relationship between degree of supervision received and level of skill exercised" (p. 185).

Characteristics of this structure according to Honea are of a formal organisation that reflects a traditional functional division of tasks and a hierarchical arrangement of responsibility.

Brophy (2000) believes that a variety of pressures have produced significant changes in the traditional picture just discussed. Some of these will be looked at in the next section.

2.4 Internal and external environments of information services

Information services operate in the context of two environments - internal and external. Both of these affect the way in which information services are planned and managed to deliver services to their customers. According to Bryson (1999) "the external environment comprises the surrounding conditions in which the information service and

its parent organisation operates, and the internal environment relates to the internal factors that shape the organisation and its operating environment.” (p. 21).

Bryson believes that most organisations operate in complex and changing environments that continuously create new challenges that must be managed to ensure survival and success.

This section of the literature review will:

- discuss the major external and internal forces affecting academic libraries;
- explore in detail two external environmental forces that are affecting academic libraries;
- discuss how these two factors are affecting the provision of library services;
- discuss the role and nature of the library in this emerging environment;
- explain what the latter mean for the organisational structure of academic libraries.

2.4.1 External Environment

Bryson (1999) mentions that "the need to understand the external environment in which information services operate is fundamental to positioning the services to take advantage of technological change, obtaining the necessary resources in a contracting environment and delivering appropriate services to customers." (p. 22). He then goes on to mention the

"environmental domains" that have an impact on information services and their parent organisations. He lists these as:

"economic conditions; availability of financial resources; geographical situation; degree of technological integration and innovation; the historical development and parentage of the information centre and its parent organisation; customers and markets; demographic patterns; labour market and industrial relations; availability of resources; industrial strata; cultural-social conditions; and the political climate." (p. 23).

Three of these environmental domains will be discussed below.

a) Economic Conditions

One element affecting the services of academic libraries is economic crisis. Fore, Knight and Russell (1993) for example mention that the economic crisis at the state and federal level has required librarians at the University of Arizona to re-examine the way they conduct business. These authors point out that as additional funding for the libraries seem unlikely in this scenario, it is vital that they explore ways to use the resources they have in the most effective way.

Apart from the above, Fore, Knight and Russell also mention that the economic realities of scholarly publishing and their impact on research have directly affected the library's

traditional mission. They mention that as scholars at academic institutions are forced to "publish or perish" these scholars sacrifice the ownership of their ideas to publishers.

As a result a few powerful publishers who operate as monopoly holders of information not only force smaller publishing houses out of business but charge high subscription rates to libraries already suffering from limited funding. Fore, Knight and Russell mention that "these and other economic pressures have forced libraries to adopt new philosophies of access to information rather than strive for self-sufficiency through ownership of information." (p. 98).

Another element that affects the way academic libraries function, organise and provide services is funding. Drake (1993) mentions that as private universities relying on the tuition and yield from endowment funds find their budgets squeezed by lower interest rates, small capital appreciation and reduced corporate dividends, their libraries' budgets are reduced accordingly.

As a result, she mentions that the purchasing power of libraries is reduced. Libraries faced with this scenario are frequently asked by their parent organisations to quantify the value of their output and the outcomes of their activities. Thus, Drake mentions that assessment and accountability in the value of the library's output and the outcomes of its activities is essential in this situation. Libraries in this situation also need to use the resources they have in the most effective way.

b) Technology

According to Bryson (1999) "technology may be defined as the available knowledge and techniques to produce goods and services." (p. 25). He believes that the complexity of the technology influences the skills and competences required by library service's employees and customers. It may also enhance or inhibit the service's ability to quickly adapt to change.

Bryson believes that the level to which technology is integrated into the business practices of an organisation will influence the ability of that organisation to position itself ahead of its competitors. He cited as an example the strategic advantage given to a publisher that can offer online ordering and other unique services ahead of its competitors.

Likewise, Bryson also believes that "those information services that can tailor services to meet the individual customer needs through the use of technology will develop a stronger customer base than those who are unable to do so." (p. 25). Bryson however warns that:

"the focus should not be just on keeping up to date with new developments in technology, but also in discovering new business applications for existing technology or new combinations of technologies in order to deliver more appropriate services or increased productivity. " (p. 26).

c) Customers and Markets

Information or library services managers must be aware of their market - that is, their present and potential customers, and their status in order to deliver effective services. Thus there is a need to understand customer service.

Hernon and Whitman (2001) mention that "customer service has been characterised as meeting the needs and expectations of the customers as defined by the customers." (p. 1). They mention that "meeting those needs and expectations means that librarians know about and are attuned to those needs and expectations and are willing to meet high-interest expectations consistently and well." (p. 1).

Bryson (1999) believes that the needs of potential customers should also be considered, as the information/library service may not be reaching its full market potential. This according to him may mean that some less used services may have to be reduced or deleted in order to diversify into an area of increased demand.

Hernon and Whitman also believe that the consumers of library services do not define the library's mission nor its service delivery as the library should set this framework. However they believe that the library needs to be sensitive to its customers' expectations. Because customers help to shape the services that libraries provide, Hernon and Whitman believe that it is important for librarians to listen to customers. Bryson identifies surveys,

questionnaires, group interviews and discussion with customers and non-users as ways of finding out their expectations.

2.4.2 Internal Environment

Bryson (1999) also mentions the internal factors that shape the organisation and its environment. He identifies these as: "structure, culture, management styles, values, communication and use of technology." (p. 21). Internal environmental factors, he mentions are influenced by the external environment. These factors however will not be dealt with in detail here.

2.5 Forces Causing Organisation Change

Bryson (1999) mentions that organisational change occurs either as a result of changes in the external environment that impact on an organisation or through internal forces. Some internal forces he says may be an indirect reflection of the external forces acting upon the organisation. In this section, two external environmental forces will be discussed in detail in order to show how each affects the provision of library services, the role and nature of libraries and the organisation structure of academic libraries. These two forces are:

- i) New information technology;
- ii) The new learning paradigm in higher education.

2.5.1 New Information Technology

Technological developments are one of the environmental forces driving organisational change. In the academic library world, there is a steady trend toward the use of new information technology and according to the literature on academic librarianship, this is anticipated to increase rapidly in the future.

According to Drake (1993) information technology is "the storage, transmission, receipt, retrieval and manipulation of data in all forms including voice, text, photographs, graphics and multimedia". (p. 39).

New technological applications such as the use of computers, CD-ROMs, online databases, and the Internet are now having significant effects on library staff and the way they carry out their services and operations. They are also affecting the relationship between the library, the users they serve, and the other groups which the library deals with for the successful carrying out of its services, such as the publishing industry and vendor services.

The discussion that follows will explore the impact of new information technology on the relationship of library staff, the users they serve, and the publishing industry. It will also discuss the implications of these effects on the organisational structure of university libraries.

a) Effects of Technology on Library Staff

i) Demands on Library Staff

The application of new technologies has placed greater demands on library staff in that they have had to learn to use various computer-based systems. This need has become even greater with the increase in number and diversity of systems. Lancaster and Sandore provide the example of a reference librarian to show the demands placed on library staff by technology.

A reference librarian for instance may now need to search databases accessible online through several different vendors, as well as some available in the library on CD-ROM. This will require knowledge of different software and search capabilities. A reference librarian must also have a good knowledge of the range of databases available in order to select the one most likely to satisfy a user request.

In addition, the reference librarian may also have to instruct users in database searching techniques. Those librarians involved in database searching must also be effective communicators because they need to interact with users to fully understand what they are looking for.

To be effective, reference librarians also require a good knowledge of the subject matter dealt with, and this implies a greater need for some level of subject specialisation.

Lancaster and Sandore mention that the job of reference librarians is made even more complicated for those who provide reference services to remote users who communicate with the library through electronic mail. This presents a special challenge since it precludes the face-to-face reference interview.

All the above requirements add a new dimension to the demand placed on library staff.

ii) Different Skills

The example quoted above of the different demands placed upon the reference librarian as a result of new technologies implies that the librarian of today needs to know more, and to possess a great variety of skills.

It also means that library staff must now be more flexible and versatile and be ready to accept new responsibilities, since they are likely to engage in a greater variety of tasks than they did in the past. Lancaster and Sandore mention that "in this environment the librarian must be flexible in attitude of mind- able to keep pace with and adapt to dramatic changes in the library itself and in the technological and social environments in which it operates." (p. 16). In other words the librarian must now be more adaptable.

iii) Professional/Nonprofessional Relationships

Automated systems also allow some of the tasks formerly performed by professional librarians to be passed down to paraprofessionals. Lancaster and Sandore for example mention that more of the professional functions especially original cataloguing have been decentralised in some of the larger academic libraries. They mention that "standardisation in cataloguing has contributed to improved and expanded online access points to materials in and across library collections." (p. 9).

Because much of the library material received does not require original cataloguing, the cataloguing unit can now be much smaller than it was before the library began to make extensive use of online bibliographic utility services and include a few professionals.

The above case represents a blurring of boundaries between staff as paraprofessionals are empowered by information technology to carry out tasks that were originally solely done by professionals.

While professional librarians have passed certain activities down to paraprofessionals, they have undertaken others in system development and implementation, in learning system capabilities, in teaching, and in the design and operation of new services.

2.5.2 Implications for Organisation Structure

Brophy mentions that "increased demands for services will lead to severe pressures on staff, leading in turn to redeployment into those areas under most pressure." (p. 93). This means that staff members must be ready to work outside their own areas of responsibility and be flexible to meet new responsibilities bestowed upon them. It will also mean an alteration of traditional work patterns. In this environment, it is essential that library staff be multi-skilled. The passing of some professional activities down to paraprofessionals indicates a move towards decentralisation of activities. This calls for increased flexibility in structure to address the opportunities offered by new technology.

The above points mean that academic libraries cannot continue to have traditional organisation separation of public, technical and collection services nor the functional arrangement and division of tasks.

As Neal and Steele (1993) explain "separation does not accurately reflect how the work of the research library is accomplished and contributes to unnecessary and debilitating bureaucracy and conflict." (p. 83). Key operations must be routinely integrated and library staff must be multi-skilled so that they will be able to meet the different demands placed upon them by users.

Honea (1997) believes that "it is now apparent to anyone familiar with academic libraries that the organisational form is in tension with reality." (p. 185). Although functional

arrangement and division of tasks was administratively efficient, one of its main weaknesses was its inflexibility to meet changing needs and demands.

A flexible structure allows the university library to respond quickly and effectively to the changing environment. As Neal and Steele (1993) mention "effective response to opportunities requires mobility and less rigidity in organisation." (p. 83). Thus there is a need to move away from long-standing bureaucratic structures which according to Neal and Steele "too routinely undermines vision and creativity." (p. 81).

b) Effect of Technology on Library Staff and Users

Computers and networking have made librarians and patrons more equal in gaining access to, storing, retrieving, and representing information in novel and efficient ways. This is affecting the relationship among libraries and their users. New technologies have allowed library users to perform for themselves various activities and tasks previously provided for them by library staff.

Lancaster and Sandore mention that firstly, remote access to the library's electronic resources using computers, modems, and networking has made the library more accessible. This has attracted a new population of users who have the capability to use libraries without physically entering them. Second, remote seekers of information can gain direct access to a library's information resources, without depending on the library's intermediary role. Third, users now have at their disposal the software and computing

tools to store and manage significant amounts of electronic information- in a sense, to create their own personal libraries.

Such views compel us to look closely at the significance of technological changes and their potential impact on the relationship between library staff and their users. The next few paragraphs will attempt to do this.

i) Access Versus Ownership

Use of new information technology will be different for different users so as for different libraries. Heavy use though could bring about a dramatic change in the relationship between library staff and their users.

Hughes and Mancall (1999) mention that the traditional role of libraries has been associated with collecting, storing and making available information for their users. Library collections adopting this model focus on collection of materials and resources "just in case" users need them.

The use of new information technology like the Internet has assumed two of these major functions, that of storage and disseminator of information. This means that users can now go directly to the Internet to obtain some of the library's resources.

Networking and remote access also empowers users so that they can now use the library's resources and obtain some services traditionally provided by the library without having to consult a library staff or to visit the library for that matter. Hernon and Whitman (2001) mention that users "might send reference questions by e-mail, engage in document request and delivery via the online public access catalogue (OPAC), search periodical indexes and databases remotely and gain full-text access to titles immediately, and so forth." (p. 4).

Hannah and Harris (1999) mention that remote access such as that provided by the Internet "breaks the relationship between ownership and accessibility." (p. 34). They mention that since users have always been interested more in easy access to information rather than in question of ownership, the "greatness" of a library "is more likely to be defined by its ability to access information and provide value-added services rather than by the size of its collection." (p. 34).

This implies a major shift in the library's historic role as the storehouse of the book. The role of libraries will have to change from one that is purely concerned with ownership of materials and resources to one which is also concerned with offering remote access to resources. It also means that in the future electronic libraries will no longer need to own and warehouse materials to which they provide access.

Drake (1993) mentions that despite the influence of new technology, most technical services operations in libraries still emphasis on acquiring, describing and providing

physical access to printed or filmed materials. She believes that with greater reliance on online sources, "the role of technical processing will change to the acquisition of content and intellectual access rather than physical access." (p. 45).

Dougherty and Hughes (1991) quoted in Lancaster and Sandore refer to the move from ownership to access as a "transition from the physical library to the logical library" and Milchako (1990), also quoted in Lancaster and Sandore stresses that the research library "must move with minimal disruption from a library model directed primarily at ownership of materials to one in which access and delivery play a more central role." (p. 83).

ii) Value-Added Services

Since user access to information will change and expand, workflow in areas of the library will need to be developed to respond to new user needs and developing user sophistication.

Neal and Steele (1993) mention that:

"the revolution in information technology, with dramatic increases in system functionality and performance, expanding volumes of information available electronically, rapid development in network connectivity and capacity, and sophisticated and powerful information searching and analysis tools, is producing unprecedented

opportunities for service enhancement and eroding barriers to information access." (p. 85).

In an environment such as this, they believe that "library administrators must take a more critical approach to current operations and programs. Routine and ongoing evaluation is essential to improvement, and must open expanded dialogue between research libraries and users. " (p. 85).

Neal and Steele (quoting Buckland) mention that emphasis will be placed upon services that will help users become effective information users.

Taylor (quoted in Neal and Steele) defines the major role for the librarians in the new environment as one adding value to the information available to the user. This is in contrast to the passive role of libraries as places purely owning materials and offering access to them. The electronic library model according to Taylor "presents an opportunity for librarians to use technology to add value to information by tailoring services directly to individual user's information needs." (p. 87).

Neal and Steele mention that the new portrait of the library emerging in the literature for this new environment is one that "define both the library and the role of librarians in this setting- new technology, value-added services, and particularly, a focus on the user. " (p. 86).

iii) Focus on the User

Butler (1993) believes that "as librarians move away from the current paradigm of "just in case", to a new paradigm of library as gateway and network connector to needed information "just in time", they must also shift their focus from the information product to the user of information. (p. 2). This profound change in vision according to her will affect nearly every assumption librarians make about their work and their profession.

Butler (1993) mentions that:

"as librarians experience the profound impact that the convergence of computer technology and developments in telecommunications is having on our organisations, they are also experiencing what Charles Mauro, an ergonomics consultant refers to as the "complexity problem", with complexity defined as a mismatch between the demands of technology and the capabilities of its users. " (p. 2).

The answer to this complexity problem that Mauro offers is a new approach to technological development called a "user-centred design".

According to Butler, this strategy "takes the user into account from the very beginning of a product's development." (p. 2). She adds that "user centredness, a focus on the habits, needs, dislikes, abilities and preferences of the user, is a strategy being adopted not only

by many in the business community, but by many in higher education and research libraries as well. (p. 2)

Neal and Steele (1993) mention that "focus on the user is critical to create the library services which are appropriate to the electronic Library." (p. 87). They mention that "for the first time, users will be required to dramatically change the way they interact with the library and library materials." (p. 87).

Neal and Steele also mention that the automated library generally made internal changes which did little to affect the basic operational exchange between library and user; but in the library which is based largely on electronic access and delivery, the librarians must change their traditional work styles.

This means that libraries will no longer take for granted the passive role they play as storehouses of information. They will need to play a more active role geared towards a focus on the user.

Butler mentions that if the large claims made on the transformation potential of new electronic technologies, electronic networks, and networked information systems are to be realised in academic institutions and their research libraries, several things will need to be in place.

Firstly, Butler believes that "information professionals will need to have a comprehensive understanding of what users want and need, and how and why they will use these new technologies and networked information systems." (p. 2). She mentions the importance of administrators designing systems with and for users.

Secondly, Butler believes that administrators will need to design information organisations with and for users and provide services that anticipate demand and are responsive to the needs of the users. Thirdly, she suggests that information organisations be flexible and responsive to the rapid rate of technological development and fluctuations in economics. This according to her means that organisations "must be less hierarchical" so that "staff are empowered to use their knowledge, skills and judgement to delivery services that customers want in an efficient, productive and cost-effective way. " (p. 3).

Fourthly, she suggests that leaders and managers be developed with the values, knowledge and skills to lead these new organisations. Lastly, she thinks that the library profession must attract and develop a new breed of information professionals in response to the new paradigm provided by new technological developments to work in these organisations.

Implications for Organisation Structure

As library users become aware of new ways of working and new awareness of what is possible to do as a result of new information technology, they are changing their

expectations of libraries. Researchers for instance expect books and print journals to be available as quickly as are online catalogue records and online journals.

Dougherty (2001) gives some examples of the changing expectations of customers in this environment. He states that "customers want service when they want it; they want convenience; immediacy or instant gratification." (p. 266). Apart from these, Dougherty mentions that they want access to technologies and databases; services that are fast and easy to use from their perspective.

Drake (1993) mentions that "this is creating the need for new organisational structures to provide flexible and responsive information and library services." (p. 39). She mentions that many universities have adopted total quality management (TQM). This initiation is closely tied to the assessment of outcomes. Libraries using TQM are asked to "benchmark their operations, pay more attention to customers, obtain feedback on customer satisfaction and raise the overall quality of output." (p. 41).

One goal of TQM reported by Drake "is to effect change in organisational structure to produce flatter organisations, empower employees, and reward employees for working in teams." (p. 41).

Since the greatest effect of technology will be on customer services, changes in the services offered will depend, in part, on the character of the user population, their expectations and their use of technology. Fred Kilgour (quoted in Drake) in discussing

library preparation for 2001 said, "Spend less on inventory and more on service ... move from just-in-case collections to just-in-time delivery." (p. 46). Drake mentions that "the move from collection toward service will involve new skills, new attitudes, new behaviours and a substantial investment in training." (p. 46).

Speed in responding to customers' demands and in correcting organisational problems are necessary. Thus, libraries have to be structured as to bring about quick responses to support the kind of flexibility needed to produce them. This may call for behaviour very different from what has been characteristics of both staff with lower skills at lower levels, and those with higher skills at higher level.

Libraries must create a working environment where the employee recognises and accepts new power to exercise creativity, and implement changes when needed. Administrative responsibility and authority must be distributed more widely throughout the organisation, to allow staff to act creatively. Every staff must be engaged in identifying and solving problems, and the organisation must enable individuals to continually experiment, improve and increase its capability in meeting user needs. Information sharing, decentralised decision-making and participative strategies are needed for effective response to customer needs.

Brophy (2000) states that since the traditional organisation structure has been faced with such pressures as those already explained, there are "general trends, to an extent encouraged by good management practise elsewhere, to devolve decision making and

responsibility downwards and to flatten previous hierarchical structures". (p. 93). He also says that there is "a shift toward team-working, recognising that an effective team makes use of the variety of skills its members can bring to the table regardless of their position in the hierarchy." (p. 93).

The need to provide value added services means that staff will need to be more involved in performing value-added activities directed toward individual users. Tailoring services directly to suit individual users' information needs will require specific immediate needs to be met. This will mean having enabling structures which is conducive to meeting users' needs and ones that can respond to needs immediately and when required.

A new model using the image of a symphony orchestra was introduced by management sage Peter Drucker to describe a leaner, flatter organisation. Kanter, Stein and Jick (1992) mention that "in the orchestra, performers with different skills concentrate in perfecting their professional competence, while a single conductor coordinates the overall performance. Performers with similar specialities form self managed workteams, operating without a bureaucratic hierarchy above them. "(p. 232).

This means that "to make beautiful music together, they must achieve a balance between concentrating on their own areas of skills and responsibility and working together with others." (p. 232). The need to collaborate simultaneously is very important.

Kanter, Stein and Jick mention that libraries that have adopted this model find that technology contributes to the management process. It improves communication, making information more accessible, and cutting the time required to manage and control people. This process according to the authors shows the importance of process over structure. Relationships, communication and the flexibility to combine resources are seen as important than the formal channels and reporting relationships required in a bureaucratic model.

The result according to Kanter, Stein and Jick is a leaner organisation, and one that is more focussed on doing things it can best do. There are fewer people or departments that are administrative in nature, more responsibilities are delegated to those producing value for customers, and more services are provided by outside suppliers. Fewer layers of management result in a flatter structure. The vertical dimension is not so important but the horizontal dimension, which is the process by which departments communicate and cooperate is basic to getting improved performance through collaboration.

Creth (1993) mentions that "information technology has created a sense of urgency and created new possibilities for product development and delivery of services." (p. 112). The impact of information technology in communication processes and connections challenge basic assumptions about organisation structure, working relationships and the nature and quality of services. (p. 112).

From the above discussion, it is clear that information technology has brought about changes in work routines and work habits. New ways of working and new awareness of what is possible to do with new information technology are changing customer expectations of libraries and creating the need for new organisation structures to provide flexible and responsive information and library services.

c) Effect of Technology On Publishing Industry and the Library

Hunter (1993) believes that publishing is changing in response to economic and technological developments in the academic market. She believes that over time these changes will have their own impact on the academic market itself.

She identifies three changes, one of which is the "strategic move to electronic products and services, motivated by declining economics of the traditional business and by new market demands." (p. 23).

i) Monograph and Journals Publishing Problems

Hunter mentions that the trends facing the traditional business of publishers has made them look for new business and service opportunities. These trends as mentioned by her relate to the changes facing the publishing of monographs and journals.

Firstly, there is a reduction of monographs publishing due to the steady decline in the number of copies sold, particularly in the sciences. Coupled with the low costs of marketing are the expenses of publishing books compared to journals. According to Hunter, book publishing need: "more elaborate systems for maintaining inventory and rapid fulfilment of orders; the double handling of orders -first, to ship the books out (and to maintain a separate department to verify credit-worthiness) and, too often, later to receive books being returned; individualised, and sometimes elaborate design requirements; payment of author royalties; and greater accounting expenses (including tracking and making the same royalty payments)." (p. 24).

Hunter also mentions that the book if it has any textbook potential must also struggle against the perception of being very rapidly dated in competitive and fast moving fields. She says that if sales are in the thousands, the efforts are worthwhile, otherwise monographs can become a business liability. She mentions that it is therefore not surprising that "book publishers look aggressively for books with higher potential sales, (trade like), longer life cycles, and ideally, with opportunities for distribution in other media." (p. 24).

Apart from monographs, journals publishing is no panacea because of rising prices and shrinking subscriptions. According to Hunter "for journals there is an underlying belief that the decline in subscriptions has less to do with the academic market's desire to access this material than with the budget limitations at individual institutions." (p. 27).

ii) New Products, New Services: User Centred Publishing

Given the trends in the publishing industry, publishers are now looking for new business and service opportunities. Hunter mentions that:

"the trends which can be seen among at least some publishers are strategies for: converting present products to electronic form; adding value via electronic enhancements; clustering and tailoring services to specific market segments or individuals; creating new distribution systems; and developing new pricing systems." (p. 27).

The conversion of present products to electronic form has meant a transfer of business from publishers because document delivery royalties do not compensate for lost subscriptions. According to Hunter one option to fight this hardship "is to listen closely to the market and try to give it what it wants." (p. 27) and one of the things that corporate and academic libraries say they want is electronic journal distribution. This is because the system should be faster; more accessible and valuable to users. It should also be networkable, lowering the libraries' overhead costs by sharing one file among many locations.

Electronically-delivered journals also add value through electronic enhancements. Hunter identifies:

"pre-print availability; linking of correspondence and corrections with the original article; hypertext linking of citations to the abstract of the cited article: bulletin boards and special interest forums monitored by the journal's editorial board; underlying data files; formulas and diagrams which can be extracted and manipulated, etc." as some examples of the capability of electronic journals. (p. 28).

One of the special benefits from electronic distribution will be the ability to tailor packages and services to individual companies, disciplines or individuals. According to Hunter publishers can readily use the network to offer individual scholars current awareness (table of contents) information about their publications themselves. Thus "it is possible, in other words, to become user-oriented, not product-oriented." (p. 29).

iii) Impact on Research Libraries

Publishers have traditionally sold to libraries and individuals via subscription agents and book wholesalers. Hunter believes that if in the future, publishers have their publications available on a file server for example, direct sales to researchers are possible. The question will be: to whom do you want to sell? To the end user or the intermediary, whether library or vendor? Will publishers sell wholesale (to the intermediary) or retail (to the end user)?

Lancaster and Sandore (1997) mention that "the subject of electronic publishing cannot be divorced from the broader issues of scholarly research and communication." (p. 85).

They mention that scholars now use a variety of networks to access sources needed in their research, to exchange information with colleagues, and to collaborate with them in research and publishing activities. Lancaster and Sandore mention that this implies that unless the library actively involves itself in providing electronic resources its role will be usurped by other bodies.

Alberico, (quoted in Lancaster and Sandore) says that if libraries "don't become involved at all levels, there is a very real possibility that resources will shift to other segments of the economy that can deliver the electronic services that academic and post-industrial organisations will need to survive." (p. 87)

Hunter asserts that the move to electronic publishing will allow publishers to become user oriented rather than product oriented. She speculates that changes in the publishing industry will mean that service will be a critical factor for the success of research libraries in the future.

She mentions that research libraries must become more user-driven if they are to maximum advantage of future information opportunities. In this environment, she sees it "worth speculating that the notion of the library as a user-centred organisation may be not only desirable but profitable". (p. 37).

Implications for Organisation Structure

A user-centred organisation is one that is more user-driven. Fore, Knight and Russell (1993) mention that “in a user-centred organisation responsiveness to customer needs is paramount.” (p. 37).

They suggest the employment of cross-functional teams with staff members participating on more than one team as a way of involving people in a wide arena within the library. This allows staff to participate in needs assessment, so that all know what the customer needs, and, therefore are given the proper information to develop a user focus. They believe that the traditional bureaucracy was not flexible enough to sustain a responsive focus on user needs.

Fore, Knight and Russell further discuss that by redefining units and approaching work activities together and as a team, department heads who saw their careers paths limited and defined by tradition have been given a chance to learn and exercise new skills. The flattened team organisation according to them will allow more sharing of administrative duties and the leader can function as a mentor and colleague and less as boss and adversary.

With the employment of teams, a change in communication is also apparent. There will be emphasis on promoting high levels of effective communication. In the traditional hierarchy, communication flows from top to bottom. In the model suggested by Fore,

Knight and Russell, much more lateral communication is visible, with a network of communication channels linking all sectors of the organisation. There is more communication between departments and teams, allowing everyone to have a broader perspective of customers' needs.

Hunter speculates that changes in the publishing industry will mean that service will be a critical factor for the success of research libraries in the future. Brophy (2000) sees this as exerting a pressure on the bureaucratic structure. He mentions that the recognition that libraries are services means that they need to re-focus on customer needs rather than, perhaps on collection building. The library must thus renew its focus on service and ensure that all operations must support and satisfy the requirement of users. This can only happen if the organisation structures of libraries are flexible enough to provide responsive information and library services.

According to Drake 1993 "this means that they must be less hierarchical organisations in which staff are empowered to use their knowledge, skills and judgement to delivery services that customers want in an efficient, productive, and cost-effective way." (p. 3).

2.5.3 The New Learning Paradigm in Higher Education

The second environmental force that is driving organisational change is the new learning paradigm in higher education.

University libraries work within the institutions of higher education to which they belong to, so environmental factors that affect the institution will definitely affect them. Because the university library is an integral part of the university, it is incumbent upon university libraries to understand changes in higher education, and the implications these will have on their operations and services, in order for them to organise themselves successfully and remain a vital part of their parent organisations. One of these changes is the new view of teaching and that has sprung up during the last decade.

According to Hughes and Mancall (1999) "traditional theories of learning, which have influenced teaching and learning for more than a century, view education and learning as external processes" (p. 233) where students learn a prescribed body of knowledge through memorisation and drill. The focus is on the teacher as the source of knowledge and students as recipients. They mention that "the aim of these external processes "is to provide students with a common core of concepts, skills, and knowledge." (p. 233).

A new theory of learning, called "constructivism" emerged during the twentieth century. According to Walker and Lambert (1995) this theory views education as "an internal process in which learners use prior knowledge and experience to share meaning and construct knowledge." (p. 20). This theory believes knowledge to be a process rather than a static body of information.

Hughes and Mancall liken the role of a teacher in this new environment as one of: bringing the experiences and knowledge of learners to the surface, providing them with

experiences that challenge their current understandings, and making them aware of the processes they use to create new structures. Thus Hughes and Mancall, quoting Gardner (1983) mention that "the aim of constructivism is education for understanding." (p. 235).

Jones and Gardner (1999) further elaborate on this new theory by stating that within this context "teacher-centred instruction is changing to student-centred learning; isolated work to collaborative work; information delivery to information exchange; and passive learning to active/exploratory/inquiry-based learning." (p. 328). It views learning as active building of knowledge through interaction with information and experiences.

This demands that students interact with and use information from varied sources to solve problems and construct new knowledge. This learning environment makes it hard to pre-judge resources that will become useful for learning because the interests, talents and abilities of the learners will affect judgements about the potential utility of resources.

2.5.4 Implication for Libraries

The change in education theory certainly has implications for university libraries. For those that operate under the traditional learning paradigm, the focus according to Hughes and Mancall is on collection and dissemination of information.

They mention that under the traditional learning mode, what the library deems as best and most appropriate for the users is bought. "Suggestions from users are considered useful,

but collaboration is not a high priority in making decisions about resources." (p. 236). Outdated and useless materials are removed from the collection, and ongoing evaluation is carried out to sustain the health of the collection. Knowledge of user behaviour is not completely ignored, but the collection as an entity is the major concern.

The result as stated by Hughes and Mancall (1999) is a collection-centred model, "which places the collector in the position of supporting traditional expectations for the student as a learner." (p. 237). They mention policy, selection and acquisition, removal/weeding and evaluation as examples of such a support system.

Under the constructivist paradigm, Hughes and Mancall believe that the role of the library must be reimagined. The focus of the library "is on learning, rather disseminating information." (p. 238). Access to resources is determined through collaboration with all members of the learning community.

This process will surely affect the role of librarians. They, instead of just being passive custodians of information will need to play a more active role.

According to Hughes and Mancall (1999) librarians should be aware of what is going on in the learning environment, in order to bring to the learning community resources that match the learners' characteristics and the teachers' expectations for what is to be achieved. Students' interests according to them play a major role in this environment. They mention that "the interests and the capabilities of the students, matched to the

requirements of the classroom are used to suggest resources available internally and from the external or virtual world." (p. 238).

Since students' needs are the basis of student-centred learning, university libraries will need to contribute to the attainment of this goal by implementing student-centred focus services. To do this effectively, they must not only provide products and services desired by students when they are needed, but more importantly to ensure that these respond to their changing needs.

2.5.5 Implications for Organisation Structure

The above pressures demand libraries that place learning at the heart of their operations and that encourage personal development. They also demand libraries that possess organisation systems which enable people to share responsibilities and workloads, systems that can change priorities quickly while still placing the user first and which can work on trust and giving responsibility rather than centralising and controlling.

Library structures traditionally, have been hierarchical organisations with three main divisions; technical services, public services and administration. Technical services and public services seemed to live in two different worlds. Technical services was worried about processing physical things, public services worried about reference questions and bibliographic instruction, while cataloguers described materials. They were more concerned with rules and consistency and how their work was used.

However, with the new era in higher education, it is likely that university libraries will re-engineer to create a structure that will enable services to fulfil library and institutional missions.

Wilson (1998) states that in this environment libraries should "make the customer the starting point for change by identifying customer wants and creating infrastructure to support these expectations." (p. 24). Libraries must change their habits in this environment. They must be flexible in order to accommodate all types of users, including those with varying degrees of familiarity with technology, those with different learning styles, and increasingly remote users.

In this environment Drake mentions that there is a need for "value based customer services". (p. 46). Libraries must adopt new ways of behaviour to better serve their users. Every staff must be engaged in identifying and solving problems and the organisation must enable individuals to continually experiment, improve and increase its capability in meeting user needs.

Information sharing, decentralised decision-making and participative strategies are needed for effective response to customer needs. As frontline staff play a vital role in their direct contact with users, they must be empowered with the knowledge and authority to address a wide variety of customer needs and must have adequate materials to carry out their jobs.

Speed in responding to customers' demands and in correcting organisational problems are necessary. Thus, libraries have to be structured as to bring about quick responses to support the kind of flexibility needed to produce them. This may call for behaviour very different from what has been characteristic of both staff at lower skills at lower levels and those with higher skills at higher levels.

Libraries must create a working environment where the employee recognises and accepts the new power to exercise creativity and implement changes when needed. Administrative responsibility and authority must be distributed more widely throughout the organisation to allow staff to act creatively.

The inquiry approach to learning requires multiple resources for students to use for problem solving. This means that students will demand services and answers based on an ability to use a variety of information resources. This means that either all staff will need to upgrade their skills or as suggested by Pugh (2000) "by creating teams and allowing a reservoir of the necessary talents to be filled from individual contributions within the teams." (p. 11). This also means that leadership and expertise in a variety of skills should exist at all levels.

It is evident from the above discussion that the university library must be reinvented. There is a need for university librarians to reconsider their systems, the roles they play, and also the organisation structure of the library itself.

2.5.6 Summary

It is evident from the above discussions that the university library must be reinvented as a host of factors have produced significant pressures on the traditional organisation structure described by Brophy.

New information technology for example has brought about changes in work routines and work habits. New ways of working and new awareness of what is possible to do with new information technology are changing customer expectations of libraries and creating the need for new organisation structures to provide flexible and responsive information and library services.

The new paradigm in higher education with its focus on a customer service or user centred environment has exerted the need to relook at long standing dysfunctional structures. The university library in order to remain an important part of the university must create a working environment and a conducive organisation structure which can adequately meet the requirements of the new trend in higher education.

The literature on academic librarianship over the past decade has shown a growing trend in emphasis placed upon the modification of the traditional organisation structure of university libraries. As mentioned in the introduction to this work, scattered among numerous restructuring efforts so far are not only the discussions of the various factors

and reasons underlying such a change, but also the ways in which university libraries are going about the change(s).

However the case studies do not as yet document any New Zealand experiences. This study proposes to explore this. The fourth chapter will discuss the report on the findings of this research.

Chapter 3 Methodology

3.0 Choice of method

3.1 Type of method

This study used the qualitative method of research. Qualitative research frequently utilises four research methods: observation, interviewing, group discussion and historical study. I chose to adopt the interview method.

Gorman and Clayton (1997) point out that in an interview study, the researcher “can obtain detailed in-depth information from subjects who know a great deal about their personal perceptions of events, processes and environments.” (p. 44-45).

3.2 Reasons for Choice of Method

The above statement of Gorman and Clayton encompasses the main reason for adopting the qualitative interview method. I was interested in obtaining detailed, in-depth information from chosen individuals who had been involved and had a thorough knowledge of the restructuring efforts in their respective libraries and whom I thought would be able to answer questions relating to aspects of the problem statement that I was interested in finding out.

I had also chosen the interview method because given the limited time available to conduct this study, this method allowed me to receive immediate response to questions that I needed to analyse.

Other reasons for adopting the interview method follow. These ideas have being adopted from the literature of qualitative research.

The use of open-ended questions encourages the person being interviewed to highlight self-perceived issues or relationships they see important. This can be really valuable in understanding contexts and creating links that are such key aspects of qualitative research. Dialogue between researcher and individual allows the interaction to move in new and sometimes unexpected directions. This adds to the depth and breadth of the researcher's understanding of the issues involved.

3.3 Population

3.3.1 Selection of participants

When selecting who should be interviewed, I used what has been termed "purposive sampling" in qualitative research.

Gorman and Clayton (1997) describe this sample as "one chosen by the researcher to include representatives from within the population being studied who have a range of characteristics relevant to the research project". (p. 127).

To return to the problem statement, this study proposed to explore if and how university libraries in New Zealand are changing their organisational structures to suit a customer service environment.

Participants to this study were thus initially chosen to include University Librarians from the eight university libraries in New Zealand, namely the University of Auckland, the Auckland University of Technology, the University of Waikato, the University of Massey, the Victoria University of Wellington, the University of Canterbury, the University of Lincoln, and the University of Otago.

This sample was chosen with the belief that they would be the ones who had been heavily involved in, and would thus have a thorough knowledge of the restructuring efforts in their libraries, thus helping in the answering of the in-depth questions related to this study. Gorman and Clayton (1997) refer to this selection criteria as "theoretical qualifications" or "criteria known in advance" and which include such criteria as "status, role, position, expertise, knowledge, group and subgroup membership." (p. 87).

Following Gorman's and Clayton's idea, I selected the University Librarians because I believed that with their status, role, position, expertise and knowledge in the organisation.

they would have a good working knowledge of their internal organisational structures and the changes that it had gone through. This to me was very important for the problem being investigated. Thus, choice of the participants arose out of the context of the problem being investigated.

3.4 Final Response Rate

Out of the eight initial participants that I had selected to interview, five finally agreed to take part in the study. This represents 62.5% of the overall total population. These five participants included the following:

- Gail Pattie (University Librarian, University of Canterbury)
- Barbara Taylor (University Librarian, Auckland University of Technology)
- Alan Smith (University Librarian, Victoria University of Wellington)
- Carol Catley (Human Resources and Staff development Librarian, University of Auckland Library)
- Tony Millett (Administration Services Manager, University of Waikato Library)

3.5 Collection of Research Data

Prior approval from participants to take part in the research was needed before carrying out the interviews. This was by way of a formal letter asking the individuals to participate

in the research. The letter was accompanied by an information sheet explaining the objectives of the study and other important information pertaining to the study. A consent form also accompanied the letter.

Data in this study were collected primarily through telephone interviews and follow up electronic mail interchanges with the study participants regarding clarifications of any points made during the interviews. The telephone interview was chosen over face-to face interview due to time constraints associated with travelling (author had to return to work in Fiji) coupled with funding constraints. All the interviews were tape recorded, reviewed and transcribed.

A list of ten questions related to the objectives of the study was prepared as the basis for the interviews. The questions were sent to the participants before the actual interview dates in an attempt to familiarise themselves with the nature of the questions and prepare them for the occasion as well. In this way, it was hoped that the response of the participants would arise in the formation of additional questions during the interview, thus allowing these responses to drive the process forward.

Chapter 4 Data Analysis

4.0 Approach Used and Reason

To compensate for the demand placed upon me to return home because of work commitments, coupled with travel funding restrictions, I conducted interviews and data verification by the informants using two approaches:

- telephone interviews using a tape recorder and transcription
- electronic mail exchange for follow up questions and information confirmation

King (1994) quoting Kvale "defines the qualitative research interview as an interview, whose purpose is to gather descriptions of the life-world of the interviewee with respect to interpretation of the meaning of the described phenomena." (p. 14). King also mentions that "the goal of any qualitative research interview is therefore to see the research topic from the perspective of the interviewee, and to understand how and why he or she comes to this particular perspective." (p. 14).

Gorman and Clayton (1997), also mention that in an interview study, the researcher "can obtain detailed in-depth information from subjects who know a great deal about their personal perceptions of events, processes and environments." (p. 44-45).

Since I was interested in obtaining detailed, in-depth information about the restructuring efforts of university libraries in New Zealand, I decided to interview the chosen participants who had been involved in and would know a great deal about the restructuring efforts and the processes involved in it. This would enable me to answer the questions that I had wanted to know and which have been discussed in chapter one, which is the introduction to the problem area of this research.

4.1 Analysis

After the interviews, I transcribed the tape recordings myself rather than asking somebody to do it for me. This gave me the opportunity to listen to each interview, reflect on what took place, and report the reactions of the participants to the questions posed, so as the interactions that took place.

As the research heavily relied on the responses of the participants to the questions asked during the interview, data collected is reported according to the respondents' answers to the interview questions.

The results of the findings will be a verbal narrative by the participants themselves. It is the actual record of the responses of the participants that will dominate the analysis. I will basically be reporting the participants' responses to each question. The participants' perspectives is respected and reported as fully as possible. The views of all participants will be included.

Gorman and Clayton mention that in this section researchers need to show the readers what they have seen and heard. The findings of this research will report mostly on what I have heard. Gorman and Clayton also mention that in the "findings" section "there are often lengthy verbatim transcriptions of participant dialogue, and detailed descriptions of settings or events, for these are the raw data from which findings are derived in qualitative research." I have decided to adopt this method when reporting on my findings, by recording the actual responses of the participants to the questions I had prepared. These will dominate the analysis.

Gorman and Clayton also mention that apart from a mere description, qualitative research should be "interpretive and evaluative as well." (p. 228). According to them this means that a researcher interprets what he/she has found - "not by being judgemental and prescriptive, but by finding meaning in words and events." (p. 228). This method will also be adopted when relating the findings. Interspersed among the description will be my interpretive and evaluative comments.

4.2 Data Presentation

A total of ten questions related to the objectives of the study were prepared as the basis for the interviews. The findings will report on the responses of the five participants (representing the five university libraries being researched) to the questions asked.

For confidentiality reasons, each library will be identified as Library A, Library B, Library C, Library D, and Library E. In cases where specific names have been provided during the interview, certain designated alphabet letters of the alphabet will be used to maintain confidentiality in the description of the findings.

Each participant's response to each question will be put under the above library labels, for example Library A's response to question one will be put under Library A, Library B's response to question one will be put under Library B, and so on to Library E. Following this, Library A's response to question two will be discussed, followed by Library B, and so on to Library E. This will continue until the reporting of the five libraries' responses to question 10.

In this way, it is hoped that the full responses from each participant representing each library will be reported. Consistency will also be achieved because each library's response will be treated in a uniform way throughout, for example, Library A's responses to each question (questions one to ten) will be found under the label, Library A, Library B's response to each question under Library B, and so on to Library E.

Straight after the verbal narrative to each question, I will be analysing and reporting on the main ideas and themes that I think have emerged from the data that has been reported for the first nine questions. No analysis will be done on data collected for question ten.

The analysis of the main ideas and themes emerging from the data reported for questions two and three will be done collectively as the nature of these two questions are the same, that is they both are both asking the purpose of the changes. It should also be noted that Library C's response to question two covers questions two and three. This explains the absence of a Library C response for question three.

4.3 The Data Collected

Question 1: What is/are the exact nature of the change(s)?

Library A

We restructured the acquisitions and cataloguing departments into a merged single department but subdivided into subject-based teams for monograph purchase and processing. We kept a serials team though. We reorganised the work so that all staff did everything - from ordering through to cataloguing. We also restructured the public services departments of the Central Library to reduce the number of service desks. We reorganised the lending services department into three teams (by function) and the information services department into staff with subject-based responsibilities.

Library B

The Library has restructured twice in the past four years. In 1998, we had three sections - X Library, Y library, and Information Systems, with a section head for each. The responsibilities were changed along functional lines so that X Librarian took over

responsibility for 'client services' including collection development across the Library, Y Librarian became responsible for policy and training. The Information Systems Librarian was responsible for technical services and systems. The aim was to redefine the Library as a single entity with potentially multiple service points and to unify and standardise services across the Library. There was a reduction in staffing at the time and some redeployment. Some technical service functions were outsourced- processing, cataloguing staff were reduced as we increased our uptake of electronic records. Media resources were absorbed into circulation, to reduce the number of service points.

At the beginning of 2001 we restructured into three sections- Information Resources, Information Access and Delivery, and Business Development. Information Resources includes acquisitions, cataloguing, liaison, information literacy, and collection development. Information Access and Delivery includes lending services, interlibrary loans and 'flexible delivery' systems and electronic resources. Business Development includes professional development, budgeting, and marketing. Client service is now a cross-Library function, with all staff being rostered on the Information Desk.

Library C

I will break this down into four steps. Step 1 was that in May 1998 the decision was taken to replace the Deputy University Librarian position with four new Managers and the new Management titles were: Administration Services, Information Access, Information Resources, and Technology Services. The first step was created consisting of those four new managers plus the University Librarian.

Step 2 was that we created new teams. These were new to the Library. We didn't have anybody with this particular responsibility before or rather the responsibilities of the teams were spread into another department. The new teams created were: Collection Management, Computing Operations Group, Document Access and Delivery (formerly Interloan), and Information Literacy. As part of the realignment we moved Cataloguing Support which used to be in the cataloguing Department into Collection Management. Those were the people who downloaded records from databases and who do a lot of the processing of books. And also as part of that realignment we also moved our book repair (1 person) into collection management as well, so for step 2, we created four new teams and moved some of the staff from other departments into those teams.

Step 3 was that we divided our reference department and our new information literacy team into two teams- the first one called Liaison & Information Literacy and the second one called Information Services. So for the first of those teams were our Reference Librarians who liaised with the schools and with teaching staff and with students by discipline. So we have a management one, social sciences one, a sciences one and so on. The reference department was disbanded. We created a team that consisted of those staff, what we call liaison, and joined them with the new information literacy team that we created in step 2 and then in addition to that one liaison and information literacy team we created a new division called Information Services Team and they are mainly the people who work in our Information desk.

Step 4, which was a very minor one, was more than a name change than anything, so some functions changed. We changed our Serials Department to be a Serials & Electronic Resources Team because so much of our serials now are moving into electronic access rather than purchase of print. It seems sensible for the electronic resources part of the Library to be located within the new Serials and Electronic Resources part of the Library. So that is what we did. That took place between May 1998 and the end of last year.

Library D

Perhaps what I need to do is clarify that we have made a lot of organisational changes and restructuring over the last five years. The restructuring is really only one part of an approach to meet customer needs. We have restructured our law Library, we have reorganised our engineering, architecture & fine arts Library and grouped them together under a Library Manager, we've established subject librarian services to meet the information requirements of staff and students and senior students.

I think in each faculty— called a department now, we've centralised our core technical services and that includes acquisitions, cataloguing, inter loans and serials. We've changed the job descriptions of some of our senior managers to include system wide responsibility and to give them policy oversight of specific areas of library services for example lending and circulation, inter loans, human resources. We've established a digital services department, which takes responsibility for managing the library's resources and their effective delivery. We've formalised services to the (Z) District Health Board.

We are developing an information common. That's a stand-alone facility which brings together the library, IT and the student learning centre within the university. The idea is that it provides very much for students' computing needs and electronic access to information and also will it contain our high demand short loan collection material. We've also established a Maori Services Team, we've established a senior position of Library Manager Learning Services and that person leads the team responsible for the development and management of the Information Common. It involves the information skills teaching program, the high demand material, our information literacy initiative, our flexible learning initiative, and our distance delivery of information. All those things have been drawn together under a library manager.

We've established a senior position and increased the team of subject librarians to provide improved services to the school of Business and Economics. We are integrating what were formerly separate libraries of science, biological sciences & geography and redeveloped a large general library within the university. We've re-evaluated and redesigned our public information reference desk services. That is it. Those changes have happened over the last five years.

Library E

Well, let me put it this way, that the changes are largely externally driven and the two big forces which drive change are firstly, the changes in the publishing market, that is the way new academic information is disseminated. Part of those changes are the growth of

electronic formats, the merger of companies, the increasing prices, and changes in the way in which academic journals are produced.

The second nature of that change is the internal one for students. There are two sorts of change. Firstly, the growth of flexible learning, and studying at a distance by the use of voice or data transmission so that the differences in geography are minimised, and the second important change which is happening in the student community is the entire growth of online capability so that now an increasingly end of the feature universities and within that academic libraries will be dealing with are students who are used to self phone communications, who see the web as the primary means of finding out things, who have an expectation that- a)it will be on the web and b)that you will be able to connect to it easily...so all those changes are happening externally and in some ways those sorts of changes have been going on for years or decades or continuously but they all have an impact on the way in which the library goes about its business and its business is always being to make the accumulated public record of world knowledge available to individuals, so it's a portal by which people can get out the whole range of knowledge so that's my perspective of some of the changes, firstly in the publishing market side and secondly on students' expectations, firstly on flexible learning and secondly the use of the web and self phone technologies as the primary ways of getting it.

The changes that I have outlined do not affect the library's structure. This is something I wanted to expand on. I have taken the view that the important thing to focus on was the actual service to the end user and some of those end users are students and staff who are

actually using it today but another important end user are the future users. Here we've got to structure things now so that next year they will be usable and so forth and I strongly believe that organisational structure, in other words the way the library is divided up into section or groups is relatively unimportant, so in this organisation in 1998, we changed the structure of the library.

There were thirteen different groups providing different sorts of services, then in 1998 these were consolidated into eight groups and my intention is to keep those eight groups through until next year when I envisage that a number of other projects will have come into being, which may justify some re-look at that, but quite deliberately it's important that the organisational structure is only a convenient and the costs of changing a structure are so great-costs both in terms of money and more importantly in terms of distracting attention from dealing with those changes or dealing with the actual users that we're going to deliberately keep this sort of structure and put our focus on really serving those end users.

So what I am saying there is that we're taking a different approach to what a number of other organisations or libraries do where you change structure and set up new groups and all those sort of things. I believe that that sort of approach actually avoids the problem because it's got two problems- firstly it's very costly in terms of money, and time and effort, and secondly it's based on a presumption that there is a perfect organisation solution and if you restructure possible and long enough, you'll get to the perfect solution. I don't believe that's possible. I think that as long as you've got a pragmatic and

reasonably workable or even a balanced sort of structure- the important thing is that within that, the focus is on customer service and not let the organisation structure issue dominate things.

4.4 Analysis of Data for Question One

The overall data reported for question one show that New Zealand university libraries are undergoing changes in their organisational structures. However the nature and degree of changes that have occurred varies for each library. Out of the five university libraries reported, all have undergone one form of restructuring or the other.

Restructuring efforts that have been reported consist of: the abolition of some departments, downsizing of others, merging of previously separate departments and the establishment of new entities; subsequent reorganisation of work so that staff did a variety of tasks associated with the merger or the establishment of new entities; reorganisation of responsibilities among departments and staff along functional lines; outsourcing of certain technical service functions because of the increase in use of electronic records; decentralisation of responsibility of senior managers to allow a spread of workload; creation of teams to handle specific tasks and responsibilities; and redeployment of staff and services to obvious areas of need.

The abolition of some departments, downsizing of others, merging of previously separate departments, and the establishment of new entities may be attributed to the effect of new

information technology. Automation for example brings with it the need for greater standardisation. With standardised operations, opportunities arise for effective integrated systems within libraries and resource sharing. Thus departments of a large library may now have less autonomy than they did before.

Standardisation in cataloguing for example and continued improvement of expanded online access to materials in and across library collections can be the impetus for collaborative innovation in some libraries. An example is the merging of the acquisitions and cataloguing sections into a combined technical services section under one head. The merge will lead to the reorganisation of work so that staff now do a variety of tasks associated with the merger. It means that all staff may now be required to be involved in acquiring and describing bibliographic records. This reduces the time spent on processing materials and reduces backlogs of unprocessed materials, thus making the quicker availability of printed materials for use. Lancaster and Sandier (1997) say that such changes in structure causes a blurring of departmental boundaries.

Another example of a restructuring effort reported is the reorganisation of responsibilities among departments and staff along functional lines. This can be attributed to the need to offer specialised services that are conducive to user needs. In order to deliver effective services, libraries must be aware of their market and the changing needs of their customers. They need to offer services that are conducive to both the current and potential customers.

Data collected also reveals the outsourcing of certain technical service functions because of the increase in use of electronic records. Vendors are currently offering an increasing number of electronic and specialised services to libraries to fulfil a number of aspects of the selection, ordering, and cataloguing processes that libraries formerly carried out internally. They are able to do this by simplifying the ordering, accounting, and claiming process for libraries, and to supply access to complete electronic files of their materials. They are able to team up with cataloguing vendors to simplify the searching and cataloguing process. The handling of these services by vendors means the downsizing or the abolition of departments that used to handle these operations and the redeployment of staff into those areas under most pressure and where there is an increased demand for services.

The creation of teams to handle specific tasks and responsibilities shows the desire to diffuse administrative responsibility and authority more widely throughout the organisation and empower staff at lower levels so that they learn to be both creative and innovative. As libraries recognise the increasing demands for new services for their users, working groups have been formed to undertake specific tasks. These working groups loosen the hierarchical structures. They promote and support collaboration among units and the sharing of ideas for improvements to increase the effectiveness and efficiency of services and operations. Brophy (2000) mentions that there is “a shift towards team-working, recognising that an effective team makes use of the variety of skills its members can bring to the table regardless of their positions in the hierarchy.” (p. 93).

The spreading of the workload of the two senior managers to a five people management group was introduced to ensure that 80% of their time was spent on strategic issues with only 20% on operational issues. It can also be attributed to the desire to allow participative management. This management style allows a group of people to provide input and make decisions on the strategic issues of the library. According to Bryson (1999) managers who achieve the most success in maintaining their organisation's competitiveness in changing conditions are those who not only have a strong sense of vision but share this vision with others and create a collaborative and supportive environment. The spreading of the workload in this example also highlights the flattening of the hierarchical structure.

Overall, the reorganisation efforts reported show that changes have been happening internally within the library. This shows that university libraries in NZ are moving away from the status quo and introducing new patterns of organisation. Rather than completely restructuring, most libraries are imposing modifications upon their basic structures. Incremental changes can be found.

Moran (2001) says that incremental changes are not surprising for large university libraries. When commenting on the incremental changes found in large universities, she mentions that:

“University libraries are relatively large units located within traditionally slow-to-change institutions. Both their size and their setting work against their being extremely flexible

or nimble. Radical transformation in such institutions is hard to achieve. Reorganisation is also made harder because current services must be maintained while the infrastructure is being built to support the information needs of the 21st century.” (p. 109).

Meanwhile, some general findings can be made from the above analysis. Firstly, New Zealand university libraries are undergoing changes in their internal organisational structures, incremental though they may be. Secondly, the way these libraries are restructuring varies from one library to another, as each library sees fit for its operations.

Question 2: What is/are the changes designed to do that is different from the way things are done now?

Library A

In both cases to give a subject focus to the work, to increase liaison opportunities with academic departments, and to improve services to the users.

Library B

The 1998 restructuring was designed to unify the Library, to remove the 'branch' structuring and to allow transfer of staffing resources to areas of greater need. In 2001 we moved from an old to a new much larger Library facility. Information Resources staff moved from a 'static' reference desk service to a 'roving' service. First tier information services are now the responsibility of all Library staff on a rostered basis.

Library C

What I decided in looking at your questions 2 & 3 was that they were really asking the same thing. What was the purpose of the changes? I don't think there was any difference between what they were designed to do and what were the reasons. That seems to me to be the same thing so I will combine my answers for that and put those two questions together.

The first purpose for the changes that we had made was to spread the workload of the University Librarian and the Deputy University Librarian over a five people management group. The job was too big for two people so we increased the number of staff that needed to do it. So that was the first reason for doing it.

The second purpose was that we wanted to ensure that out of those five or those four new managers plus the University Librarian, we wanted to ensure that 80% of their time was spent on strategic issues with only 20% spent on operational issues. So what we were trying to do was to increase the strategic management capability of the library.

The third purpose was that we gave greater operational responsibilities to the team leaders. Because the strategic management of the library was been done by the four new managers, the team leaders were mainly concentrating on operational responsibilities.

The fourth reason was that in the structure we wanted to emphasise a number of things. These were five of the things that we wanted to emphasise in creating this new structure.

We wanted to emphasise the need to review our collection, so that was the collection management team. We needed to review our collections, both because we needed to be reviewed, that is: Are we buying the right things, are we retaining the right things? but also because of its impact- the impact of our growing collections on our capital development plan, our building plan. You can't go on buying and determine whether you need to keep every thing. That was the justification for the collection management team.

We also wanted to stress the importance of information literacy for all our students and for our academic staff. The library has right from the beginning undertaken a number of courses on how to teach students how to learn, how to find information by creating a team: an information literacy team. We actually put the emphasis on that and indicated how important a role we believe this is for the library. The University is here to teach students how to learn so that when they go out into the workforce, they can continue whatever job they end up in. They can continue to learn, they know the skills of learning, the skills of finding information.

The third reason is that what we were trying to emphasise in the structure was the importance of liaison with our schools, with our academic staff, particularly our senior or graduate students. We had always done that, but in grouping our former services under the sort of heading 'Reference' we actually were diluting what they were doing- the staff were spending so much time in the information desk and dealing with face to face, one on one enquiries that came in, that they weren't focussing sufficiently on the needs of the schools that they were supposed to liaise with, and so by restructuring their role and

giving greater emphasis for the information desk to that new information services team I spoke about, that gave emphasis to the role of our former reference librarian & liaison librarian.

The fourth reason deals with the growing importance of computing resources. The library is entirely dependent now on its automation program- both for its own internal system, for its catalogue but also in linking to the Internet and to electronic resources so it was quite critical that we developed a team that could revive the library with the support-computing support it needed, and that was the computing operations group.

The last reason or the last point that the structure emphasises was the importance of customer services at our information desk and we have a number of them at the library. This gave emphasis to the importance of providing good customer service at the desk.

The major consequences of this restructuring was that two senior staff left the library. This gave us the opportunity to regroup in the way in which I've just described- to regroup the library, or to restructure the library into different patterns. The other considerable consequence was that there was a very considerable increase in our staffing cost of the consequence of the additional position but the University recognised that the burden carried by the University Librarian and the Deputy Librarian was just too great and that what was needed was a bigger management team which was able to carry the burden and the University was prepared to fund that. We received a considerable increase in our staffing allocation.

Likewise in step two, when we created the new teams, the University was prepared to fund the additional collection management team leader and the information literacy team leader, which were brand new positions but the consequence was that we increased our staffing cost.

Library D

Now the law Library and the grouping of the engineering, fine arts library under a manager was really to provide more effective and efficient services to those particular library users.

Library E

To reduce the time spent on management and to increase the time on service. The thirteen groups were simplified down to eight spread over five different geographical locations. It reduces the time that has to be spent on administration and increases the time that then becomes available for real service-for really understanding and keeping abreast of those changes and really sort of understanding the user needs.

Question 3: What are/were the underlying reason(s) or cause(s) for changing the library's structure?

Library A

For our collections, we wanted to improve liaison in order to make our collections more responsive and in tune with the needs of the users. For public services, we made more

efficient use of staff so that there were two service desks and not five, and a better service for users by having two desks, not five and service from them all the hours of opening.

Library B

The underlying reason was that of significant culture change- we were moving towards University status. The previous Librarian had been in the position for over twenty years, technology was changing business processes, we had to work 'smarter' as workloads and services were increasing and staffing numbers were not.

The 2001 change was also designed to make the Library create a more open and less 'pyramidic' type of structure. We put in place five team leader positions, with the aim of increasing the level of responsibility of those positions to pick up some of the responsibilities of the two Associate Librarian positions.

Library D

The underlying reasons were probably a more effective use of skilled and knowledgeable staff. As far as those ones went, it was the impact of technology with part of that and the effect of the available money. Changing user demand was another reason. People using the library were demanding more than what those libraries were providing and they needed the leadership and direction to provide that.

Now, the next significant change for us was the establishment of our subject librarian services. Now this was in response to the demand to move from a far more generalised

type service to support staff and senior students in their research with specialised skilled people. So many of these changes are in response to the strategic direction that the library is moving in and also in response to the strategic planning of the University as well. I think that is really important.

Library E

The underlying reason would be to improve customer service. It was also to reduce the time spent on management and increase the time spent on service.

4.4.1 Analysis of Data for Questions Two and Three

The analysis of data for questions two and three will be done collectively, as the nature of these two questions is the same. Both questions are asking the purpose for introducing the changes.

The wide range of reasons provided for changing the library's structure reveals that organisational change is motivated by many factors. In other words, a variety of pressures have produced the need to change the library's structure. The table shows the reasons for change as provided by the participants.

Reasons	Number of participants
Liaison with users for improved services	2
Redeploy staff to areas of great need	3
Effect of technology on business processes	3
Move to flatter structure	1
Changing user demands	1
Subject specialisation for improved services	2
Improve customer service	3
Staff empowerment	2
Use of teams	2
Review of collection	1
Information literacy	1

The table shows that out of the reasons reported for organisation change, the most common ones are: the need to redeploy staff to areas of great need; the effect of technology on business processes; and the need to improve customer service. Following these are: liaison with users for improved services; subject specialisation for improved services; staff empowerment; and the use of teams to undertake specific tasks.

The need to redeploy staff may be attributed to the increased demand for services leading to severe pressures on staff. This in turn leads to the redeployment of staff into those

areas under most pressure. It can also mean that user needs are constantly changing and that the library needs to play a pro-active role by researching on the current and future needs of its users in order to continually provide conducive structures that can accommodate these changes.

Technology and its effect on the library's processes also lead to organisation change. This is not surprising given the revolution in information technology. Networking and remote access for example empowers users so that they are able to obtain some services traditionally provided by libraries without having to visit them. The automated library generally made internal changes which did little to affect the basic operational exchange between the library and its users. However in the library which is moving towards the provision of electronic access and delivery, librarians must change their traditional work styles and business processes. They must reorganise in order to make use of the opportunities provided by new information technology to enhance the services they provide to their users, because if they do not do so, they will be at the risk of losing them. Butler (1993) rightfully says that:

“as librarians move away from the current paradigm of library as storehouses of information packages to a new paradigm of library as gateway and network connector to needed information, they must also shift their focus from the information product to the user of information.” (p. 2).

The above statement will result in a profound change in vision that will also affect how responsibility is distributed in the organisation, how individual positions are coordinated, and how information is disseminated. Since user access to information will change and expand, workflow in certain areas of the library will need to be redeveloped, while new services will need to be set up to cater for new user needs.

The need to improve customer services has also precipitated the need to change the organisation structure. This can be attributed to the need to deliver effective services. In order to do the latter, libraries must be aware of their current and potential customers. As the number and diversity of library competitors is likely to increase, these competitors will offer varied services that cater to customers and their expectations.

Libraries to be competitive in this environment will need to understand the habits, needs, desires, dislikes, abilities, and preferences of the users. By taking the user into account, responsive information services can then be developed to meet user needs. However developing these services may mean a move from the traditional way of doing business. Work designs and processes may have to be changed and this will affect the organisation structure. Some NZ university libraries are already doing this.

The desire to increase the library's liaison programme may be attributed to the realisation of the importance of the library's users and the need to listen closely to them and to be sensitive to their needs in order to deliver effective and responsive services that are in tune with their needs. This is particularly important in an era where powerful forces such

as the growth of interdisciplinary research; the changing nature of scholarly communication, and the fact that information is no longer location dependent are affecting the information-seeking behaviours and practices of library users.

This means that librarians need and must embrace the opportunity, to engage users and scholars with innovative and effective services that stretch beyond the traditional library boundaries. Frank et al. (2001) mention that:

“to remain a relevant and vital part of the academic environment librarians must embrace a philosophy of consulting that looks beyond the traditional library roles such as collection development, reference services, access services, and circulation.” (p. 92)

They must anticipate and assess information needs, delivering value-added information and services in a timely way.

The need for subject specialisation, staff empowerment and the use of teams to undertake specific tasks have also produced changes in the structures of NZ university libraries. Discussion of what may have attributed to these needs have already being discussed in the analysis to data collected for question one.

The provision of information literacy is attributed to the need to provide information literacy skills that can help users locate information effectively. This may be due to the realisation of the abundance of information as a result of new information technologies

(such as online sources) and the need for libraries to teach users the two major skills of finding information and evaluating its content in a critical way in order to pick out what is relevant.

The general finding that can be made from this analysis is that there are a wide variety of underlying reasons for the restructure.

Question 4: Which out of the reason(s) or cause(s) you have mentioned would you rank as most important in terms of what you would have most liked to achieve in the new structure?

Library A

User liaison for a better user service.

Library B

Improved customer service. During this period of change staff have undergone two Library-wide customer service workshops and other professional development workshops.

Library C

All were very important.

Library D

The most important is the strategic direction and I think the effective use of the skilled and knowledgeable staff we have. The impact of technology is obviously really important, and certainly the changing demands of users for example the expectations of students and staff for online access to collections and electronic resources, the demand for full-text material, increasing demand for 24 hours/7 days a week access, all those sorts of things are important.

Library E

The most important would be to improve customer service. It was also to reduce the time spent on management and increase the time spent on service.

4.4.2 Analysis of Data for Question Four

The table shows the participants responses when asked to rank what they would regard as most important (in terms of what they would have most liked to achieve in the new structure).

Most important reason for restructuring	Number of Participants
Improve customer service	5
Reorganisation due to impact of technology	2
Liaison with schools and other users	2
Strategic management capability of library	2
Changing user demands	1
Empowerment of staff	1
Review collection	1
Information literacy	1

Data collected seems to show that participants had different views on what they regarded as most important. However the top ranking seems to be for: improved customer services. Thus the general finding is that the NZ university libraries are emphasising on becoming more customer/user-centred. The reorganised structures are trying to put the needs of users before the needs of the library.

This may be attributed to the recognition that libraries are services and that they need to re-focus on customer needs. Brophy (2000) refers to this move as ‘the customer comes first’ ethic. (p. 93). This means that whatever changes are done must be geared to satisfying the customer/user.

Question 5: Does/do the reason(s) for the change(s) match the library's vision? In what way(s)?

Library A

Yes, by bringing people and information together. All changes were designed to enhance this.

Library B

Increased focus on client service as a whole Library responsibility.

Library C

Yes. They are aligned with the Library's Mission and Values, which are aligned with the University's strategic plan. The Library has a mission statement which is very brief: 'Bringing people and information together.' It also has in its strategic plan a group of eight values. We don't actually have a vision- we have a mission statement and a set of values. The changes that we have made for restructuring reflects those values say for example the first value is information literacy and lifelong learning, so by creating an information literacy team we are meeting that value.

The second one is the exploration and appropriate use of advanced technology so that's wider than just the computing operations support people, but they are critical to our ability to meet that particular value.

The third one is traditional and electronic library resources so what that's getting at is that the library is a mixture of the old print plus the new technology and I think a good way in which we have structured the library enables us to ensure that those, I suppose receive equal value.

The fourth one is quality customer service and a vibrant and friendly environment and I've already emphasised our wish to place an emphasis on customer service, for example at our information desk as part of our restructuring but also the empowerment of our liaison librarians in working with schools and senior students in doing that. So I think that we have met the library's strategic plan mission statement and values by the restructuring that we have done.

Library D

Yes. The mission statement of the Library is that the University Library is committed to providing quality library and information services to support and enhance the teaching, research, scholarship and creative work of the university. The library is to serve special obligations to Maori and I think that section was basically all the changes that have been made.

Library E

Yes and No. The reasons for the changes would be to constantly improve the way we can line up with the vision and there are two of these things which underline that vision of the Library. Firstly, is the world as a collection. In other words that the Library is all about

enabling students to get at the total world of recorded knowledge. That's largely delivered through networks and inter-library loan and these sorts of things, but if we take the view of the world as a collection, not simply the collection that we happen to have here at the moment, now how do we enable students to get access to that?

Secondly, the second part of that vision is the notion of recorded knowledge as valuable in itself, so we're not just interested in knowledge which enables people to pass degrees or just set texts or set readings but we are creating an environment where people can read around subjects and get into self-directed learning. So that the changes as made in 1998 was simply driven by administrative convenience- reducing the cost, but the organisational development and project- those matched the library's vision because as I say their goal was to make sure that the library is sustainably viable beyond 2004 when there will be more flexible learning developments and commercial alternatives to information supply so we want to make sure that the Library is there adding value and being used a lot.

4.4.3 Analysis of Data for Question Five

Data collected for the answers to question five seems to show that the changes implemented by each library matched each of their visions. However, Library E mentioned that the answer was both yes and no.

Question 6: How would you describe the successfulness of the change(s) that have been made?

Library A

It has been successful but it needs constant reviewing, for example currently the collection budget is reducing so staff may need to be reduced and reorganised to reflect changing financial fortunes, or, staff redundancies in Lending have led them to reorganise into two not three teams.

The failure was that Document Supply (Interloans) started out in lending but it was found to be a very uneasy fit, so they have moved to be an independent department now.

Library B

Staff are now more flexible and willing to accept change, and to do things in different ways, for improvement of services and greater efficiencies.

Library C

The new structure provides greater strategic support for the library by firstly increasing the number of managers and ensuring that they spend 80% of their time on strategic issues. In this way, the strategic direction of the library is able to be dealt with much more efficiently than that could ever be in our previous structure.

Secondly, it allows greater focus on the things that are very important- customer service, information literacy, collection management, and electronic resources. Some of our new teams are still bedding in and learning to work with each other. It's a very long and complicates business changing the structure of a library that's being around for a while. Some staff resist change, while others welcome it, recognising its benefits to themselves and to the Library and the University.

Library D

Well, some of the changes are too recent to evaluate for example the Maori services, the information commons, the Library Manager learning services. All those changes are ones that are in progress so those ones are too soon to really evaluate how effective they would be.

Certainly, some of the changes that are well and truly embedded have been very successful. I think that because the attitudes here that organisation change and the restructuring is always flexible, the commitment of the staff to making things happen is actually quite important, and where changes have not been quite as successful as we've expected, I think the underlying reason is that staff have not been fully committed to the change. Some of the changes for example the subject librarian service and the establishment of digital services have really made fundamental changes in the way that the library does things. They have changed services to our students and library users in quite fundamental ways.

Library E

In respect to those changes made in 1998, I think that was fairly satisfactory.

4.4.4 Analysis of Data for Question Six

As shown by the data collected for question six, the changes that have been made have been quite successful. One Library mentioned though that the economic conditions of the Library would make it essential to constantly review the changes being implemented.

A general statement that can be made here is that university libraries in New Zealand who are making the efforts to change in ways that can make them more responsive and effective in the future, are finding that the efforts have been successful. There is recognition in one of the libraries that staff are now more flexible and willing to accept change, and to do things in different ways, for improvement of services and greater efficiencies.

Question 7: What were some of the problems you faced when implementing the change(s) and how did you try to solve them?

Library A

Some problems were related to staff resistance to either qualified staff doing acquisitions work or unqualified staff doing cataloguing. The resistance was from the qualified staff, not the unqualified staff.

We tried to solve the problem by talking with the staff a lot. We consulted, listened, debated, then insisted on the changes. Staff have slowly come round- some more slowly than others. However, it wasn't too bad.

Library B

There was resistance to change on the part of some staff and suspicion on the part of some other staff. We found that there was the need for communication, communication, and communication, often at an informal level. When there are high workloads, it is sometimes difficult to 'get one's head above water.' However, we found that changes are needed to be accommodated within "business as usual."

Library C

There was resistance from some staff. There were always human resources issues in terms of redundancies and staff moving to new positions and there are a lot of issues in relation to that. Two of our Senior staff in the end left. Union concerns were another problem that had to be worked through. The fourth problem was the recruitment of appropriate staff as libraries change. The fifth problem was the long time that it takes to implement change. It is something that cannot be rushed. You will have to consult with staff and bring them along with you. The last problem that I've got here relates specifically to the university environment. We need to 'sell' the changes not only to the Library staff but also to academic staff who are also in many ways very conservative and who believe that the Library should go on as places they have always been. What we've

got to ensure is that they understand why we're making changes and that we allay their concerns regarding the Library's intention.

Library D

I think we faced a lot of problems. There are a lot of people who do not like change- the emotional process is really important. Other problems we've talked about include commitment of staff, disseminating information to the stakeholders, and ensuring that the required or appropriate appointment practices are followed. Just solving the day to day problems was a problem, so as using the money to institute the changes. Another thing is the politics of the wider University of bringing people on board in relation to the wider aspects of the change.

To solve the problem, what we did was that we had numerous staff education workshops on change management, identifying issues, establishing working parties to deal with those sorts of things, putting up web sites to inform both staff and the wider community of what's going on, holding regular progress meeting every two weeks where anyone could just come and get updated on how things were happening. The actual specifics are too many to mention but I think the main things were that we had to make sure that the communication was always open to keep reminding people to listen to concerns and all those sorts of things- just the general skills and managing change.

Library E

The change in actual fact took much longer to work through than I had hoped and that's largely because of the natural resistance of the staff to change, which is completely understandable and the enormous amount of time and effort which can be involved in dealing with personalities and particularly individuals who are affected by change. Now these are 'known' things about restructuring. I certainly expected some of that.

4.4.5 Analysis of Data for Question Seven

Data collected for question seven shows that a variety of problems had to be attended to, as a result of organisation change. This shows that organisation change is not a smooth transition. Some of these problems (such as the resistance of staff members) originate from within the organisation whereas others emerge as a result of the need to let other stakeholders (those outside the library) know of the change.

This indicates that university libraries operate within two types of environment: the internal and external one. In order to introduce change effectively, library managers must build strong communication channels with both environments in which the nature of the changes are explained.

Bryson (1999) mentions that "the most effective technique for overcoming resistance is by encouraging participation in the decision-making, problem-solving and planning processes." (p. 257). He believes that once employees participate in the planning and

implementing change they will be better able to understand the reasons for it. Uncertainty will be reduced and doubts and fears reduced as they are given the time to express their ideas.

Question Eight: Have any new opportunities emerged as a result of the restructuring effort?

Library A

There was a general opportunity for further flexibility for staff movement, particularly in Lending Services. In Information Services, we created strong links to academic departments so there were greater opportunities for working with academic staff. There was more development of information literacy classes in tandem with subjects.

Library B

Staff accept change far more readily. We have become “tuned” to look for new ways of doing things and each time a position comes up we look to see if it should be focused in a new area eg. Flexible delivery services being undertaken by shifting duties and responsibilities.

Library C

There was greater involvement in electronic education. Some of the Information Literacy courses are being taught via the Web. The Library is increasingly involved in the University’s e-education programme particularly in our School of Education. There has

been an increase in Information Literacy instruction classes and in the number of students who attend these.

We were able to review our collection. Reviewing collections is not just a matter of reviewing what you've got-it's also reviewing what you are currently acquiring- in terms of what you are buying, what you are subscribing to, how do you subscribe to journals. Reviewing the collection is in part related to reviewing our capital needs. You can't ask for an extension of a building if your current building is filled up with books and journals that you no longer have any need for.

The fifth one relates to technology area- huge opportunities in relation to access to electronic sources. This is one of my passions and one of my areas of responsibility. I am trying to make information available wherever our students are- whether they are working on campus, from an office, or whether they are working from home or another city, or they are working from overseas- to make our resources available without them having to come to the Library is where we are moving towards. So the opportunities in relation to electronic resources, the Web Catalogue, the Internet are absolutely enormous and although we have done much in this area- it's naturally untapped. There's a huge amount that can be done there in terms of opportunities.

The second last one is that as part of our collection review, we are reviewing print ownership versus electronic access, particularly in the area of journals where we have print- we are now increasingly moving to electronic only and cancelling the print. In terms

of reference books we are going online and having access. These can be available wherever our users are. Lastly we have increasingly a large number of students that aren't on campus. The opportunity of providing for them is a very great one. We are hoping that our revised structure will assist in that.

Library D

Well again I think there are too numerous to really list. I think that my point would be that any organisation change and restructuring always brings opportunities and what we need to do is to recognise them and then incorporate them if we think that they are worthwhile. I mean there are many and varied, the skills, the opportunities that have come out, for example the establishment of the digital service team for clients has just been huge and all the innovations, even the routines are minor things that have been done, for example part of that was putting together the Library Intranet that staff use. I mean that's just a minor thing but that's had a major impact on how we do things.

Library E

Certainly. Firstly one of the eight groups set up in 1998 was called the Digital Services group which was a way of consolidating the various bits of work which were being done on electronic content. That was five years ago when it was in a reasonably early stage. So having a bunch of five people dealing with this rather than five people working in a team on this has resulted in an expansion of our understanding of the world of electronic knowledge. It has increased our ability to negotiate good licences with the suppliers and it has resulted in a great increase in electronic content.

The second new opportunity that emerged as a result of that consolidation was to give a sufficient bunch of people that we could improve the liaison work we did with academic schools and academic departments so there is now a much stronger liaison relationship with academic colleagues and that has been possible under the thirteen groups so new opportunities did emerge from that and it may have been that those opportunities would have emerged anyway but certainly I could tie those right back to that 1998 change.

4.4.6 Analysis of Data for Question Eight

Data reported for question eight shows that all the five university libraries have realised various opportunities that have emerged as a result of the restructuring efforts. This is encouraging. The good news is that these libraries are making efforts to change in ways that will make them more responsive and effective in the future. As they change (incremental though they may be) they are also experiencing the ‘windows’ of opportunities that they could further develop in order to provide more effective services.

Question 9: What will happen to the organisation if the change(s) is/are not made?

Library A

Focus on client would not be as strong. The work would still be done though even without the restructuring but it may not be as effective. The Library would certainly

need to be restructuring now to cope with the shrinking staff situation, particularly in the public service areas as it could not have sustained the service desks that it previously had in place.

Library B

These changes have been made. The danger is that the organisation would stagnate. Also that changing priorities and foci would not be able to be accommodated.

Library C

The Library cannot move forward. The Library must move forward- if you don't you will die, you will be by-passed, you will be superseded, so that's the first consequence of not proceeding. It would not have assisted us to move forward.

The second consequence would be that we would have become increasingly irrelevant within the University. If we do not do information literacy, somebody else will. If we don't provide for the information needs of our external students someone else is going to step into the bridge- and we can do it better than they can so it's absolutely critical that we do so. We have the professional skills to do it.

The third one is that if we hadn't changed, we would not be able to meet the objectives of the University. These objectives are reviewed every year and they change from time to time and those are the objectives that we must meet, say for example e-education is one of the major objectives and some of the restructuring supports that. Lastly, we would be left

behind in relation to international trends. Libraries operate in an international environment and in an international market and if a library does not keep up with the trends overseas, again it will be increasingly irrelevant. Students will go elsewhere instead of coming here.

Library D

If we hadn't made the changes I think that because technology in particular has moved on so fast that we would be left behind. I mean the Library within the University is regarded as an innovator and a leader particularly in all sorts of ways. If we hadn't improved our electronic access we would never have coped with the demand.

Library E

I'll answer that in two parts- firstly in 1998 and secondly, looking out into the future. In 1998 if the changes hadn't been made we would not have got a critical mass applied to dealing with electronic content and we didn't have a critical mass or a sufficient body of people working together on that, we would not have grasped all those opportunities.

Secondly I believe probably that administrative costs would have just kept growing and would have diverted money away from actual collections and serving users. Looking ahead to our organisational development project, what would happen to the organisation if the changes we recommended are made I believe there would be a risk of the University Library becoming financially unsustainable- it's a very costly operation to run with large property costs and we want to be sure that cost is fully justified. Secondly as there will be

more flexible learning, it's quite possible that the number of users that enter the campus Library will diminish over that time and the number of electronic access will increase.

4.4.7 Analysis of Data for Question Nine

Out of the five participants interviewed, four reported on various problems that would have arisen if the changes had not been made. This shows that there is recognition that the old patterns of organisation have either become obsolete or may not be able to successfully accommodate the various pressures that are affecting it. One reported that work would still be done without restructuring, but not as effective as when changes are made. Another participant mentioned that now that changes have been made, the danger is that the organisation would stagnate and also that changing priorities and foci would not be able to be accommodated. In this case, it is important that staff continue to 'rethink' of the library structure and continue to experiment with new organisation models.

Question 10 What is your advice to other academic libraries that are planning restructuring programmes?

Library A

Be clear about why you need to restructure. Identify the benefits clearly and the problems that need resolving. Consult with the library users as well as the staff. Communicate all the time- the why, how, when the restructuring will happen. Discuss options fully-

communicate some more and then some more. Be firm when decisions are made. Don't prolong the process any more than is necessary.

Library B

Be clear about the intent of the change, document it, communicate to staff why something is changing and the aims of the change. Allow an opportunity for comment and consultation. Provide an opportunity to review changes which have been made.

Library C

Be very clear where you wish to go. Try to gain the support of senior University Management. Communicate reasons for the change. You need good processes for managing change. You will need to train staff in change management concepts and procedures. Take the necessary time. Try to avoid Management burn-out. Accept that not all staff will embrace change immediately. Lastly, handle staff issues and concerns as sensitively as possible.

Library D

If you are getting into restructuring I think you need to think through why you are doing it, and you need to be quite clear about your reasons. You need careful thorough planning on how you are going to do it. You need to seek professional advice particularly if restructuring involves any employment issues. You need to communicate with all stakeholders and listen to their concerns. I think the most important thing is to involve staff as much as possible in the decision making.

Library E

One is to seriously question whether it is worth the effort. Any restructuring programme is an enormously costly effort. It involves money, and time and diverted energy. My general advice would be not to- discontinue planning about restructuring. Secondly and my advice would be to put the effort into incremental changes- in other words continuous improvement of what you have, continuous improvement based on getting the right people in the right place, taking the opportunity as people leave to just adjust things at the margin, so in that way, you've got a continuous improvement going on. You are avoiding the trap and there is a trap of restructuring, you are avoiding the trap of believing that there is some perfect solution out there. Even if there's something that seems perfect, it is so costly and will take so long to implement that by the time it will come into being, it may no longer be perfect, but secondly and more importantly, you've diverted effort away from the real thing, the real important thing which is the focus on your users and understanding the changes that are going on in the supply market. So the third advice is to stick to the core principles and that is the value of knowledge for its own sake, being a gateway or a portal for students to be able to get the full range of academic knowledge and use all the personal capacities and capabilities, and enthusiasm of the existing staff and don't throw away some of those personal enthusiasm like trying to squash them into organisational structures. I would like to stress my main advice- the real benefits of incremental change, and making the organisation structure a secondary consideration. Put the main emphasis on service for the end users.

Chapter 5 Conclusion

The findings of this research show that university libraries in New Zealand are aware of the complex and changing environments they are operating in, and the increasing variety of pressures that will inevitably lead to the close examination of their organisation structures. All of the five libraries that participated in this study showed that they were involved in one form of restructuring or the other and in their 'own' ways.

Restructuring efforts include: the abolition of some departments, downsizing of others, merging of previously separate departments and the establishment of new entities; subsequent reorganisation of work to reflect changes in composition and size of departments; redeployment of staff and services to areas of need; decentralisation of responsibility and authority from top to lower levels of the hierarchy; and the creation of teams to handle specific tasks and responsibilities.

The findings also show that there are a wide variety of factors encouraging organisational change. Rationales for the restructuring include: the desire to increase liaison between the library and other users; need to give a subject focus to the work; using staffing resources in areas of great need; the need to change business processes because of the growing importance of new technology; the need to spread the workload of management over a larger management group; and the importance of improving customer services.

Although the factors encouraging organisation change are varied, the findings show that the most common characteristic underlying the mentioned changes is the need to improve customer services. This shows that most NZ university libraries believe that organisation restructuring makes them more able to deliver student centred learning or a customer service environment. Libraries are emphasising on becoming user-centred.

Changes as reported in the study have been successful and the university libraries taking part in the study have realised the growing opportunities for service enhancements that have arisen because of the changes that have been made.

This is not to say the restructuring efforts have been without its problems. Data collected for question seven shows that a variety of problems had to be attended to, as a result of organisation change. This shows that organisation change is not a smooth transition.

To conclude while it is clear that NZ university libraries feel a need to come up with a better organisational structure, no new models of reorganisation have emerged. The study shows that NZ university libraries are experimenting with organisation change models that have emerged in the literature of academic librarianship.

Adams, Roy J. 1986. *Information technology & libraries: a future for academic libraries*.

London : Croom Helm.

Boykin, Joseph F. & Babel, Deborah B. 1993. Re-organising the Clemson University Library. *The Journal of Academic Librarianship*. May: 95-96.

Brophy, Peter. 2000. *The academic library*. London: Library Association Publishing.

Bryson, Jo. 1999. *Effective library and information centre management*. 2nd ed. England: Gower.

Budd, John M. 1998. *The academic library: its context, purpose and its operation*. Englewood, Colorado: Libraries Unlimited.

Butler, Meredith A. 1993. Introduction. *The Journal of Library Administration*. Vol. 1, no. ¾. 1-9.

Cooper, Harris M. 1984. *Integrating research : a guide for literature reviews*. 2nd ed. London: Newbury Park.

Creth, Sheila D. 1993. Creating a virtual information organisation: Collaborative relationships between libraries and computing centres. *Journal of Library Administration*. Vol. 19, no. ¾. 111-131.

Dougherty, Richard M. 2001. Being successful (nimble and agile) in the current turbulent environment. *The Journal of Academic Librarianship*. Vol. 27, no. 4, July: 263-267.

Drake, Miriam A. 1993. Technological innovation and organisational change. *The Journal of Library Administration*. Vol. 19, no. ¾: 39-53.

Dunlap, Connie R. 1976. Organisational patterns in academic libraries, 1876-1976. *College & Research Libraries*. Vol. 37 (5): 395-407.

Farber, Evan. 1991. College libraries and the teaching learning process: a 25-year reflection. *The Journal of Academic Librarianship*. Vol. 25, no. 3: 171-177.

Frank, Donald, G. et al. Information consulting: The key to success in academic libraries. *The Journal of Academic Librarianship*. Vol. 27, no. 2: 90-96.

Fore, Janet S., Knight, R. Cecilia & Russell, Carrie. 1993. Leadership for User Services in the Academic Library. *Journal of Library Administration*. Vol. 19, no. 3/4: 97-109.

Gao, Zhuo-Xian. 2001. Position restructuring at Peking University Library. *College & Research Libraries*. Vol. 62, no. 2: 173-178.

Galbraith, Jay R & Lawler, Edward E. 1993. *Organising for the future: the new logic for managing complex organisations*. San Francisco: Jossey-Bass Publishers.

Giesecke, Joan (ed). 1994. *The dynamic library organisations in a changing environment*. New York: The Haworth Press.

Gorman, G.E. & Clayton, Peter with contributions from Mary Lynn Rice-Lively & Lynn Gorman. 1997. *Qualitative research for the information professional: a practical handbook*. London : Library Association Publishing.

Hannah, Stan A. & Harris, Michael H. 1999. *Inventing the future: information services for a new millennium*. Connecticut: Ablex Publishing Company.

Hernon, Peter & Whitman, John R. 2001. *Delivering satisfaction & service quality: a customer-based approach for libraries* Chicago: American Library Association.

Honea, Sion M. 1997. Transforming administration in academic libraries. *The Journal of Academic Librarianship*. May: 183-190.

Howard, Helen A. 1981. Organisational structure and innovation in academic libraries: *College & Research Libraries*. Sept: 425-433.

Howard, Helen. 1984. Organisation theory and its application to research in librarianship. *Library Trends*. Spring: 477-489.

Hughes, Sandra M. & Mancall, Jacqueline C. 1999. Developing a collaborative access environment: meeting the resource needs of a learning community. In *Learning and libraries in an information age: principles and practice*, ed. Barbara K. Stripling. 231-259. Englewood, Colorado: Libraries Unlimited.

Hunter, Karen. 1993. The changing business of scholarly publishing. *Journal of Library Administration*. Vol. 19, no. ¾.: 23-37.

Jones, A. James & Gardner, Carrie. 1999. Student learning: linking research and practice. In *Learning and libraries in an information age: principles and practice*, ed. Barbara K. Stripling, 327-359. Englewood, Colorado: Libraries Unlimited.

Kanter, Rosabeth Mos; Stein, Barry A. & Jick, Todd D. 1992. *The challenge of organisational change: how companies experience it and leaders guide it*. New York: The Free Press.

King, Nigel. 1994. The qualitative research interview. In *Qualitative methods in organisational research*, ed. Catherine Cassell and Gillian Symon. 14-36. London: Sage Publications.

Lancaster, F.W. & Sandore, Beth. 1997. *Technology and management in library and information services*. London: Library Association Publishing.

Leedy, Paul D. with contributions by Timothy J. Neby & Peggy A Ertmer. 1997. *Practical research: Planning and design*. 6th ed. New Jersey: Prentice Hall.

Lewis, David W. 1986. An organisational paradigm for effective academic libraries. *College & Research Libraries*. July: 337-351.

Mauch, James E. & Birch, Jack W. 1998. *Guide to the successful thesis and dissertation; a handbook for students and faculty*. 4th ed. New York: Marcel Dekker.

Moran, Barbara B. 2001. Restructuring the university library: a North American perspective. *Journal of Documentation*. Vol. 57, no. 1. Jan: 100-114.

Neal, James G. & Steel, Patricia. 1993. Empowerment, organisation and structure: the experience of Indiana University Libraries. *Journal of Administration*. 19 no. ¾: 81-96.

Owusu-Ansah, Edward K. 2001. The academic library in the enterprise of colleges and universities: towards a new paradigm. *The Journal of Academic Librarianship*. Vol. 27, no. 4. July: 282-294.

Pugh, Lyndon. 2000. *Change management in information services*. Hampshire: Gower.

Riggs, Donald E. 1997. What's in store for academic libraries?: leadership and management issues. *The Journal of Academic Librarianship*. Jan: 3-8.

Shapiro, Beth J. & Long, Kevin Brook. 1994. Just say yes: reengineering library user services for the 21st century. *The Journal of Academic Librarianship*. Nov.: 285-290.

Schwartz, Charles (ed). 1997. *Restructuring academic libraries: organisational development in the wake of technological change*. Chicago: ACRL.

Walker, Deborah & Lambert, Linda. 1995. Learning and leading theory: a century in the making. In *The constructivist leader*, ed. Linda Lambert et al. New York: Teachers College Press.

Wehmeyer, Susan., Auchter, Dorothy & Hirshon, Arnols. 1996. Saying what we will do and doing what we say: implementing a customer service plan. *The Journal of Academic Librarianship*: May: 173-180.

Wilson, T.D. 1998. Redesigning the university library in the digital age. *Journal of Documentation*. Vol. 54, no. 1 Jan: 15-27.

APPENDIX

a) Letter to the University Librarian

Flat 11 Everton Hall
Everton Terrace
Wellington
1 February 2002

The University Librarian

Dear Sir/Madam

As part of the requirement for completing a Masters Degree in Library and Information Studies (MLIS) at the Victoria University of Wellington, I am undertaking a research project on how university libraries in NZ are changing their organisational structures to suit a customer service environment.

Because your library is one of the eight (8) university libraries I am hoping to use as part of a comparative study for this project, I am writing to request your permission to be involved in this study.

Attached with this letter are:

- a) an information sheet (containing details of the intended study)
- b) a consent form,
- c) a return self-addressed stamped envelope (in which you may send the consent form to indicate your willingness to assist me in this study).

Thank you for taking the time to read this letter. I look forward to hearing from you soon in relation to this request.

Yours sincerely

Liviana Tabalala

b)

Information Sheet

Research Project: How academic libraries in NZ are changing their organisational structures to suit a customer service environment.

By Liviana Tabalala

As part of the requirement for completing a Master of Library and Information Studies (MLIS), I am undertaking a research project on how university libraries in NZ are changing their organisational structures to suit a customer service environment.

The literature adequately covers sources suggesting the need for academic libraries to change their organisational structures in order to successfully meet the powerful changes facing them: shrinking budgets, exploding numbers and types of information resources, shifting demographics of users, and increasing patron demand. It also contains examples (case studies) of certain academic libraries restructuring their organisations within the last decade or so, in an attempt to remain a vital part of the parent institution to which they belong.

However, nothing much has been published about how academic libraries in NZ, or in the Pacific for that matter, are responding to the suggestion for a change in their organisational structures, nor are there any case studies documenting how academic libraries in NZ or in the Pacific are changing their organisational structures to meet the powerful changes facing them.

Because of the desire to fill the need for such a gap, I have identified your library as one of the 8 university libraries that I hope to use as part of a comparative case study, in the hope that it will give other academic libraries confidence in trying new strategies to effectively administer their restructuring programmes.

The objectives of the study are:

- To identify the principles and assumptions encouraging organisational change in university libraries in NZ;
- To identify apart from the above principles and assumptions any other reasons for changing structures amongst university libraries in NZ;
- To explore how these university libraries are changing their organisational structures as a result of the principles, assumptions and reasons explained in objectives i) and ii);
- To identify any common characteristics underlying these changes;
- To assess if the changes have been successful;
- To propose either a model or a list of factors that other academic libraries could use as a “road map” to effectively administer planned restructuring programmes.

Participation in the study involves requesting permission from the University Librarian or Manager of the following:

- a copy of their traditional organisational structure;
- a copy of their new (existing) traditional structure (if changes have been made);
- brief notes on changes that have been made;
- a 30 minutes telephone interview with each regarding the development of new organisational structures;
- follow up e-mail contacts regarding clarifications of points and other matters pertaining to the research.

Individuals who are interviewed will receive a summary of what was discussed and have any opportunity to correct any misrepresentations.

The results gained from the above will form the basis of a written report to be submitted to the School of Information Management and deposited in the VUW Library. I am requesting written consent to carry out the latter participatory points from University Librarians or Managers. If participants do not give consent for their opinions and information to be attributed, it will be presented anonymously in the research report. All notes and correspondences will be destroyed on completion of the project.

If you have any questions, or would like to receive more information, please contact Liviana Tabalala by e-mail tabalalivi@scs.vuw.ac.nz
Or through my supervisor Philip Calvert, Philip.Calvert@vuw.ac.nz Department of Library and Information Studies, Victoria University of Wellington, PO Box 600, WELLINGTON.

Thank you for your cooperation. I look forward to hearing from you.

c) Consent Form

Victoria University of Wellington
Consent to participation in research

Project title: How university libraries in NZ are changing their organisational structures to suit a customer service environment.

Researcher: Liviana Tabalala

Supervisor: Philip Calvert

I have been given and have understood an explanation of this research project. I have had an opportunity to ask questions and have them answered to my satisfaction. I understand that I may withdraw myself (or any information I have provided) from this project before it is completed without having to give reasons or without penalty of any sort.

Please tick one:

I give consent for the information and opinions I provide to be attributed to me, using my position title, in the final research report.

I do not give consent for the information and opinions I provide to be attributed to me in the final research report. I understand that the published results will not identify me, or my position title in any way.

I understand that any transcripts of interviews and correspondences will be destroyed at the completion of the project.

I understand that I will have the opportunity to verify a summary of what I said in the interviews before that information is included in the final report.

I understand that the information I provide will not be used for any purpose other than this research project or released to others without my written consent.

I agree to take part in this research.

Signed: _____

Name of participant (please print): _____

Email address: _____

Postal address: _____

Phone contact: _____

Date: _____

d) Interview Questions

Topic: Restructuring the University Library to Meet a Customer Service Environment: a NZ Perspective

1. What is/are the exact nature of the change(s)?
2. What is/are the change(s) designed to do that is different from the way things are done now?
3. What are/were the underlying reason(s) or cause(s) for changing the library's structure? For eg. the effects of IT on operations; changing demands of users; budget constraints, etc.?
4. Which out of the reason(s)/cause(s) you have mentioned would you rank as most important in terms of what you would have most liked to achieve in the new structure?
5. Does/do the reason(s) for the change(s) match the library's vision? In what way(s)?
6. How would you describe the successfulness of the change(s) that has/have been made?
7. What were some of the problems you faced when implementing the change(s) and how did you try to solve them?
8. Have any new opportunities emerged as a result of the restructuring effort?
9. What will happen to the organisation if the change(s) is/are not made?
10. What is your advice to other academic libraries that are planning restructuring programmes?

Word Count: 23,177 (including References and Appendix).