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Librarians Perception and Use of a Library Portal:

A Case Study of the Bazar Library Portal (Oslo Public Library)

ABSTRACT

Libraries are adopting and implementing portals to promote their visibility and meet the demands of their users. The Deichmanske Public library has adopted a portal focused on immigrants' population referred as Bazar portal. This research is focused on the usage of this portal through the opinions of the librarians.

This study attempts to investigate librarians use and non use of the Bazar library portal and what they expect from a library portal of this kind. Accordingly the study investigates and analyses user request problems and the library portal system. The study also highlights some challenges faced by librarians in their use of the Bazar portal even though this was not the primary focus of the study.

The study has surveyed and interviewed librarians from the various branches of Deichmanske library to know their perception and use of the Bazar portal. A total of six librarians participated in the interview and 18 librarians took part in the online survey. The findings of this research shed light on the understanding of library portal use among librarians. One thing that became clear was the fact that the portal is not widely publicized, hence not popular among the librarians. It also identified some quality characteristics of the Bazar library portal and the kinds of users and content to expect. This study concludes with some practical suggestions on improving and enhancing the use of the Bazar library portal.

Keywords: Portal, Library Portals, Librarians, Quality, Information Needs, Norway

ACKNOWLEDGEMENTS

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CHAPTER ONE

1 INTRODUCTION

This chapter discusses the background information to the study, research theme, the aims and objectives, significance or purpose to the study, scope of the study, motivation to the study, definition of terms, limitations of the study and structure of the study.

1.1 BACKGROUND OF STUDY

Technologies are changing things in the library environment and users' expectations and their demands on libraries are increasingly versatile. In view of that, libraries continue to search for new ways to respond to those demands through technology-based solutions. Portals are known to be one of these technology-based solutions. Portals have become one of the most recent and significant information technologies used in the library (Konnur and Umeshareddy, 2006). Libraries have been quick to adopt this technology in order to meet user demands. The adoption of the portal in libraries has brought new opportunities and challenges to both users and librarians (Daigle and Cuocco 2002). This study investigates the usage of this technology within the Oslo Public library also known as the Deichmanske library. The name of the library portal is Bazar and it is focused on the information needs of the immigrants group of population in Norway. To date, no complete study has been conducted on the Bazar portal to reveal the current status in the library, hence the reason for this study.

A library portal has been described as a single access point combining the library catalogues subscription databases, subject gateways, electronic journals etc (Konnur and Umeshareddy, 2006). They are developed to meet the various individual needs of users. Given the opportunities that come with the implementation of portals, library institutions need to put in place the right strategies for the realization of its maximum usage.

1.2 RESEARCH THEME

Discovering means in which users use an information system has been a longstanding concern within Library and Information science. Public libraries have developed many services to enable their users to access electronic resources and the library portal is no exception. Amid the enormous increase in electronic resources, libraries have become aware of the problem that it

poses on the users. Portals are being adopted to create an environment that addresses the problem of information overload by designing information content to meet specific end-user needs. The library portal is emerging in its significance as the ideal approach in organizing and using information. It is known to provide a framework for deriving order out of a disorganized state (Boss, 2002). However this is can only be achieved through careful planning, implementation and evaluation.

Library institutions are known to pursue their objectives through the implementations of portals. However in achieving these objectives it is important to review the state of usage of the portal system in order to know whether the portal is achieving the purpose for which it was developed. To just assume its uses and development without a careful assessment could lead to unexpected consequences therefore it is necessary to enquire users' perception of the portal library system.

The topic of portal usage has gained increased interest during the late 1990s, primarily due to the massive introduction of portals in institutions and libraries (Stoffel and Jim Cunningham 2004). Despite an increased interest in the development of library portals, little is said in previous work about librarians' perception on usage and the problems that emerge when this type of portal is introduced in the public library. Even less is written about how librarians can be motivated to use and contribute to library portal development. Little research has been done in the area of librarians as users of the portal and their perception on the use of it in relation to the motivations or aim of developing the library portal system. This research on librarians' views or perception would be added to the existing research to provide a more rounded view of the reality being explored.

Librarians may not be the primary target population for which portals are built, however they are known to be users and guides to the very primary target users of the portal. As librarians, who organize and evaluate information resources, they bring distinctive perspectives to the planning and implementation of library portals systems. Their expertise with content, copyright and dedication to customer service cannot be ruled out. The librarian as one of the users of the portal has a lager view on the usage of the library portal since he or she is a user and serve as a guide to other users as well. For the librarians and any other user, the library portal system is surely only useful if it meets a real need that they have, and in a way with which they are comfortable within their frame of work in meeting users needs (Miller, 2001).

1.3   THE PURPOSE OF THE STUDY

This investigation seeks to discover the extent of use of the Bazar portal and what librarians across the Deichmanske library expect from a library portal of this kind. There is also an analysis of user request problems and the library portal system. This is an investigation of librarians and the library portal, which does not address the views of specific groups of library users, nonusers, or other interested parties.

1.4   RESEARCH QUESTIONS

The present study, which focuses on librarians' perception and usage of the library portals, addresses the following research questions:

- What information or content should be available on Bazar portal and what qualities should Bazar library portal have?
- What are the reasons for the use and non-use of the Bazar portal?

1.5   RESEARCH OBJECTIVES

The research seeks to reveal the status of usage of library portals by librarians, to explore their satisfaction and quality level of the portal, and to find out their suggestions to the restructuring of the Bazar portal. Specifically:

- To analyze user requests encountered by librarians regarding their common needs and the kind of content the Bazar library portal should have to solve these requests.
- To identify the reasons for the use and non-use of the Bazar portal.
- To identify different qualities and benefits of the Bazar library portals.
- To furnish some recommendations to help improve upon the awareness, use and restructuring of the library portal system.

1.6   SIGNIFICANCE OF THE STUDY

The study of librarians' perception on the use and qualities of Bazar portal is important for a number of reasons. The importance of the research focuses on identifying usage of the Bazar portal and characteristics of its content and performance, which may be useful in providing recommendations for the restructuring of the Bazar library portal.

The result of the study shall inform libraries on how library portals like Bazar are used by librarians and for what intentions they are used and not used. This will give libraries the opportunity to understand user needs and enhance the use of the portal. It would also enable the

portal managers to know whether interactions between librarians and users matches the main aims for which the library portals was established.

Finally, this study shall contribute to the already existing knowledge on the use of library portals in public libraries.

1.7 MOTIVATION FOR THE STUDY

During one of the workshops in my third semester in Italy, I quickly developed a fascination towards library portals and its implementations. I therefore took the opportunity to expand my understanding on this topic by picking Oslo public library as my place of internship since the focus was on portal development. When I began my internship, there were several research topics on portals that came to mind but I rapidly developed interest in investigating librarians' perception of portal usage. This interest came up during one of our assignments on user requirements for the Bazar portal. On completing this assignment, librarians were identified as one of the important users of Bazar. I began reading on library portal usage and I realized librarians have been neglected in the process of research studies. The existing literature on portal usage has not covered this specific issue and therefore looking into it can greatly improve our understanding.

This research on librarians' views or perception would be added to the existing research to provide a more rounded view of the reality being explored. The idea of studying librarians as users of library portals interests me since it brings new interesting perspectives on library portal usage. To me this was very interesting and something I was eager to gain more knowledge about.

1.8 DELIMITATIONS OF THE STUDY

As mentioned in earlier in the introductory section, this library portal serves the information needs of so many people including students, asylum seekers, nursing mothers, professional healthcare workers, librarians, and other stakeholders. This research focuses only on the issues related to the librarians' use of the portal. The thesis is a case study, and mainly focuses on the use of portals, qualities, problems and solutions for a library institution. Although the result is based one single public library institution, I believe that many other libraries also face similar kinds of conditions and this study can be applied to some extent.

1.9 STRUCTURE OF THE STUDY

This research has been divided into five different parts. First chapter starts with the background to study, the research theme, Objective of the study, scope of the study, significance of the study

and motivation to the study. The second chapter presents the background of Deichmanske library and Bazar library portal. It continues to review related literature to the study. The third chapter provides information about the methodology used in the study. The fourth chapter focuses on the analysis of data gathered from the survey questionnaires and interviews. In the last chapter of the study presents the summary of findings, conclusions and recommendations.

CHAPTER TWO

2 BACKGROUND AND REVIEW OF LITERATURE

2.1 INTRODUCTION

This chapter is divided into three sections:

The first section presents the Deichmanske library, Multilingual library and the Bazar portal. The information for this section is based on documentations, presentations, Deichmanske website and on interviews conducted with the Bazar portal managers.

The second section discusses relevant literatures on portals in general, and library portals and librarians working within a growing immigrant population in particular. This section reviews and examines various aspects of portal systems from general overview to the adoption and implementation, in the library sector. The importance of library portals or applications to the immigrants' population is discussed as well. This is followed by a discussion on librarian roles and usage of the library portal and how it can help the libraries to expand and improve on various levels in the emerging knowledge era of the world. This study used different information sources in reviewing literature and this included Emerald, Google scholar, Google books, Books and websites. Unfortunately, the researcher found no complete study published on the views of librarians as users of a portal system.

The final section of the chapter discusses the Bazar portal in relation to the literature reviewed.

2.2 DEICHMANSKE LIBRARY (OSLO PUBLIC LIBRARY) AND THE MULTILINGUAL LIBRARY

The main library of the Oslo public library is located in the city centre of Oslo. The library´s activity is based upon a testamentary gift from the estate of Chancellor Carl Deichman (1705-1780). With his gift, the library was bequeathed a collection of handwriting and approximately 6,000 books, nearly all of which are preserved today.

Currently, the Deichmanske library has 14 branches and three Departments in the main Library. Most of the libraries are concentrated in the eastern part of Oslo which has a large proportion of people with immigrant background. The Oslo public library has a multilingual library which has the immigrant population as its target group.

The Multilingual Library (DFB), a sub-division of Oslo Public Library has a national responsibility for library services to the multicultural populations of Norway. It has three main aspects in order to fulfil the main goal: integration, cultural diversity and intercultural competence, collaboration and exchange. Through the work of the DFB, new immigrants are able to keep in touch with home, strengthen their identity, understand and manage in Norway socially, culturally and educationally.

The Multilingual Library through its work, give the libraries the possibility to contribute to developing Norway as a positive and vital multicultural society. Further, it is the purchasing and cataloguing department, as well as a central for inter-library loans of media in the major minority languages. Thus the Multilingual library provides information:

- on library services to linguistic minorities in Norway
- on suppliers of books and other material in minority languages
- on newspapers and periodicals for linguistic minorities
- literature in different languages

2.2.1 USERS

The collections are available to everyone through the public libraries in Norway. The Multilingual library has two main target groups:

1. The libraries and other relevant institutions in Norway which includes County libraries, public libraries, school-libraries and other public institutions such as libraries in prisons, hospitals and immigration detention centers.
2. End users who are the linguistic minorities (group of asylum seekers, refugees, migrant workers and other language minorities in Norway).

2.3 BAZAR PORTAL

Bazar is a project situated at the multilingual library – a branch of Oslo public library. This portal is established to give ethnic minorities' information about the Norwegian society and culture, global news and other relevant information. The Bazar portal is mainly focused on people who are new in Norway. In this case the content of the Bazar portal focuses on primary users such as refugees, asylum seekers, job seekers, new immigrants, students and other group of users. Secondary target group is everyone who works with primary target group. This is a very broad

definition that includes everything from library staff and health workers to the operators of reception centers.

2.3.1   THE PURPOSE OF BAZAR

The main reason of the Bazar portal service is to promote and encourage integration and active participation of immigrants in the Norwegian society through access to information on Bazar. It is also to help immigrants keep in touch with their home-land and provide them with other relevant information.

2.3.2   RESOURCES AND CHARACTERISTICS OF THE BAZAR PORTAL

One of the key phases of the creation of the portal is the analysis of the type of information content to be disseminated. The information content in Bazar portal has been grouped into three main headings: News from homeland, information on the Norwegian culture and Norwegian society. The details of theses have been given in the subsequent paragraphs. The information content in Bazar portal consists of links to websites, full text documents and other electronic resources. Access to the Bazar portal is available through http://www.bazar.deichman.no/ . The initial page of the English section of Bazar portal is shown in Figure 1.

Language

Bazar is available in 14 languages and is a unique opportunity to reach out to minorities in their own language and on their own terms. This portal is presented in the dominant different languages of the minority groups in Norway. The linguistic presentation on the site is adjusted to the target group of users. The consequence of this is that the site is multilingual and that access in the Norwegian language is formulated in a Norwegian understandable to a foreigner. Flags are used to indicate the country/language. Some of the languages represented includes; English, Urdu, Vietnamese, Arabic, Tamil, Somali, Spanish, Kurdish, Tagalog (Pilipino), Turkish, Serbian and so on.

News from homeland

The site for news gives access to all kind of news which includes newspapers, news portal, radio and television etc from 41countries. It also gives the opportunity to find international news in general and news of areas in which a language is spoken.

Information on the Norwegian culture

The site contains information which is supposed to help the user to understand the Norwegian society and behaviour. This covers the Royal family, art, food, costume, geography and history sports etc. The pattern of the information is based on the book series Culture shock!

Information on the Norwegian society

This part of the content offers information on all aspects of the Norwegian society. Information related work, health, family-matters, accommodation, Norwegian language, human rights, racism and discrimination, religion, immigrant's organizations and so on.

Figure 1 shows the initial page of the English section of Bazar portal

2.3.3   FUNDING

The main source of funds for the library is the government. Very little income is realized from the sale of books or publications. Through "Norwegian Archive, Library and Museum Authority" (ABM-utviklingen) funds, the multilingual library developed the Bazar portal. However, other funds came from Financers Bazar, Deichmanske bibliotek and Fritt Ord.

2.3.4   RESTRUCTURING OF THE BAZAR PORTAL

Managers of the Bazar portal are currently working on a new one. The Bazar portal has been running for about ten years. During this period, the managers of the portal discovered some problems and needed it to be restructured. The providers have the following perception on the problems in Bazar:

- The old Bazar has some limitations when it comes to the structure. The resources in Bazar portal are described using a topic in a hierarchy. In that case if the resource belongs to different categories it has to be duplicated.
- In addition, labels describing the concepts of Bazar may not correspond with the users' idea of the same concepts. For that reason it would be beneficial to have several entrances to the resources.
- Another problem is the confusion of translated labels that leads to resources that is not in the language the users have chosen. It is not possible for the user to select the language of the actual resources, only the language of the labels that leads to the resources. Labelling the resources with flags to indicate the language is also a bit problematic, for instance, which flag to use for languages which are spoken in more than one country, such as Arabic, English and so on.

2.4   PORTAL SYSTEMS GENERAL OVERVIEW

The interests in the planning and implementation of portals in businesses and institutions have been growing in recent years. The world is quickly been immersed with a growing amount of information, a condition that requires a process of finding solutions or methods for effectively and efficiently organizing information, which is important for our interests and responsibilities. Portals have been noted to provide such organization (Davies 2006).

Portals started as applications, typically Web-based, providing a single point of access to distributed on-line information, such as documents resulting from a search, news channels, and links to specialized Web sites (Emmot, 2006). The history of web portals originated in the business sector in the early 1990s (Zhou 2003). According to Boss (2002), the first to develop portals were large organizations who were then seeking to provide employees with a single interface by which they could have access to corporate information from several computer systems. Boss further noted that although the first portals were developed by or for specific companies, commercially produced portal software soon became available (Boss, 2002). This may have resulted in several organisations' motivation to helping end users access information resources and applications, through the implementation of portal technology (Davies, 2007). Yahoo holds the reputation of being the first portal even though before the term portal was originated, it was plainly referred to as a search engine.

From the literature reviewed so far, although so much has been written on the subject of portals, there is still no universally accepted definition of what constitutes a portal. It was found that authors not only differ when defining the concept portal, but also do not agree on the exact nature of the portal (Miller, 2001; Brakel 2003; Firestone, 2003). Some authors see this as a problem whiles others see this as an opportunity, whereby everyone can have his or her own definition. Generally, a portal is a gateway that provides information and connects to different sources in a customizable and personalized way keeping in view the users needs.

For understanding the concept various definitions have evolved, and the concept has been described differently by several scholars. JISC for example, defines portal from two angles:

- Technically, as a network service that brings together content from diverse distributed resources using technologies such as cross-searching, harvesting, and alerting, and collates these into an amalgamated form for presentation to the user .This presentation is usually via a web browser, though other means are also possible (JISC's portals FAQ).
- For users, a portal is a personalized, common point of access where searching can be carried out across one or more sources and the amalgamated results viewed (JISC's Information Environment Architecture). Information may also be

presented via other means, for example, alerting services and conference listings or links to e-prints and learning materials.

The European Library Automation Group (2002) and IBM (2003) share a common view of seeing the portal as a single interface with different information resources to meet diverse needs and responsibilities of a targeted community.

Portals have also been described as not been static. Portals are transformational environments that address the problem of information glut by customizing information content to meet specific end-user needs (Konnur and Umeshareddy, 2006, pg.1).

As several authors and organization have presented different views for defining and representing the concept of a portal, it can be said that a portal is a web based platform that collects and organizes information to meet the needs of a particular group of users. It goes further to provide links to relevant resources on an easy platform for its target users through some unique characteristics.

2.5   PORTAL MODELS AND TYPES

Portals vary in scope and services they offer. Consequently, terms have evolved to describe the different types of portals. There is therefore no authoritative categorization of types of portal. Despite this some writers have offered various listings and they have been discussed in the following paragraphs.

Some authors have categorized the portal into three main types which includes horizontal, vertical and corporate portals (Strauss 2002). Kovalchick and Dawson however, grouped portals into four general types - the vertical portals, organizational or corporate portals, consumer portals and the industry or B2B portals (Kovalchick and Dawson, 2004, p.619). Tatnall (2005, p.4) argued that, categories given by other authors are not mutually exclusive, some portals fit into more than one while others do not fit into any well. The following are explanations of the different types of portals given by different authors:

1. Horizontal portals: These provide information using an extensive array of nonspecific applications. It has a mass-market approach which stretches to draw a lot of opinion (Paavilainen, 2002, p.180).

2. Vertical portals: are focused on a specific domain. They can either be industry specific or functional area specific but are largely defined by the data and people it serves (Kovalchick and Dawson, 2004; Dias, 2001). Dias (2001, pp. 277-279) went further to group this into three broad areas;

- Portals with prime focus on decision support, for employees to gain access to information in order to make right business decisions. Examples of this include information or content portals, business portals, and decision processing portals.

- Portals with emphasis on collaborative processing: It uses groupware and office automation systems. In addition to that, it deals with information from traditional supply chain and information produced by groups or members out of this chain. Examples of this include collaborative Portals, and Expertise Portals.

- A combination of Decision support and collaborative processing portals: This includes knowledge management portals, and enterprise Information Portals.

3. Corporate portals or organizational portals: Gurugé (2003, p.1) defined it as "a corporations strategic, electronic interface to the web or at minimum, to web technology based private networks (example extranets)". They are occasionally meant to provide or assist company partners (Kovalchick and Dawson, 2004, p.620). Its content is known to be much broader than the vertical portal and this is as a result of the complex nature of information for business decisions making process (Isaac, 1999).

4. Business to Business: This type of portal is relatively new phenomenon. These portals are places where people or persons in particular industries can go for information sharing and most importantly, the completion of transactions (Kovalchick and Dawson, 2004, p.620)

It is therefore important for information professionals to know and understand these different categories in grouping of portals in order to choose the right portal for the right purposes.

2.6   LIBRARY PORTALS ADOPTION OR INITIATIVES

Library portals are a subset of Web portals and serve specific communities (Miller, 2001). They typically provide a gateway to an institution's resources by listing them for users and creating a direct link to the local interface of each resource. Library portals are more than just a gateway.

Gateways and hubs enable one to discover where the content is, however one is still required to go to the site of the content to get it, while a portal brings the content to the person. Boss (2002, p.1), writes that, "what distinguishes a library portal from a gateway is that it augments the user interface with federated searching, patron authentication, and link resolution—the last of which gets beyond the sources of the content to the content itself".

The first library portal appeared in the late 1990s The North Carolina State University libraries are considered to be the first to introduce web portals in the library sector (Morgan and Reade, 2000; Stoffel and Cunningham 2004, p.145). Lexis-Nexis is known to be a pioneer in the development of portals within the library sector. Westlaw later became its major legal market competitor (Boss, 2002). Library portals are important vehicles through which information needs and uses of library patrons are supported (Detlor et.al.2003). Such a description emphasizes the need to build robust interfaces to library resources interfaces that address the information needs and uses of patrons through personalization of information content tailored to individual preferences.

2.7   COMPONENTS OF THE LIBRARY PORTALS

Various components of a library portal have been proposed by different authors (Davies, 2006; Franklin, 2006; Strauss 2002; Boss 2002). In a Library report prepared by Boss (2002 pp.8-12), he listed the following as the four major component of the library portal:

- A single-search interfaces; also described as federated search is an important component of any portal system. This allows a single or simultaneous search across multiple electronic sources and the return of results in an effective manner.
- User authentication; this determines whether users are qualified for the service by checking them against a library database. The authentication is generally done with a proxy server to limit access to resources that a user is authorized to use. However, libraries do not like to restrict access to information and may not apply this feature.
- Resource linking; this enables the library to connect to different information services or electronic resources.
- Content enhancement; this function overcomes the limitations of the bibliographic records. It increases the functionality available for the user in terms of the access to information resource.

Boss (2002) further went on to highlight interactive services as one of the emerging component of the library portal. He stated that even though most portals can support interactive services, only a few libraries, primarily academic libraries, have incorporated them into their portals because these services often tie up expensive computer resources for activities that are not directly related to the mission of a library (Boss, 2002 p.11).

Libraries are often noted to implement only a few of these portal's components even though all of them are important (Winship, 2006; Boss 2002). Some of the reasons for this situation have been identified to include cost, lack of staff resources, and lack of familiarity with portals potentiality and perceived needs of users (Boss, 2002).

Davies (2006) also enumerates in functional terms that, a library portal is expected to provide services and that should include: tools for resource discovery; common search interface, federated search direct access to content; authentication to information resources; customization and personalization that would help to automatically direct individuals to required resources.

2.8 BENEFITS OF LIBRARY PORTALS

The above components offer various functions which come with benefits. Every library planning to implement a portal should be very clear about the benefits they want to achieve. Without a clear vision and goal this valuable tool will just be an addition to the library's existing service stock. However, the service of a library portal cannot be useful until they are utilized. Users have to be aware of the benefits that the services provide until they use them. Cox (2003, p.38) identified five primary benefits of the portal and they have been explained below

1. *Easier access for users*. Portals offer the user the ease of searching many sources on one occasion, integrating results from licensed resources and local databases and bibliographic descriptions of digitised material.

2. *Simplified authentication*. In so far as the systems handle authentication they can reduce the barrier of users having to remember multiple log-ons.

3. *Unified presentation of quality resources*. The portal gives the library a tool to channel users towards preferred resources. It increases the ability of libraries to ensure that costly electronic journals and databases are used, by offering a simple way to browse the

available resources (Davies 2006). It also facilitates searching by carrying users through from bibliographic searches to full text options.

4. *Personalization*. Groups of users can be offered clusters of information resources. Also, users can save their favourite databases and searches for easy access and reuse. A few libraries are noted to be considering this function (Boss, 2002).

5. The portal can serves as a mechanism by which to offer services to institutional portal, consequently keeping the library at the forefront of larger initiatives in presenting resources.

2.9   QUALITY DIMENSIONS OF PORTALS

The concept of information *quality is* fundamental in the development of information science. Information therefore has value or quality when it is beneficial to information recipients. Quality is mostly determined by the user of a particular product or service. The users' expectations and opinion should be the main determinant of quality and not the technical characteristics or elements of the system (Gounaris and Dimitriadis, 2003).   There are various definitions of *quality.* "Perceived quality" is defined as the consumer's judgment or evaluation about a product's overall excellence or superiority (Ziethaml, 1988). Instead of measuring quality, the current study focuses on librarians' perception of portal quality. Most definitions for quality are based on customer's satisfaction, which may be achieved not only through conformance to requirements, but also through some inbuilt attributes of a product or a service, and through the ways they are presented and delivered to customers (Lillrank, 2003). Over a number of years, several researchers have tried to ascertain a set of factors, attributes, guidelines in order to evaluate system quality (Zmud, 1978; Parasuraman *et al.*, 1985; Ziethaml, 1988).

Zmud (1978) conducted an empirical investigation to study the different dimensions of information. In his study, he identified four categories of information quality: (1) an overall view of the quality of information consisting of a measure of relevancy; (2) the relevancy components comprising accuracy, factualness, quantity, and reliability/timeliness; (3) the quality of format; and (4) the quality of meaning in terms of its reasonableness (cited by Shirley A Becker 2001, p.32).   Relevance is determined by the judgments of the requester in respect of the system in question (Eisenberg and Schamber 1988, p.166). Studies have shown that relevance is a predictor of source and information selection and use (Choo et al 2000).   Again, O'Reilly (1982) determined that relevance is a key dimension of perceived source quality (the other dimensions

being accuracy, reliability, and timeliness). Again, Martin (1976), proposed 12 qualities that computer-provided information should possess. They include: accurate, tailored to the needs of the user, relevant, timely, immediately understandable, recognizable, attractively presented, brief, up-to-date, trustworthy, complete and easily accessible.

Models have also been proposed to focus on the overall quality levels of portals, so are library portals (Moraga, Calero and Piattini 2004). Moraga et al, (2004) model integrates the SERVQUAL model and the Data quality model which originated from Wang and Strong's study in 1996; this model consists of intrinsic, representation, accessibility, and contextual data quality) and propose a six dimensions (tangibility, reliability, responsiveness, assurance, empathy, and data quality) of a portal quality model. (Moraga et al 2004, p.557) defined each of the service dimensions specifically for web portal:

Tangibility indicates "if the portal contains all the software and hardware infrastructures needed according to its functionality". Reliability is the ability of the portal to perform its functionality accurately. Responsiveness is the willingness of the portal to help and to provide its functionality in an immediate form to the users. Assurance is "ability of the portal to convey trust and confidence." Empathy is defined as "the ability of the portal to provide caring and individual attention."

Detlor *et al.* (2003 p.14) also developed a framework and suggested that a library portal is robust when it does the following:

- offers good usability in terms of both perceived usefulness and ease of use;
- facilitates a range of information seeking activity from browsing to searching of electronic journals, indexes, and online catalogues of holdings;
- supports personalization of the interface in ways that address the information needs and uses of the portal's major constituents;
- fosters knowledge work through the provision of a shared information work space comprised of content, communication, and collaboration areas;
- Leverages the use of intelligent agents to improve information seeking and knowledge creation, distribution, and use.

A number of studies have applied quantitative research methods to attempt to identify the design elements, content characteristics, and other factors that lead web portals to be highly rated by users. Some authors are of the opinion that an increase in the visit to a portal suggests a high

level of quality (Offutt, 2002). Nonetheless it is important to be aware of the restrictions of purely quantitative measures for quality measurement of such portals (Joint, 2005).

Gounaris and Dimitriadis (2003), in their study, came up with three key quality dimensions of portals:

(1) Customer care and risk-reduction benefit. This covers aspects such as concern for the user, ease of communication with the portal's service personnel, prompt response to queries and e-mails, and the security of transactions and of personal information.

(2) Information benefit. The information provided should be reliable, complete, up to date, and cover the personal interests and lifestyle of the user.

(3) Interaction facilitation benefit. This embraces the portal's technology, design, speed and functionality.

In a study of IP web users, Yang et al. identified five service quality dimensions Web Portal which also includes: usability, usefulness of content, adequacy of information, accessibility, and interaction (Yang et al. 2004, p.548). They suggested that, portals should be a user friendly Website, with appealing Webpage appearance and visual design, intuitive layout and classification, high readability, and simple and easy-to-use search and navigation directions. To the user, the most valuable factor is being able to locate information with no complexity.

Hoxmeier (1998) argued that a quality process does not necessarily lead to a usable database product. According to Martin (1976), data is valuable when used to interpret the world and prescribe action to improve it [as cited by Shirley 2001, p. 32].

2.10 THE NEED FOR DEVELOPING A LIBRARY PORTAL FOR IMMIGRANTS POPULATION

Libraries have a social responsibility to steward, disseminate, and preserve human knowledge and cultural heritage. The concept of diversity applies to many of fundamental duties of libraries, including collection of all-points-of-view, promotion of multilingual collections and services, and development of a diverse workforce that reflects the community that the library serves.

Norway is generally regarded as a homogeneous country with a small, scattered population who speaks the same language and belongs to the same culture. All the same, like almost every other country-it is made up of an ethnic and cultural mix of peoples. Norway is therefore becoming

more multicultural, and nowhere is this better seen than in the capital Oslo. Norway has been attracting more and more immigrants in recent years. A report by Statistics Norway, (2010) stated that most immigration to Norway is largely linked to work, family, conflict and education. Over a period of 18 years that is between 1990 and 2008, a total of 377 000 non-Nordic citizens immigrated to Norway. Among these, 24 per cent came as refugees, 24 per cent were labour immigrants and 11 per cent were granted residence in order to undertake education. Twenty-three per cent came to Norway due to family reunification with someone already in Norway, and 17 per cent were granted residence because they had established a family. Currently the immigrant population in Norway consists of 415,000 persons, which corresponds to 8.9 per cent of the population and out of this, consist of people from 214 different countries and independent regions (Statistics Norway, 2010)

In fact, how to help immigrants or foreigners with their information needs within a new setting is a realistic problem faced by libraries in many countries nowadays, especially in non-English-speaking countries. Audunson (2005) recognizes this development as having fundamental effects on librarianship and public libraries in particular. Since libraries have been noted to be a trustworthy source of information for new people to the society (Michalko, 2004), they have a valuable role to play in the lives of new immigrants. The challenge to libraries is; how to integrate newcomers into the political and social culture of the host country. Structures need to be put in place to allow such a process which gradually introduces immigrants or newcomers into the community in order to participate fully (Audunson, 2005). There is no other better institution that would be able to serve such a purpose than the library (Audunson, 2005). Nevertheless, one cannot ignore the competition that libraries are facing today. In the light of this competition, libraries have to capitalize on their visibility and usefulness especially to their primary customers. Building a library portal is known to be one of the ways of delivering that and at the same time a means of achieving the library's mission (Michalko, 2004). Based on the needs of foreign users, the library would therefore have to create a bilingual information environment from different levels, including collection development, web site and web portals, information literacy instructions and facilities improvement.

The most important issue while implementing a library portal is the library's need for the portal within the institution as a whole. All these foreigners from different origins are seeking

information to integrate into their new environment. The following paragraph discusses their information needs.

2.11 IMMIGRANTS INFORMATION NEEDS

People emigrate from their country of origin to a new place of settlement for diverse positive or negative reasons. These reasons may include better employment, meeting up with family and friendship (Boyd 1989). The negative side of immigration concerns the harsh realities of war, intolerance and poverty. Choo et al (2000) argued that information needs arises from problems, uncertainties, and ambiguities encountered in specific situations and experiences (p. 6). Information needs and information-seeking are important issues which arise as a result of these transitions. The information needs of these immigrants range from initial, general needs to more personal, specific needs (Shoham and Strauss 2008). And these include information related to work, school, health and recreation and all other information that is needed for an individual to develop in a society.

Shoham and Strauss (2008) also points out that information needs occur even before a person begins settling into their new life in a new country. The initial information needs begin to emerge once the person has the thought in mind regarding immigration to a new country. Shoham and Strauss (2008) are of the view that, these initial information needs are general in nature: where to live, how to find employment, what kind of education is available and so on.

Silvio (2006) explored the information needs and seeking behaviour of immigrants - southern Sudanese youth in London, Ontario. In this study, Silvio (2006) notes that immigrant's need all types of information constantly like anybody else, for the development of themselves, and concerning the environment in which they live. He discovered that, information needs of immigrants are related to education, health, employment, how to deal with racism and political information needs (Silvio 2006). His study also showed that immigrants tend to seek information that is easily accessible, preferably from interpersonal sources.

2.12 LIBRARIANS - ROLES AND USAGE OF THE PORTAL

Librarians have been traditionally known to be organizers, indexers, abstractors, and archivist. Amid the changing state of technology, libraries are faced by the need to adapt to these changes.

The role of librarians to users and information resources are changing as libraries adopt new technologies in their services (Borgman, 2001). Lakos and Gray (2000) stressed that, "A library Web portal has the potential of changing how libraries are used and how librarians will do their work. These portals have the potential of bringing about real change to our professional and organizational culture. These changes enable libraries to become customer-centred (p. 169).

Librarians are assuming new roles such as intermediary, facilitator, end-user trainer/educator, web organizer & designer, researcher, interface designer, knowledge manager/ professional and sifter of information resources (Rao and Babu, 2001). The roles of the librarian are however known to be changing and there are uncertainties attached to that. However, their services cannot be ruled out since they bring a valuable expertise to the success of library portals (Konnur and Umeshareddy, 2006). In order for librarians to survive in this change, the nature of personality is emphasized. Lakos (2001) noted some key personality traits or features of the librarian within portal technology environment;

- Adapt to even faster changing technological environments.
- Maintain healthy scepticism of technology
- Maintain a high degree of curiosity
- Develop and maintain customer focus
- Develop and maintain good relations with users.

A number of providers of portals thought that librarians needed no new skills in operating the system. Lakos (2001, p.552) also claims that librarians who create and plan the content do not have to bother with HTML and other technical issues. Cox and Yeates (2003) argued that the rising of electronic systems and the speed of technical change mean that there is a growing need for them to learn some fundamental technical and web skills. It is reasonable for institutions to focus on training users, which first starts with librarians to make the best use of the sophisticated taxonomic tools that are provided for searching. However, librarians do not have to become engrossed in the details of the portal technology to enable them continue their work within the new environment. They further said that librarians need to concentrate on creating content and organising information to meet the needs of users.

Taylor (1968) noted the important role of librarians as intermediaries in helping end-users clarify their information needs which are often inadequately articulated. Lakos (2001, p.553)

highlighted that librarians know more about the needs of the customers, since communication channels is personal and persistent. He further said that the librarians can form a community with the patrons and the Web becomes the medium of communication.

Several authors in the library reference services domain have discussed the role of the librarian as an intermediary in information seeking. Information seeking was identified as a process of negotiation and communication with users as they travel from vague to clearer needs. Librarians have been identified as having the expertise in the field of clients needs (Brakel, 2003). Lakos (2001) is of the view that all library staff should collaborate. He pointed out the fact that the portal implementation induces collaboration, systems thinking, and will break-up functional silos. Although librarians are clearly important players, they are surprisingly ignored in the portal design projects (Choo, Detlor, and Turnbull 2000).

It can therefore be concluded that the support structure of any information environment has to focus on people who add value to the information (Davenporth, 1997), in this regards librarians. And for every library that wishes to build portals which support librarians work practice, then there is a strong need for the library, prior to its systems implementation or development to understand how librarians behave with the portal in their daily activities. Library staffs that understand its users and their needs will develop a service model that best fits to those needs (Cox and Yeates 2003).

2.13 PORTAL SYSTEM USAGE AND MOTIVATIONS

To be motivated means *to* be encouraged to do something. Behaviour is influenced by intrinsic as well as extrinsic motivation (Deci, 2000). Intrinsic motivation is defined as the doing of an activity for its inherent satisfactions rather than for some separable consequence (Ryan and Deci, 2000, p.56). Intrinsic motivation is gained from within the person or from the activity itself (Ryan and Deci, 2000, p.56), so it refers to a person's need, to feel competent and self-determining (Deci, 1975). Extrinsic motivation is a construct that pertains whenever an activity is done in order to attain some separable outcome. Extrinsic motivation refers to doing an activity simply for the enjoyment of the activity itself, rather than its instrumental value (Ryan and Deci, 2000, p. 60). It places emphasis on performing behaviour to achieve a specific goal (Deci and Ryan 1987).

People use information for different reasons. The "Uses and gratifications" approach is also used in media research. This approach concerns itself with why people use and choose a particular media. Theories have been developed from this approach. Blumler and Katz's uses and gratification theory suggest that media user's play an active role in choosing and using media (Blumler and Katz, 1974). In meeting their needs, they become actively involved in communication processes and in choosing media sources that fulfils those needs. Hence, their use of mass media is goal oriented.

Equally, library portal users choose and use media to meet their needs. In understanding the motivation to using web portal, it is necessary to know why people use information in general. Stafford and Stafford (2002) study presents the motivation of Web users from the uses and gratifications perspective. From the data collected they discovered 45 motivations for Web use (p.57). The most common motivational things were information, e-mail, and research, chatting, entertainment, communication, and fun. This result shows that Web users recognize the Web as a searching and communicating tool. However, Stafford and Stafford categorized these 45 items as content or process gratification. Process gratification is associated with the actual use of the medium whereas content gratification is related to information or entertainment delivered by the medium (Stafford and Stafford, 1998). In other words, process gratification is seeking for something with a means or channel and content gratification is focused on the use of the information conveyed by the medium. People may browse for fun but the key factor of a user been influence to use the web maybe the content (Stafford and Stafford, 2002).

Korgaonkar and Wolin (1999) employed the use and gratification approach to know the motivations for using the Web portals. In their study, they identified seven motivational factors impacting the usage of the Web. The factors are Social Escapism, Transaction-Based Security and Privacy Concerns, Information Motivation, Interactive Control, Socialization, Non-transactional Privacy, and Economic. They considered transaction-based security and privacy concerns, and non-transactional privacy concerns as negative motivations for web usage.

Users usually refer to an information system with some expectations. Yang et al (2004 p.585) pointed out that users demand unique, reliable, valuable, and up-to date information from portals. Updated content is important in achieving information consistency. Usefulness and ease of use of information and communication system may also influence a person's decision to use the

system or not (Yang et al 2004). Usefulness is determined by the inbuilt attributes of the resource and its application within particular information-seeking contexts (Wilson, 1981).

Lee, Cheung and Chen (2005) also conducted a study to explain students' intention-to-use of Internet-based learning mediums. Their study found that perceived usefulness and perceived enjoyment significantly influenced the use of Internet-based learning mediums. However, the perceived ease of use did not impact the intention-to-use of Internet-based learning medium.

Portals are also defined as been successful when they are used repeatedly. According to Telang and Mukhopadhyay (2005), successful portals need users to come back repeatedly (repeat use) and frequently (frequency), and for extended periods of time (stickiness). They developed a conceptual model explaining portal uses, which consists of repeat use, stickiness and use frequency. They also established that users develop loyalty for a given portal. Repeat use is an indication of loyalty. They found search services as well as personal services develop strong repeat use. For frequency, they counted the total number of times a user went to a portal weekly. For repeat use, they used an exponentially weighted average of all previous use (Telang and Mukhopadhyay, 2005, p. 61).

 Web portals have also be described as a system which contains information focused on a particular group of users with various needs. Telang and Mukhopadhyay (2005) argued that quality of the portal results has a strong predictor of user choices. In that if a user is not satisfied with the quality portal's output, then it is not likely for the user to use the portal in the future. Thus, poor quality portal cannot develop user loyalty.

It has also been noted that motivations show a significant relationship with web use (Korgaonkar and Wolin 1999). They believed that information motivation, interactive motivation and economic motivation have considerable influence on the number of hours spent online per day. Joines, Scherer, and Scheufele (2003) also affirmed this by investigating the influence of dimensions of motivational factors on two types of consumer web use: time spent web surfing to search for product/service information and online shopping and transactions. They conducted a survey of undergraduates in a course at Cornell University and a mail/web survey of 59 New York State residents. The results of the study demonstrated that information motivations,

interactive control motivations, and socialization motivations, economic motivations can forecast online shopping.

Summary

It has been the goal of this section to provide a better understanding on the background of Bazar portal of the use, information needs, benefits, and qualities of library portals. This section focused on the literature review on general portals and library portals. It also discussed in details the need to develop a library Portal for immigrants in Norway and information needs of immigrants. The benefits of library portals, portal system usage and motivations, portal quality dimensions, and of course the librarians' roles and usage of the library Portal were also discussed. The next section reviews the Bazar portal in relation to what have been discussed in this section.

2.14 ASSESSMENT OF THE BAZAR PORTAL

Based on the literature reviewed so far, the researcher decided to come up with two broad headings to discussing the functionality of the Bazar portal. These are the quality features and components of library portals. The following paragraphs delineate these key issues in relation to the present state of the library portal.

2.14.1 QUALITY

From the literature surveyed on quality of a portal, certain elements influence the level to which a portal is viewed as being of good quality or not. However, for the purpose of the Bazar four criteria shall be employed. They include relevance, adequacy, accessibility and visibility and usability.

Relevance: In this regards**,** the Bazar library portal is well defined to the group it is relevant to and in this context immigrants or minority groups in Norway. These different groups of people can either search the information available on the Bazar portal or go to the library in person and seek for that help. They can search for information in all the languages displayed or featured on the Bazar portal. All the major groups of the immigrant population are well catered for in the design of the portal.

Adequacy of Content: This describes the completeness of information given. The portal has also made efforts in being exhaustive with its list of content information items (see section 2.2.2 for details). It is observed that each target user group has some relevant resources that the library provides. However at present, the content of the homepage and the help button menu is only exhibited in Norwegian. Bazar library should provide translation to this basic information for their users so that they understand the working of the portal thus helping to promote its usage.

Accessibility and visibility: Accessibility is related to a number of issues and this is linked to how easy it is to find the site and, once found, to use it. In terms of accessibility, the Bazar portal is easily accessible. The link to the home page of Bazar is accessible to the Deichmanske library's main page from any computer that connects to the Internet. In fact, anyone in the world with an Internet-enabled computer can access the Bazar library portal. Figure 2 illustrates the home page of Deichmanske with Bazar and other library services displayed.

Visibility of the Bazar is important especially to new immigrants who are trying to settle in Norway. To improve on visibility, more links of interest to Bazar portal need to be created and made known on the main page of the Deichmanske library. For example, new acquisitions on Norwegian languages could be featured or highlighted in various sections of the Deichmanske library Web site which concurrently leads user to the portal.

Figure 2 shows the Homepage of the Deichmanske Library

2.14.2 INTERFACE DESIGN

On the whole, the Bazar portal has a simple interface. However there are interface design problems which affects the overall perceived usefulness and ease of use with the portal. The following paragraphs explain some of the elements that affect ease of use and usefulness.

Terminology: This can be reflected in the terminology used in the portal. The portal has made effort in translating almost all the major menus into the different languages. Though the Bazar portal has made some efforts towards this it could go further to describing links to resources and documents in the different languages it focused on.

In terms of *layout design*, there are both positive and negative aspects. From a positive point of view, the Bazar portal makes use of a simple, easy to read graphical user interface by showing the meaning of every symbol used on the page. However, some improvements can be made on standardizing the menu. At present, the homepage menu is only in Norwegian. So to make it meaningful and promote usage to the primary users it has to be translated in all the other languages that the portal is focused on.

Navigation: the Bazar portal has provided few methods through which users can be helped navigate the site. These methods include the Basic search function and the multiple languages featured on the site. Nevertheless more could be done by powering the search with Google, and a site map that provides an overview of the content posted on the portal. This should also be translated. In addition to this method, a menu for links that are accessed most often can be displayed.

Organization of information: Users of the libraries are known to prefer information organized by subject areas of interest. Bazar library portal has been positive in organizing the information on the site by topics; however the structure is in hierarchical order. It has been noted that hierarchical design in portals can pose some challenges in terms of navigation. Considering the different users of Bazar portal, their interest overlaps, so that designing the site's navigation in terms of an integrative site where users can locate information by topic of interest, such as Work, Education, News, Health, Norwegian culture and society would be useful. This would prevent users from navigating and collecting information through a long list of items on the site.

2.14.3 COMPONENTS /FUNCTIONS

Personalization and User authentication: Currently, Bazar library portal does not have a user authentication function. This has some limits on the function of personalization. From the literature reviewed, we know that the feature of personalization enables library portal to better meet the needs of individuals. Groups of users can be offered clusters of information resources as one of the benefits or functions of portals (Cox 2003, Davies 2006). Presently the Bazar library portal has not fully incorporated this feature. This is because there is no authentication function or component. To an extent, Bazar portal has been able to do this by definition of its target group of users and the use of the different languages.

With the function of personalization the portal system itself can tailor present and deliver information content to suit the user or the users can customize the type and format of information displayed. Personalized services add value to the portal because if the active involvement of users.

Perhaps Bazar can offer personalized services in the form of "My List" and "My Account" when this function is fully incorporated. The purpose of "My List" is to keep track of resources for the user. The "My Account" element enables a user to receive an overview of their activities or transactions with the library.

In addition the portal can implement the following personalized features to users:

- Links to pages frequently visited and search results that the user is interested in could be saved and presented to users in the Portal.

- Notification of new items or information on the portal. Bazar users may also appreciate it if the system could automatically notify them when new information arrives that might be of interest to them. This feature would necessitate that the site store subjects which are of interest to the individual user profiles.

The personalization feature or function on Bazar portal can be fully utilized when there is a function of authentication for its users. Thus, it is necessary to incorporate this feature for users to enjoy the full benefits of the portal.

2.14.4 INTERACTIVE SERVICES

Boss (2002) described this feature as one of the emerging component of the library portal. Currently, interactive functionality is limited on the Bazar portal. The Bazar portal only has basic feedback tools which are available for users to ask questions and get answers from a contact person in the library. A two-way communication can only occur between a user and a librarian through e-mail or by use of a telephone.

A recommendation to improving on communication is to adopt interactive tools, such as discussion groups, which will allow users to communicate about issues of concern and common interest. News boards and other web 2.0 tools could also be provided. Such tools and features are needed.

Summary

This section of the chapter reviewed the Bazar portal in relation to the literature reviewed so far and some identified problems and suggested some recommendations to improving the use of the Bazar portal. The next chapter discusses the methodology of the study.

CHAPTER THREE

3 RESEARCH METHODOLOGY AND DESIGN

This chapter discussed the qualitative and quantitative methods that have been used in relation to the selection of sample, collection of data and analysis of the data.

3.1 RESEARCH DESIGN

This study has adopted and used research instruments belonging to the qualitative and quantitative traditions in doing research in information science. The quantitative approach is regularly used when one wants to say something about the world or testing hypotheses. The advantage is that the researcher is able to reach many people through methods like surveys or questionnaires. The qualitative approach is often used when trying to get a more complete understanding of a certain occurrence, and methods such as observation and interviews are normally used in this type of research (Creswell, 2004; Pickard, 2007).

The combination of these two methods affords me opportunities to use the strengths of some methods to counterbalance the weaknesses of other methods. Since all methods have strengths and weaknesses, combinations of multiple methods that achieve this counterbalancing aim are particularly valuable (Axinn and Pearce, 2006). In the study of the usage by librarians, the combination of both methods provides many advantages in the understanding of how respondents make use of library portals, problems encountered both from users and the portal and suggestions for the improvement of the Bazar portal.

3.2 RESEARCH STRATEGY

The thesis is a case study, and will mainly focus on a single case. According to Yin (2003) a case study design should be considered when:

- the focus of the study is to answer "how" and "why" questions;
- you cannot manipulate the behaviour of those involved in the study;
- you want to cover contextual conditions because you believe they are relevant to the phenomenon under study; or
- The boundaries are not clear between the phenomenon and context.

The researcher was motivated to using a case study because the case could not be considered without the context, the Bazar portal, and more particularly the Deichmanske library settings. Stake (1995) observes that case study research is concerned with the complexity and particular nature of the case in question. According to Yin (2003), this method allows the researcher to explore individuals or organizations, simple through complex interventions, relationships, communities, or programs.

Case studies can be single or multiple-case designs. As stated earlier, this research has chosen a single case. Yin (1994) pointed out that generalization of results, from either single or multiple designs, is made to theory and not to populations. Case study has been noted to be an ideal methodology when a holistic, in-depth investigation is needed (Feagin, Orun and Sjoberg, 1991) and this is one of the reasons why the researcher chose this method.

3.3   AREA OF STUDY

The research study focused on librarians and their usage of the Bazar portal. Librarians working in the Deichmanske public library were the target of this study. This research focuses on the usage of library portal specifically the Bazar portal of Deichmanske library.

3.4   THE POPULATION

The population includes librarians who perform reference services in the various branches of Deichmanske Library. There are sixteen branches and Departments of Deichmanske library in Oslo, Norway. Nine of these branches and department were covered whiles seven of them were not covered due to time.

3.5   SAMPLING STRATEGY

A self selection *sampling* was considered to be the most fruitful. Accordingly, the librarians who participated in this study volunteered to be part of the study. A general appeal was sent through Departmental heads of Deichmanske library and the librarians chose to respond. This method was useful in reaching a variety of respondents. Powell (1997 p.69) indicated that respondents who volunteer may not be a representative of the entire population; however these volunteers represent a selection of librarians from the various branches in Deichmanske library.

3.6 METHOD OF DATA COLLECTION

Primary and secondary data were collected in this study. The primary data was collected through online survey questionnaire and interviews. Secondary data was also collected through the gathering of information from Deichmanske website and other documentation from the multilingual library.

3.6.1 ONLINE QUESTIONNAIRE

An online questionnaire with both closed and open ended questions was one of the instruments employed for the data collection (see Appendix 2). This was used to capture both quantitative and qualitative data. The online survey was adopted because it was considered to be a quick way in reaching respondents from the various branches and departments of Deichmanske library who may not have been identified by the researcher.

The Online survey questions were designed in English using the quest-back survey instrument. Quest-back provides online survey services and expertise for gathering and analyzing data collected (http://www.questback.no/). The quest-back survey tool was used because it was considered the most convenient survey tool which allowed researcher all the features needed to design the survey. These features included the design of multiple choice questions, single choice, free text, adding and changing of content, logical and easy to read structure, streamline design and appearance, publish survey and invite respondents, restrictions to avoiding multiple answers from a single person and others.

The survey questionnaire was distributed to the target population. Both users and non-users (who were librarians) of the Bazar portal were invited to participate in the survey and interview. An attempt was made to reach as many librarians of this background as possible by distribution of the online questionnaire through heads of Branches. This was done by sending the link to them and they subsequently forwarded it to the right calibre of respondents. Respondents were given the option to respond in either English or Norwegian language in respect to the open ended questions. Respondents were asked in the questionnaire to indicate if they wanted to be interviewed. Out of the nineteen respondents, eight provided their email to be contacted for the follow up interview. However, six of the respondents offered the time to be interviewed after contacting them.

The survey link was sent out on Friday 9th April and in the first week 12 respondents returned the survey, and a lesser amount of respondents did so in the subsequent weeks. The survey was kept opened until four weeks due to low response, though the agreed time was two weeks.

3.6.2 QUESTIONNAIRE INSTRUMENT DESIGN

The intention of the online questionnaires was to compile data on use and non-use of Bazar library portal, user requests encountered by librarians and the kind of content the Bazar library portal should have in order to solve these requests. Suggestions on motivation to using Bazar library portal were also considered in the design of the questionnaire. The questionnaire consisted of mostly close-ended questions, as the researcher believes that people do not like to fill in information, which is the case with open-ended questions (Brace 2008, p.52)

Since there were two groups of librarians (Users of Bazar and non users), two versions of the online questionnaires were developed to ensure that each group answers the appropriate questions (see Appendix 2) These two groups had four common questions and they were related to:

- Data on gender and departments or Branches were included. Branches or Departments was considered to be important since it assisted in knowing which Branches participated and know their frequency of use of the Bazar.
- The kinds of problem related issues librarians most frequently encounter from users
- The group of users they mostly receive such problems from

In analyzing user requests and the Bazar library portal, a list of sixteen problems areas were used as multiple options and respondents were asked to select all that apply. The reason for this particular instruction was to identify the scope or kinds of problems, and not necessarily the most encountered problems from users, thus no rating. These items were developed after reviewing the Bazar library portal and past literature (Shoham and Strauss 2008; Silvio, 2008) on immigrants needs. In addition, a list of fourteen items was formulated to assess the expected content for the Bazar library portal. These items were taken from the list of the items related to users' requests. A portion marked other was specified for respondents to add more if relevant. However, this option was used to a little extent; this indicates that the researcher was exhaustive in the listing of information items expected in the portal.

Two scale questions were developed. These were the frequency of usage and adequacy of content the adequacy of portal.   The questions required the respondents to indicate the extent to which Bazar portal was currently being used to support users' needs and adequacy of the content of the Bazar.

A meeting was held with the managers of the portal to review the items in the questionnaire. Slight modifications were made with some of the items in the questionnaires. Later a pilot test was conducted to solicit comments from three librarians on the questions. Respondents were asked to comment on clarity and appropriateness of the items in the questionnaires. A detail of this pilot test has been discussed in section (3.6.5).

3.6.3   ONLINE SURVEY INSTRUMENT

The increasing use of the internet has encouraged researchers to conduct online surveys (David, Kurtz, Mackenzie and Snow, 2009 p.243). Despite its popularity today, it has advantages and disadvantages.   The advantages and disadvantages have been discussed in the following paragraphs.

Advantages: Online survey has the advantage of low cost and quick distribution as compared to paper-based questionnaires (David, Kurtz, Mackenzie and Snow, 2009). This is so because it less expensive and quick to send questionnaires online than to pay for postage, transport, paper and printing as done by paper-based questionnaires. It is also easier to and simpler to make changes to questions after pretesting it. Additionally, online survey offers a quicker response time to questions irrespective of the geographical location of the respondents and helps with easy analysis since data is sorted out automatically (Wright, 2005).

Disadvantages: Access to a computer, internet and knowing how to use these can serve as a limitation to sample population. These issues were not a challenge because of the location of the library (being in the city of Oslo) and the respondents (librarians) involved. Issues surrounding the design and implementation of the online survey can be more difficult to some researchers (Wright, 2005). This was not a problem since the researcher found it easy to use quest-back with the help of a manual.

Potential problems such non delivery of the survey questionnaire was also avoided with the help of Library Departmental heads.

3.6.4 INTERVIEW

Kvale and Brinkmann (2009, p.3) described an interview as a conversation that has a structure and a purpose. According to Pickard (2007, p.172) interviews are useful when we are seeking in-depth data that is specific to the individual. The main purpose of this follow up interview is to help gain insight into the motivations, factors which promote or limit the perception on use of the Bazar portal.

Semi-structured interview

Semi-structured interviews typically consist of conversations between the researcher and the respondents based on an interview guide (see Appendix 4). The main topic was given beforehand, the questions are prepared in a broad and open manner, and follow-up questions are dependent on the conversation (Silverman, 2006). This method was useful in this study, as it gave the researcher the opportunity to guide the conversation and focus on the topic at hand, and at the same time as the respondent is opened to express opinions. As a result, each interview will often reflect the respondents' views and perception on the use of the library portal.

There are different methods of conducting interview and it includes face to face, telephone, email and chat boxes (Opdenakker 2006). All these options have their various advantages and disadvantages. Face to face is acknowledged to be the most common and preferred one even though telephone interviews are well accepted too. In face to face interviews there is no significant time delay between question and answer. So that the interviewer and interviewee can directly react on what the other says or does to bring out new and relevant issues. The advantage of having a telephone interview is that it gives one the opportunity to reach respondents irrespective of the geographical location. Computer mediated communication (CMC) tools such the email and chat are gradually becoming due to computer technology. With the use of emails, the interviewee can answer the questions at his or her own convenience without noise disturbance due to independence of place and time. In the study, the researcher gave the respondents the opportunity to choose from these methods. Out of these, five face to face interviews and two email interviews were conducted. The respondents who chose to be interviewed by e-mail preferred it because of their busy schedules.

The seven interviews were conducted within a period of almost two weeks (nine days). The respondents consisted of a male and six females. According to Kvale and Brinkmann (2009) the researcher should brief and define the situation to the participants. Subsequently, the respondents were given information about the purpose of the interviews, as well as the goals of the thesis. Each interview was recorded on tape and transcribed in order to make it easier to process the data later on, to detect possible misunderstandings and to make the conversation run as freely as possible during the interviews. Recordings are generally preferred when conducting interviews, as a researcher never gets access to better data than what he/she is able to write down (Opdenakker, 2006). Notes were taken during the interviews. though essential, note taking must not be allowed to spoil the interview (Fletcher 1980 p.932) .This is also one of the reasons why the interviews were recorded.

The interviews lasted between 35 and 60 minutes, depending on each respondent's discussions and consideration. Respondents were not known prior to the interviews, however preceding communication through e-mail or telephone contributed to a relaxed atmosphere of conversation. Interviews were also conducted with the key actors of the Bazar portal. This was done in order to elicit some information on the developmental and intended aspects of the library portal.

The interview guide

The researcher adopted an interview guide to direct all the interview processes in the study. An interview guide is known to be one of the important preparations to be made ahead of an interview. The guide includes an outline of topics to be covered (Kvale and Brinkmann 2009). The topics provide an overview of the major issues or concerns. When conducting a semi-structured interview each topic generally consists of several open questions which are designed so that the informants have the opportunity to elaborate on the matter. The topics act as the main frame during the interview and help to divide and categorize the various dimensions that may arise throughout the conversation.

3.6.5 PILOT

The online survey questionnaire was piloted with three librarians in Deichmanske library. This gave a better reflection, since they form part of the intended audience. The research purpose was included on the online survey questionnaires. The pilot study provided useful information

concerning content ambiguities. The online questionnaire was completed and comments were sent accordingly. The pilot test revealed that instructions for some filtered questions posed certain problems. Also two questions which needed to be reformulated for clarity purposes where identified. A revised version of the questionnaire was developed and it consisted of twenty-two questions.

A test interview was conducted on one volunteer library staff in Deichmanske library. Based on the feedback obtained from the test respondent, the content of interview questions was modified, the wording of questions was adjusted. This process also enabled the researcher to gain self-confidence through practice, test recording equipment and overcome other unanticipated difficulties.

3.7   RESEARCH LIMITATIONS

- The amount of data in this study was relatively low since all the branches and departments were not covered in this study. The researcher received eighteen responses from the online survey and only seven interviews were conducted. Therefore all opinions may not have been covered. This did not impact strongly on the outcome since the departments covered were situated in dominants immigrant communities.
- This research focuses only on the views related to librarians. The study was mainly focused on the usage of a single portal within a particular Public library in Oslo, Norway. It is possible that other libraries maybe facing the same issues discussed in this study and the result can be generalized to that extent.

3.8   CONFIDENTIALITY

Anonymity could not be guaranteed for respondents who volunteered to be part of the interview after completing the online survey. However, prior to the interviews and the respondents were informed that their answers would be treated with confidentiality and that they would remain anonymous in the transcripts and the thesis in general. They were asked for their permission to tape the interviews, and they were assured of the confidentiality of the interviews.

3.9 ANALYZING THE DATA

Since the data from the study is both quantitative and qualitative in nature, different analysis processes were employed. The researcher used interviews, questionnaires and data from the Bazar portal site to bring out a complete picture of the study (Denzin & Lincoln, 2000). The following were the methods taken:

Data collected from the survey was captured into charts and tables and this was done by the quest-back survey instrument. The summarised data from quest-back was later exported to excel for further analysis.

Cross tabulation was used for variables which were related, for instance for the questions:

- *For what kinds of problems do you mainly use the Bazar library portal?*
- *Which kinds of problem-related issues do you encounter from users?*

The aim here was to determine whether there are discrepancies between the problems they receive and the problems they use the portal for.

The frequency of usage was cross tabulated by branches. The aim here was to see how the different branches use the portal.

Data collected from interviews were used to support and expand the views made in the survey. After conducting the interviews, the information was transcribed and data was collected from the transcripts. Because the interviews were conducted within a short period interval, the transcription was commenced upon the completion of the interviews. During the transcription process, questions and answers were sorted in order to create a better understanding and to make it easy to explore the findings in relation to related studies. The data was also sorted into different categories. Data sources from both interview and the Bazar portal web were read, re-read and compared to bring out thoughtful interpretations.

In summary, all data from the interview was used to support and provide more insight into the survey questions and further expand on some of the questions which I was not able to ask in the survey. Chapter 4 presents the details of this analysis.

3.10 VALIDITY

Validity is related to whether a research design is appropriate in collecting the data for the study. Thus researcher can also improve on validity by thoroughly describing the research context. In general a research is considered to be valid when the conclusions are true (Powell, 1997).

Triangulation is a validity procedure where researchers search for convergence among different sources of information to form themes and categories (Creswell and Miller, 2000 p.126). Both interviews and questionnaires were adopted in this study to improve on validity. Some of the questions were triangulated using both interviews and questionnaires.

CHAPTER FOUR

4   DATA FINDINGS AND ANALYSIS

INTRODUCTION

In this chapter the results and analysis of the collected data is presented. The themes and topics that have risen throughout the collection of data will be elaborated. The chapter has been divided into three main sections with various subsections:

4.1   RESPONDENTS' BACKGROUND

From the online survey, a total of 19 employees responded to the online questionnaire. One response was discarded as a result of incomplete answers. Consequently the valid responses were 18.

Respondents were asked to identify the branch or department where their library is located. The branches that participated included: Furuset, Bjornholt, Oppsal, Roa, Boler, Central lending and reference department, Torshov, Grunerlokka and Holmlia. These Branches and departments in this study have been divided into two groups; highly dominated community of immigrants' citizens and less dominated community. Torshov, Furuset Grunerlokka and Holmlia are known to be districts which have a lot of inhabitants with immigrant background. Bjornholt, Oppsal, Roa and Boler Branches are known to have less of immigrants' background[1]. Seven librarians from various branches and departments of Deichmanske library were also interviewed.

4.2   ANALYZING USERS REQUESTS AND BAZAR PORTAL

4.2.1   GENERAL KINDS OF PROBLEM RELATED ISSUES ENCOUNTERED FROM USERS

Both users and non-users were asked to identify the kinds of problem related issues they encounter from users. Figure 3 below, clearly shows a high selection for Norwegian language help (17) followed by educational system needs (11), and where to find a job (10). Visa related issues and medical assistance were the least encountered, with just one (1) response each.

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[1] http://www.deichmanske-bibliotek.oslo.kommune.no/english/branches_departments

Domestic violence and other also had just two (2) responses each. The trend depicted by the figure is intriguing, in that issues, which received low responses, border on critical immigrant population needs.
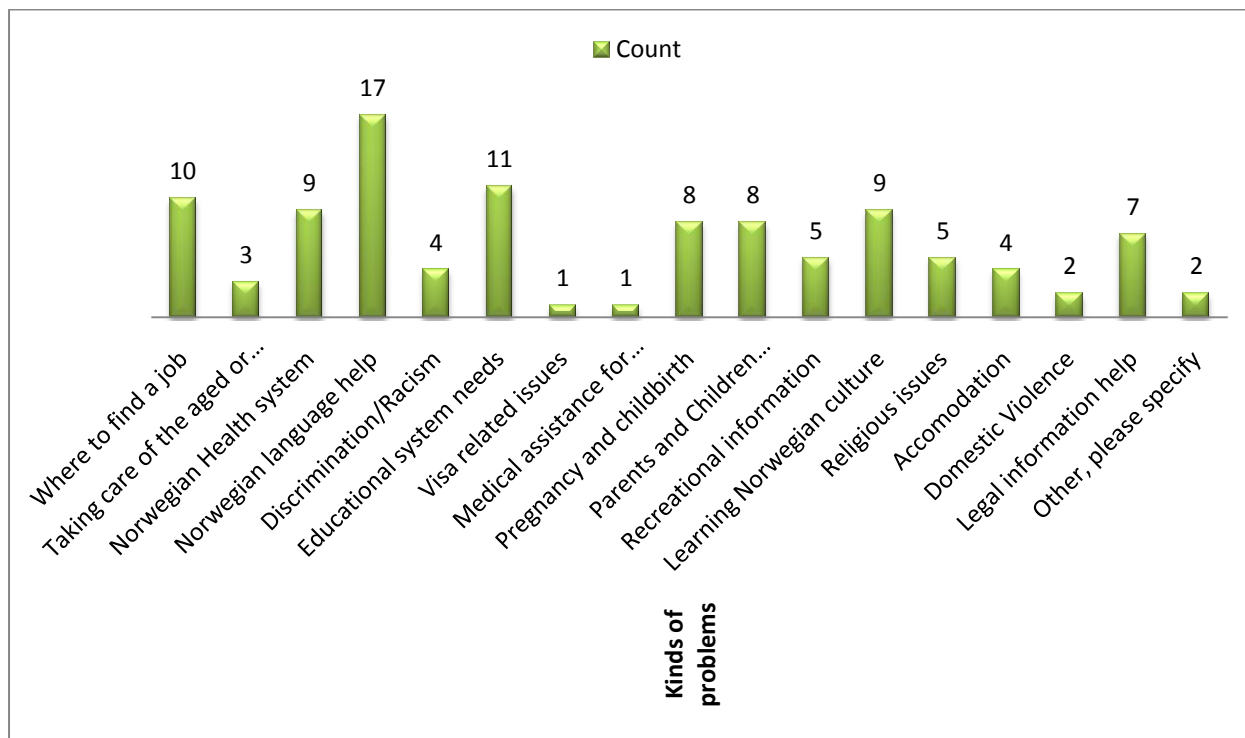
Two figures were generated from the above to compare the two groups of respondents. Figures 4 and 5 below show the responses from users of Bazar and non users of Bazar respectively each group.
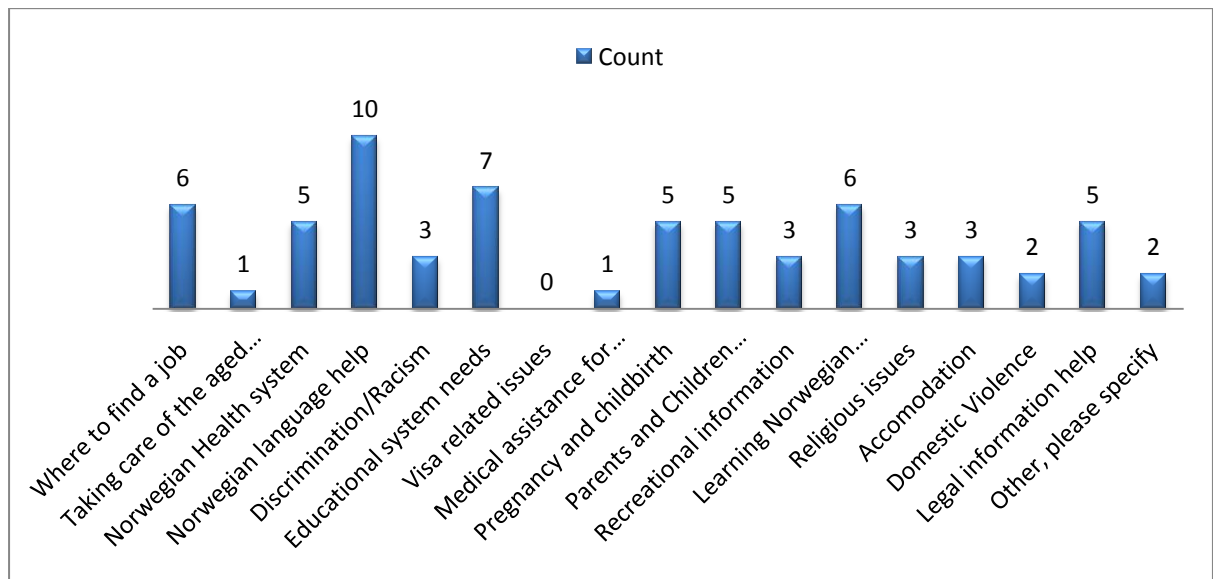
Figure (4) above shows the responses received from Bazar users. This figure present relatively similar trend in comparison with figure (1) responses (from both user and non user librarians).There was a high selection for Norwegian language help (10) followed by educational system needs (7) and where to find a job (6) as the kinds of problems encountered from users.

Figure 5 shows the kinds of problem related issues encountered by non-users of Bazar n-7

44
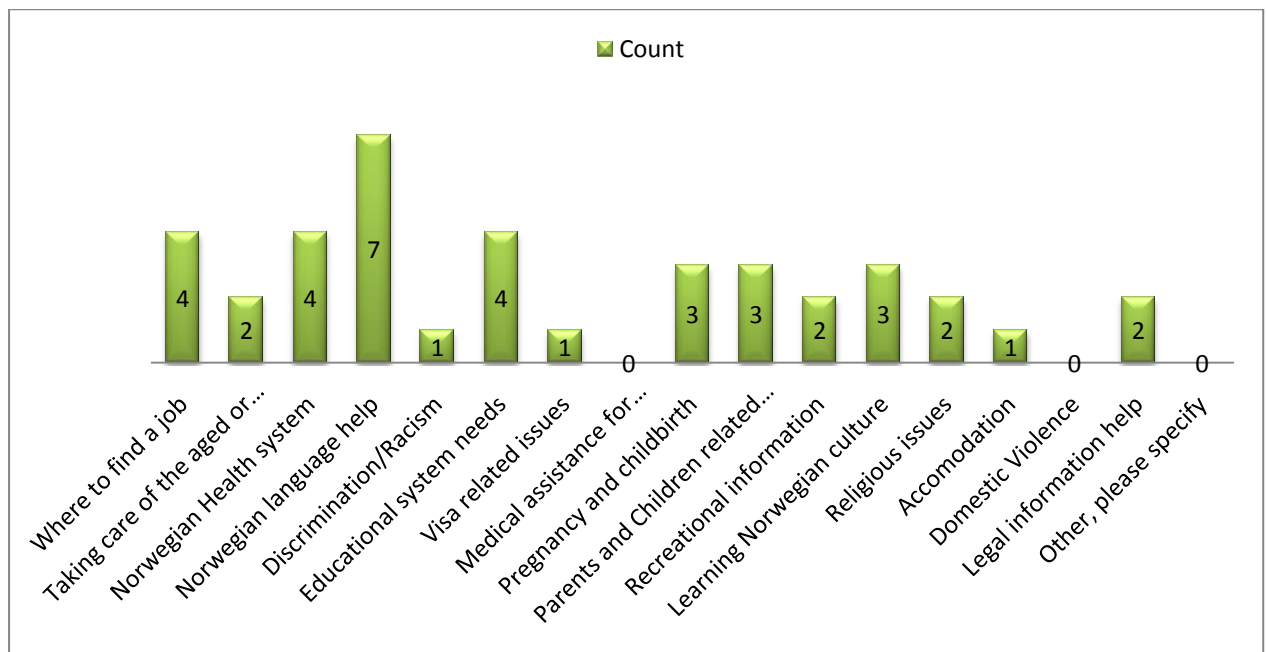
This figure (5) also shows the same trend as in the previous figure 2 (showing the responses for users). Showing a high selection for Norwegian language help (7), followed by educational system needs (4), Norwegian health system (4) and where to find a job (4).

In comparing the results from both users and non users' results, it can be clearly seen that there was no great difference in the kinds of problems they all received from users.

The high number of librarians selecting Norwegian language help, learning Norwegian culture, educational system, where to find a job and legal information help indicated a large amount of questions of these kinds encountered by librarians of Deichmanske library. Therefore the content of this particular section in Bazar is justified and should continue. The low choice of visa related issues could strongly indicate the fact that most immigrants manage to sort out visa related requirements in their home countries before embarking on the journey and may be relying on other sources when they arrive. Medical assistance for refugees and asylum seekers was also low: indicating that this group of users rarely come to the library for such information.

When the interviews were conducted, additional problem-related issues were identified as follows:

- How to use and find information on the internet
- Curriculum books, novels and books from one's own country.
- Recommendations for a book and a few articles and magazines
- Films and CDS
- Direction to places (Maps)

Questions related to how to use and find information on the internet encountered by librarians has an implication on the potential use of the Bazar library portal on the part of library users which requires them to be computer literate.

Although requests on curriculum books, novels, CD, Maps Films, are not the present focus of Bazar portal, films, maps (direction to basic places in town) and books related to one's own country of origin however can be considered as part of the content of Bazar since those requests comes from the immigrants population as indicated by librarians.

The result from both the survey and interview shows an expected outline of user needs requirement that Bazar portal should consider. Though some of the mentioned problems are general in nature, Bazar providers considering any of those would help meet a wide range of needs from their expected users. According to Silvio (2006) immigrants need all types of information constantly like anybody else, for the development of themselves and concerning the environment in which they live. Therefore it is important to consider some of these general needs in the Bazar portal.

4.2.2 GROUP OF USERS AND NEEDS

Figure 6 representing User Groups
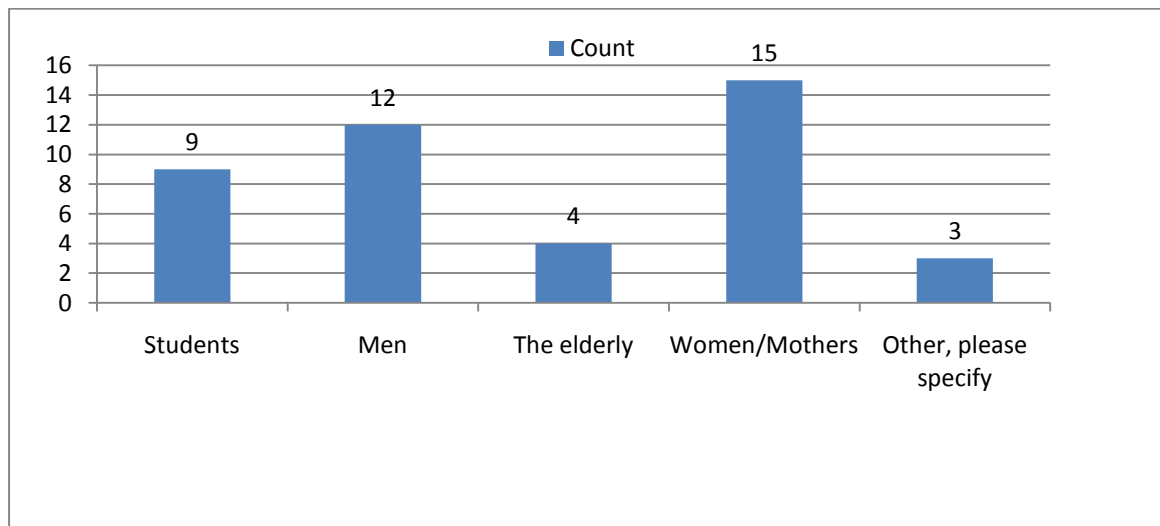
The group of users under this project were classified as students, men, elderly, women/mothers and others. And the number of counts was 9, 12,4,15 and 3 respectively (see figure 6).

From the figure above, women/mothers were found to be the most significant group of user, with 15 counts. It was noted in the interview that most of their needs and request centred on health, pregnancy, family and educational needs of their children. Though mothers and women were defined as the most significant users overall, there were only some few disparities in individual branches or departments.

Other respondents, when asked to be specific, indicated children as been one of the groups of users they encounter.

4.2.3   KINDS OF PROBLEMS THE BAZAR LIBRARY PORTAL MAINLY USED FOR

Figure 7: Shows the response on the problem related issues for which Bazar library portal is mainly used for (n=11)
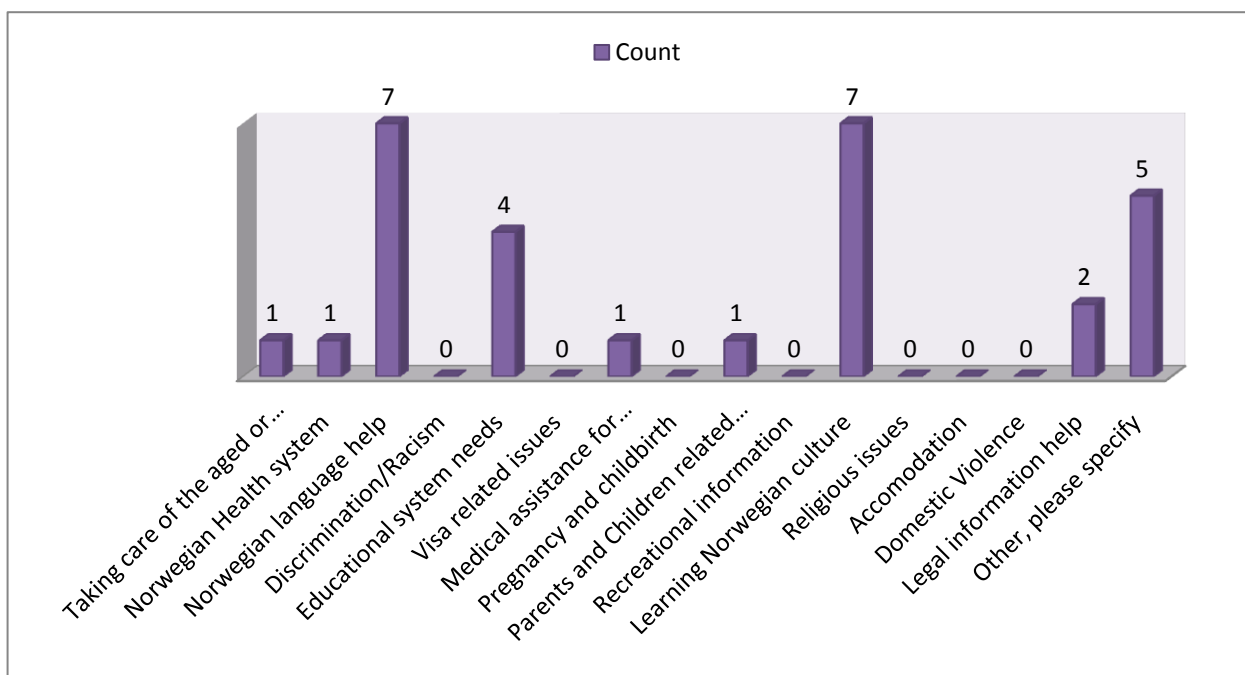
The majority of the librarians (Bazar users) from the survey indicated Norwegian language (7), learning Norwegian culture (7) and educational system needs (4) as the mostly kinds of problems they use the Bazar for. The response to the section "other, please specify" was marked by 5 people who indicated that they use the portal for news related issues. None of the respondents indicated visa related issues, pregnancy and childbirth, accommodation, domestic violence and recreational information as issues that they use the Bazar for, even though these were indicated by them in figure 2 as the general problems encountered from users. A possible reason for this could be that respondents are unaware of all the content of Bazar. This may also imply that some of the content of information is not visible enough for easy accessibility. Another explanation could be that they use other searching aids. It could also indicate that those sections of the content need to be updated. This result raises an issue of content of information for these specific kinds of problems identified.

Most of the librarians interviewed equally confirmed the results from the survey. However most of them stated that they frequently use the portal for news from home country and newspaper related issues.

The result from both sources indicated that the most accessed sections (content) of the portal are Norwegian language help, Norwegian culture, where to find a job, educational system, health care system and news from home country of origin.

However, as far as the goal of the Bazar library portal is concerned, the low indicated sections of the content of the portal needs to be reviewed for an active use of them. However the low indicated sections of the content of the portal needs to be reviewed for an active use of them. The importance of this content-usage relationship has been highlighted by Stafford and Stafford (2002), where they identified it as one of the key factors in portal system usage. They indicated that people may browse for fun but the key factor of a user been influence to use the web maybe the content (Stafford and Stafford, 2002).

4.3 LEVEL AND FREQUENCY OF BAZAR PORTAL USAGE

4.3.1 A REPRESENTATION OF BAZAR USERS AND NON USERS

Figure 8 representing users and non users of Bazar (n=18)
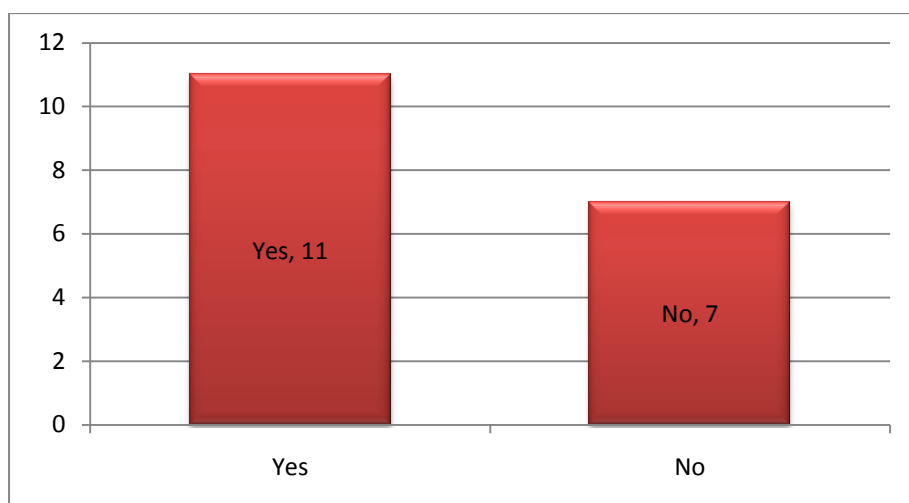
Out of the 18 respondents 11 of them representing 61% indicated that they have used the Bazar portal and 7 (39%) indicated they have not. The reasons for non-use are indicated in figure (5).

4.3.2 FREQUENCY OF BAZAR PORTAL USAGE BY BRANCH

The majority of librarians from central lending and reference department, Grunerlokka and Holmlia surveyed used the library portal a few times in a month. It was only the respondents

from the Furuset branch who uses it twice in a week. Librarians from Bjornholt, Oppsal, and Roa indicated that they rarely use it. It is not unexpected to have this result, since these districts are known to have fewer inhabitants with immigrant background.

On the whole, interviewees indicated that they rarely use the Bazar portal. Most interviewees pointed out that their low usage of Bazar portal is as a result of lack of awareness. For example, one respondent said that:

"I don't know much about the Bazar." *(Interviewee 5#)*

Another interviewee pointed out that:

"It's not a place that I would check out first, which I think it should be, part of it is also because it hasn't been promoted as a service."(*Interviewee 6#)*

The result indicated that the Bazar portal is not often used by majority of the respondents and needs to be publicized.

4.4   REASONS FOR NON-USE OF BAZAR PORTAL

Figure 9: shows the reasons for non use of Bazar Library portal
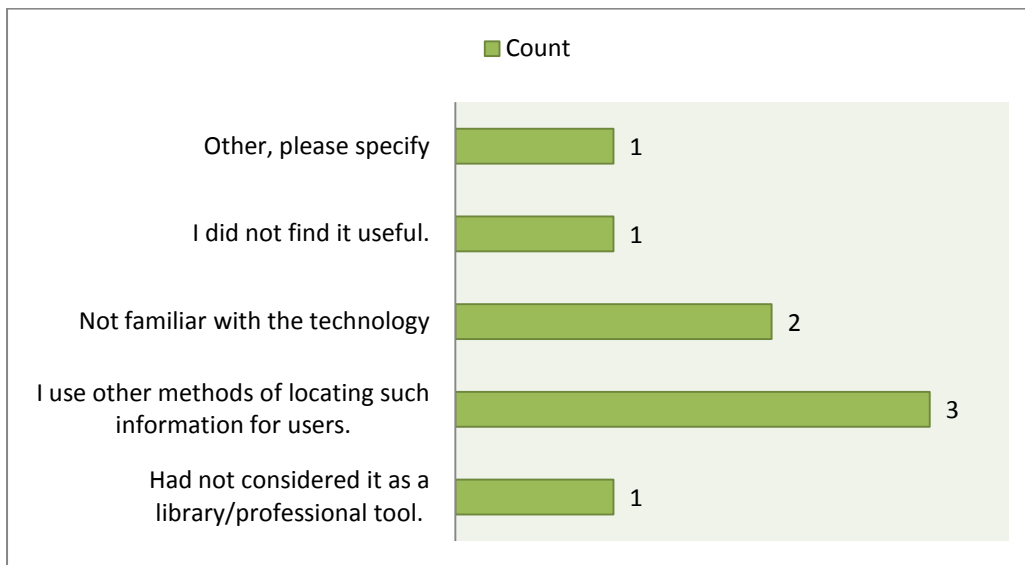
Various reasons for not using the library portal were given. The response online survey, three respondents indicated that they use other methods in locating such information for users, two indicated that they are not familiar with the technology (Bazar). One responded that he/she had not considered it as a library professional tool, whereas one respondent did not find it useful. There was a person who marked other (1) and when asked to be specific, wrote in that he/she has simply forgotten that the portal even exists.

During the interview, most of the librarians indicated their usage of other source of information in helping users, and these included Google, government portals, the national library, Wikipedia and so on. The fact that majority of the respondents indicated their use of other methods of locating information for such expected users of Bazar portal is a concern. Michalko (2004) pointed out that libraries need to stay visible and useful to its users in the face of competition. This emphasizes the need of Deichmanske library promoting the Bazar portal tool among its users and more especially to its immediate users.

However, some librarians said they would be encouraged to use the library portal if the following are in place: better marketing and advertising of its existence, creation of manual on its use, user friendly, current and up to date links to content information. One respondent specified that he would be motivated to use the Bazar if it is focused and friendly to Children.

BAZAR PORTAL IMPROVEMENT AND CONTENT SUGGESTION

4.5   CONTENT OF INFORMATION FOR BAZAR

Figure 10: shows the expected content of the Bazar Portal
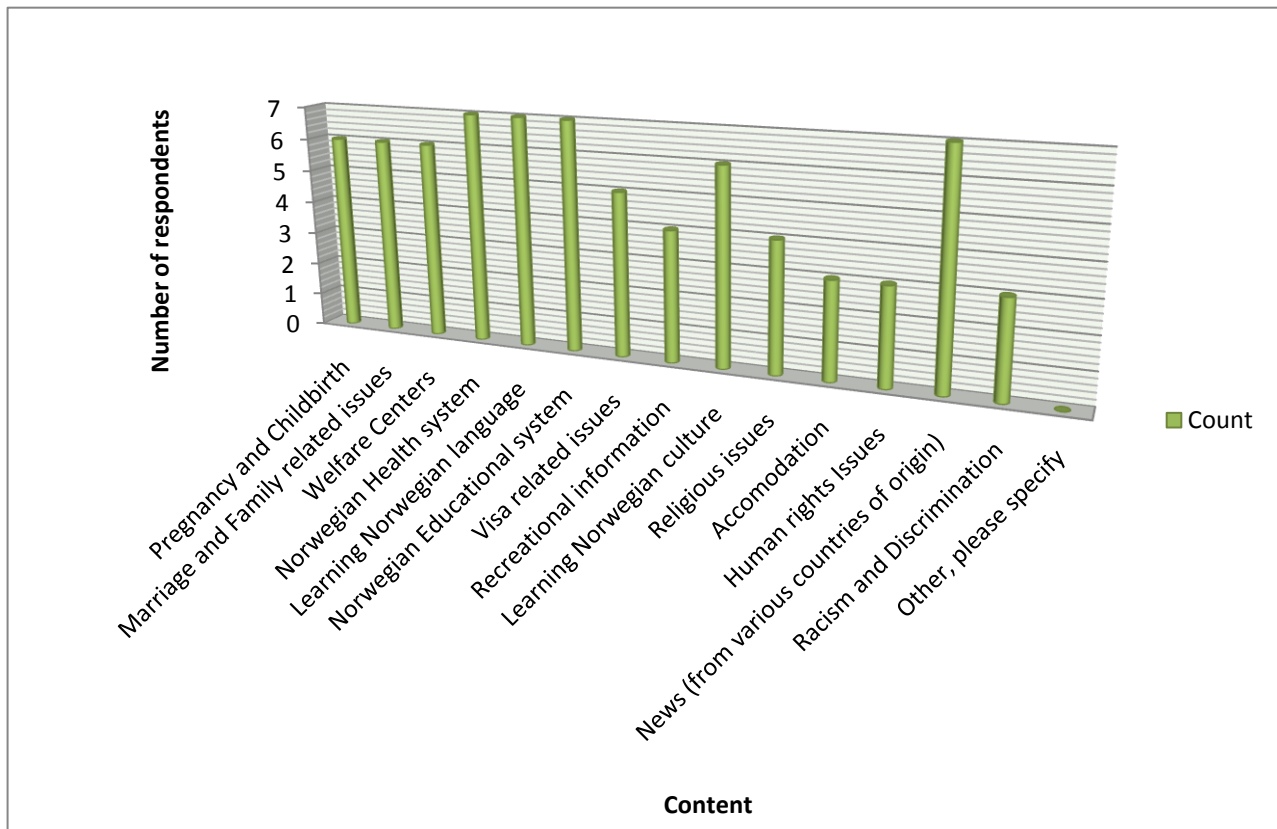
From the figure (10) above, the main kinds of information or content (expected in the Bazar) identified by librarians in the survey were learning Norwegian, Norwegian educational system, News from various countries of origin and Norwegian health system.

The interviewees equally confirmed all that were highly mentioned in the survey. One interviewee said:

"You should be able to find everything you need to function in the Norwegian society."
(*Interviewee # 6*)

They, however, identified other content or information which were lacking in Bazar portal. These included:

Rights for single mothers: At present there is no specific document or link on rights for single mothers in Bazar portal, though there is a resource on Human rights.

Information on the culture of the immigrant population: One respondent suggested content on culture of the immigrants' population because he felt it is relevant for both the librarians and people born in Norway with immigrants parents to have knowledge of that.

Moreover, some librarians advised on expansion of content in areas of information related to kindergartens, where to find a job and learning Norwegian. The following were the comments they made:

"Maybe even more information about how to get a job, how to get a course in Norwegian, and presented in all the languages."*(Interviewee #4)*

"Mostly things to do with kindergartens*" (interviewee #3)*

The comments above indicate some lack in adequacy of content with regards to the requests that they receive from users and this has been highlighted in the section 4.6.2.

4.6   QUALITIES AND USEFULNESS OF BAZAR

This section identifies some elements of qualities and benefits identified by librarians.

4.6.1   EASE OF USE

Figure 11: shows the response on the ease of use of Bazar library portal
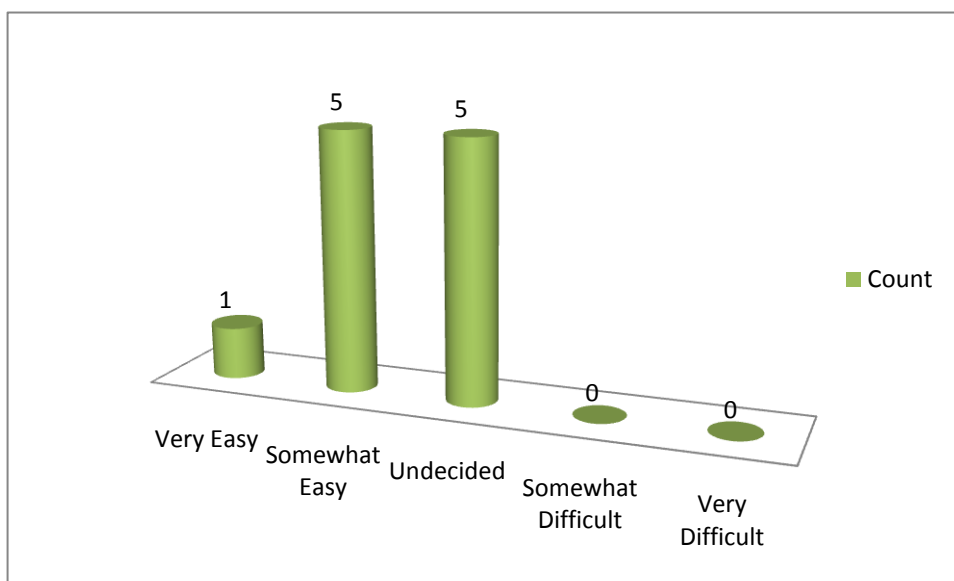
As Figure (10) shows, 5 out of the 11 respondents feel somewhat easy to use the Bazar and only one respondent found it very easy to use. Five of the librarians were undecided with whether the Bazar portal is easy to use or not. It was not possible in knowing the criteria with which they used in this particular (undecided) judgment. The possible reason for this undecided result could be their rare or infrequent use of the portal. However, the obvious issue which needs to be addressed is the fact that there is some level of difficulty with the use of the Bazar library portal.

On the other hand, most respondents from the interview agreed that it was easy to use Bazar because of their skills as librarians. One respondent confirmed this and said that:

"It's easy to find information there."(*Interviewee #7)*

However, some of the interviewees identified problems with usage from the perspective of their users. Below are the comments they made:

"But if you are not an expert, you may have problems in searching." (*Interviewee #2*)

"It's ok to use, but it's not consistent. Not all the points are in all the languages, and it's therefore hard for me to guide foreigners around in their own languages when the portal is not the same for all the languages." *(Interviewee #4)*

When respondents were asked whether, users requested their assistance in the use of Bazar, out of 11 respondents, majority of them indicated rarely (8) and 2 pointed out that they do few times in a month and one said he/she doesn't know. The possible reason for rarely may be that most of the users do not use the Bazar in the library and possibly don't know much about the Bazar portal. However, with two librarians indicating few times in a month also shows some level of difficulties that the library users experience in using the Bazar portal.

These results showed that librarians have less difficulty in searching the Bazar because of they are experts but identified possibilities of challenges when it comes to their end-users. This indicates the need for an improvement of the interface of Bazar portal in terms of easy navigation.

Layout

It was noted by a respondent that the Bazar portal is organized. One librarian expressed her likening towards the layout of the portal especially the tiny little flags on almost each the page of the portal which facilitates easy navigation. However, one interviewee said that:

"The site is not very attractive…maybe a bit old and boring I think. If you don't know the usefulness of the service and you see the layout, you would be discouraged to go there." *(Interviewee #6)*

One librarian offered a recommendation that the Bazar portal should be made attractive. This is an interface design issue which needs to be considered in the restructuring of the Bazar portal.

4.6.2   ADEQUACY OF CONTENT

Issues around adequacy of the content were also raised, particularly in relation to their experiences with foreign citizens.

Figure 12: shows the response on the adequacy of the Bazar portal
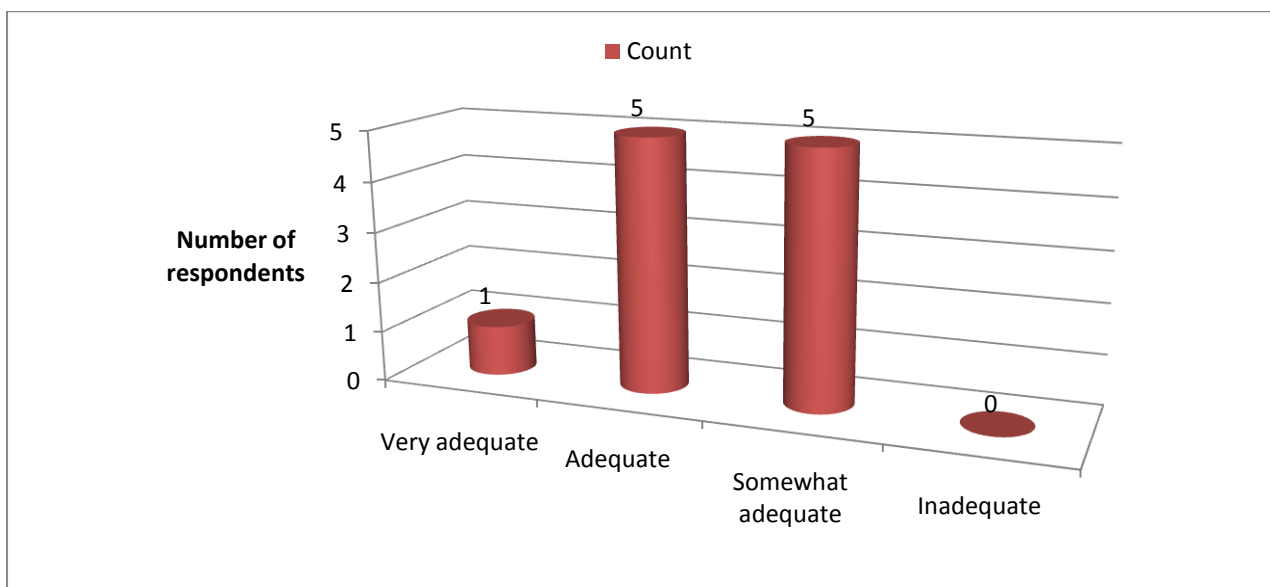
From the survey, out of the 11 respondents, a significant proportion of librarians value the content of the Bazar portal: five believe this to be "adequate" while a further five rate it as "somewhat adequate" and one person rated it as being very adequate. None among the

respondents rated Bazar portal as inadequate even though only one indicated of being very adequate.

One interviewee indicated that the portal should have more information in all the languages for all the defined group of users to enable them make good use of it. One librarian suggested that the Bazar portal should expand on its content by giving more options in search results.

4.6.3   RELEVANCE

Studies have shown that relevance is a predictor of information selection and use (Choo et al 2000), which needs to be considered in improving on usage of a portal system. Issues on relevance, bordering around immigrants needs and the Bazar portal were discussed in the interview. One interviewee expressed the issue of relevance clearly and said:

> "I think it's relevant, especially when you have users who are not familiar with Norway. And in getting them to become familiar with Norwegian culture they get a sense of security." (*Interviewee # 2*)

Most interviewees also highlighted the unique practicality of different language features that Bazar portal offer.
Issues affecting relevance with existing resources in the Bazar were also mentioned. One interviewee stated that:

> "It's relevant to have a Bazar portal, but when the information is not available in your own language, it's not that relevant." *(Interviewee #4)*

She indicated that almost all the links contained in the Bazar portal are in Norwegian which therefore requires the user to know and understand Norwegian in order for the portal to be relevant to him or her. Thus, language becomes a barrier in understanding and acquiring information for the user.

4.6.4 USEFULNESS OF BAZAR PORTAL

The issue of usefulness plays a major role in the use of portals. As Yang et al (2004) identified usefulness of information as one of the elements of information, which influence a person's decision to use a system or not. The concept of usefulness was discussed from an angle of Bazar being a tool for librarians in their work.

Most librarians interviewed clearly stated that the Bazar portal has something that the other portals they used do not have. However, they were not specific with what the "something" was.

One librarian commented that the Bazar portal is extremely useful in public libraries. She further indicated that since the public librarians are expected to find answers to any and all kinds of questions, this kind of library portal serve as a useful tool for the librarian.

The majority of the interviewees expressed their satisfaction towards the multilingualism of the Bazar portal in respect to the language. One interviewee commented:

> "When people come to the library and their English and Norwegian is not that good enough for us to understand them, we then try to use Bazar to help them find information in their own languages." (*Interviewee # 6)*

In addition, one librarian from the survey stated that he/she uses Bazar portal as a tool for translation for users of the library. Thus, Bazar library portal serves as a help tool for librarians in meeting requests from different backgrounds of immigrants groups.

4.7   PUBLICITY AND USER AWARENESS

4.7.1   AWARENESS OF LIBRARY PORTAL CONCEPT

Figure 13: shows response on the familiarity of library portal
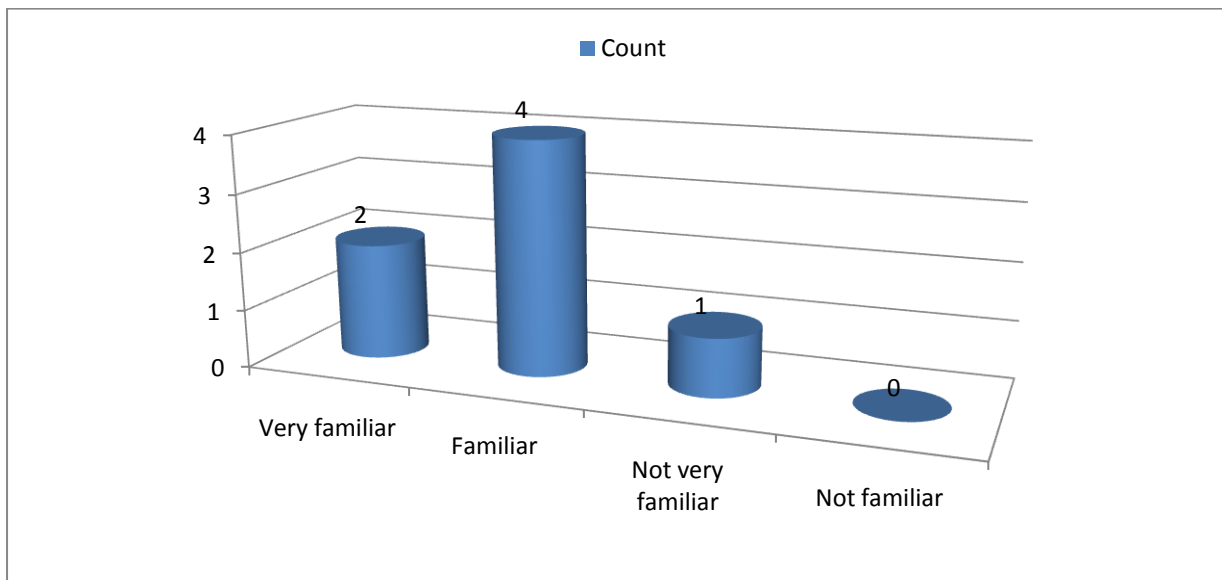
The non users of Bazar were asked about their familiarity with the concept of library portals. The question was preceded by a short paragraph describing what is commonly understood by the term in order that the questions could be considered from a common starting point to all respondents. The majority of them indicated to be familiar with the concept. The results are presented in the Figure above. Relatively few librarians (2) are "very familiar" with library portals, whereas four (4) were familiar and only one said, not familiar.

When asked about what libraries have done so far to promote awareness of library portals within their employees, half of the respondents indicated that library portals have been promoted to them by their libraries whilst the other half indicated that nothing has been provided to their understanding of library portals. The results in the survey have been presented below.

4.7.2   PROMOTION AND PUBLICITY

Figure 14: The response on the kinds of resources which has been provided by libraries in creating the awareness of the library portal
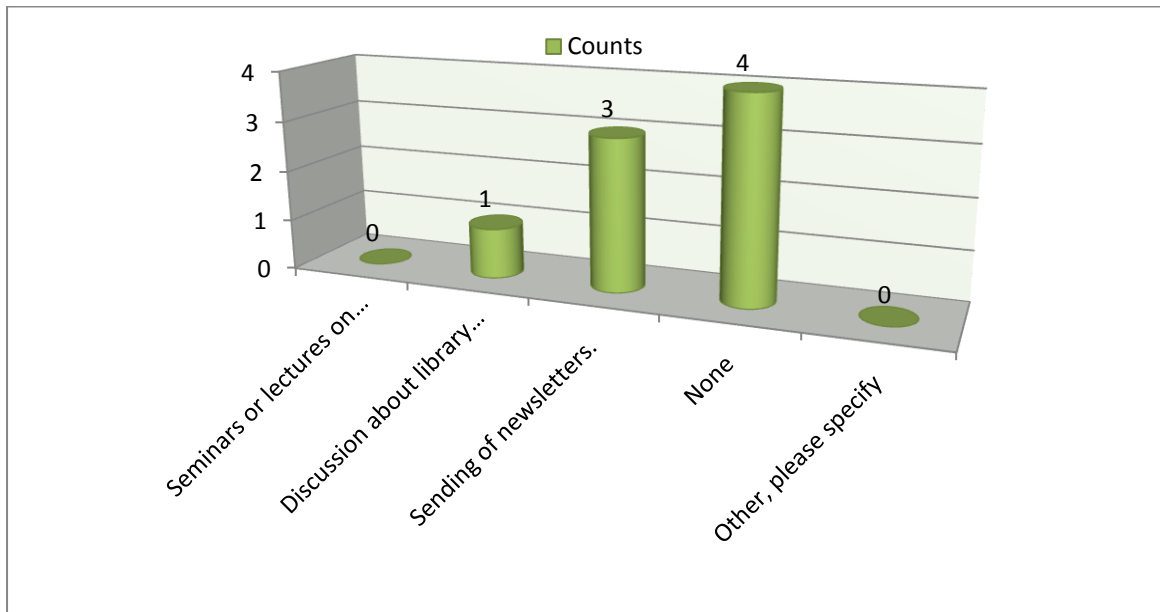
In the interview user awareness and promotion of the service of Bazar portal was one of the most discussed issues within service improvement. Most of the librarians mentioned the need to market Bazar portal service both within and outside the library institution.

Most respondents from the survey indicated that they were not familiar with the Bazar portal. One respondent made an interesting comment that:

> "If I am not familiar with it (.......) it would not be the first thing I would show users."(*Interviewee #6)*

Another instigated the need to actively promote it.

The majority of interviewees provided some suggestion on promoting Bazar which included: sending of newsletters, formal demonstration sessions for librarians, use of posters, brochures, pamphlets and leaflets, as represented in the figure above. An interesting comment made by one of the respondent was:

"Make it more accessible from Google in its ranking level." *(Interviewee #5)*

They also indicated the importance of involving other institutions who are responsible for immigrants needs in the promotion and use of the Bazar service.

4.8 **CHALLENGES OF LIBRARIANS**

4.8.1 **TECHNOLOGY AND COMMUNICATION DIFFICULTIES**

Most librarians interviewed indicated that lack of technological and communications skills on the part of users were some of the challenges. Some users could not use computer and the internet and therefore found difficult in using the portal. For instance, one librarian commented that:

"if the immigrants don't know how to use the internet and the computer, then how would they be able to use the portal." (*Interviewee #2)*

And went further to suggest that training in using the computer and internet should be given to users in order to enable them use the Bazar portal.

Some librarians also indicated that problem of communication arises in situations where the library user can neither understand nor speak Norwegian or English. A librarian stated that:

"it can be hard to guide users in their own language." (*Interviewee 4 #)*

The same interviewee pointed out that documents or information and the descriptions given to the links on Bazar should be translated in the languages of the targeted users.

4.8.2 **KNOWLEDGE ON BACKGROUNDS OF USERS**

The challenges that were identified included librarians' knowledge on the backgrounds of users. One librarian highlighted that librarians working in the public library may not be able to give full scale of support to people if we don't know their background.

He stated that librarians will be able to give and provide the right content of information in Bazar when they are informed about the culture, and way of life of the users. He underlined the importance of verification and said:

"I don't know how many people in the library who know something about Ghana for instance and add to the Bazar, and even knowing and verifying as being correct or not. Knowing something about language, cultures are also important to know about the users." *(Interviewee #2)*

Another concern raised by this same interviewee was the problem of selecting a language for a country which has widely distributed languages. He commented that:

"What if you come from Group A of a tribe and you don't speak B and a language if Group B, would one use it and you are hostile against the other country, would you use it at all?" *(Interviewee#2)*

This result indicates the complexity that arises in meeting user needs and in that regards requiring librarians to be inclined to the culture of their users.

CHAPTER FIVE

5   SUMMARY, CONCLUSION AND RECOMMENDATION

5.1   SUMMARY AND CONCLUSIONS

This study was conducted to help in the restructuring of the Bazar portal in Deichmanske library. The study used interviews and an online survey as the research instruments. Interviews and survey were conducted among the librarians from the various branches of the Deichmanske library.

The main focus of this study examined librarians use and perception of the Bazar library portal. This study analyzed the use and non-use of Bazar portal, user requests encountered by librarians regarding their common needs and the kind of content the Bazar library portal should have to solve these requests. The study also identified different qualities of Bazar, suggestions on its content, promoting its use and the challenges that the librarians face while using the portal.

The following are summary of some key findings related to the objectives of the study:

In analyzing the common needs and requests encountered by librarians, the study results clearly point out Norwegian language help (17), Norwegian educational system (11), where to find a job (10), Norwegian culture (9), Norwegian health system(9) as the most mentioned problems and therefore significant content items of the Bazar portal. Others problems were indicated, though less selected, are some of the main problems or requests that the target portal users bring to the library. Bazar portal intends to cater for these and other related needs of immigrants groups as discussed in this study (see section 2.3.2)

A range of expected users of Bazar were identified by librarians and these included women/mothers, students, men, the elderly and children. One must however note that these groups of users are not mutually exclusive. Women/mothers were identified as the most significant group who mostly bring problems related to pregnancy and childbirth, health and educational issues. It is not unexpected to see some of their problems were highly rated by librarians.

After conducting the interviews and survey with the librarians in Deichmanske and analyzing the result gathered from both methods, it became clear that there is a low usage of Bazar portal

among librarians. Reasons given by some librarians for non use included; not familiar with the technology (Bazar), had not considered it as a library professional tool and did not find it useful. The biggest issue concerning this low usage of Bazar portal among librarians is lack of publicity and awareness. The question then is, if librarians who are the intermediaries and advisers are not familiar and rarely use the Bazar as a tool in meeting their users' needs, how then can they introduce and promote it to their user?

The study discovered that presently, most librarians use other sources of information for the same needs that Bazar portal is focused on. In determining this in the survey, the researcher integrated the results from the figure 4 and 7. (Refer to section 4.1.) . The result showed that librarians do not use the Bazar for some requests that they receive from users though the portal contains information for that. Interviewees also confirmed this by indicating a few information sources like Google, government portals, Wikipedia in helping their user.

However, the following suggestions were made by respondents as ways of encouraging their use, thus improving on the low usage of Bazar:

- Better marketing and advertising of its existence
- Creation of a manual on its use
- More user friendly
- Attractive layout
- Up to date links to content
- Improving on content to focus on children

Identifying quality in the Bazar portal was one of the objectives of this study. The details of this were explored in detail in Sections 4.3.2. The mentioned quality characteristics of the Bazar in this study were related to ease of use, layout, relevance and adequacy and usefulness. The librarians in this study made some suggestions for improving the quality of the Bazar during the interview sessions:

First, most of them indicated that it was easy to navigate, but pointed out that this was so because they are librarians (with a higher skill level), stressing the possibility that it would be a challenge for common users. Second, on adequacy, content in Bazar should be expanded in order to cater for the varied needs of minority immigrant population. Third, that layout should be more attractive and descriptions of labels should be translated into the different languages featured on

Bazar. Librarians also identified Bazar portal as a tool for translation and extremely useful in public libraries.

The findings of this study demonstrated that though a portal can be adequate, useful and relevant it can still be rarely used. Hoxmeier (1995) considers this issue to some extent in his article that a quality process does not necessarily lead to a usable product. This indicates that efforts and strategies must be put in place to make the product usable.

This study also discovered some challenges that librarians face as a result of using the Bazar as a tool in meeting users' needs, and these included among others; technology and communication difficulties and Knowledge on Backgrounds of Users.

Librarians' perceptions provided important information on common needs, content and ways of improving the use and quality of Bazar library portal services. This research pointed out the importance of the librarian as an intermediary who is able to identify user needs through requests encountered and provide suggestions on content in meeting those needs.

The outcome of this study should be useful in the restructuring of Bazar portal and the implementation of marketing and publicity strategies aimed at improving the use of Bazar among both librarians and end users. It is only when the right content, publicity and marketing processes and appropriate measures are implemented that the Bazar portal usage would be enhanced.

5.2   RECOMMENDATIONS

In view of the information gathered from the online survey and interviews and other literatures, the researcher came up with the following recommendations:

5.2.1   PUBLICITY AND PROMOTION

Given the level of use with the Bazar portal as shown in the result of this study, ignoring an active promotion and publicity of it will be disheartening and unproductive. Deichmanske library has done very little to ensure that the Bazar portal is effectively put to use by librarians and to fully serve the purpose for which it was built. However, if the goals of Bazar are "to facilitate the individual's transition from home to Norway, promoting integration into Norwegian society and to ensure contact with the home country's society, culture and language" are to be achieved, managers of the portal and other stakeholders in Deichmanske must adopt and implement

measures that in the short to medium term will reverse the current awareness and use of Bazar and any other service they may be providing as a library tool for librarians.

If librarians are not familiar or aware of the Bazar portal and the benefits it offers as a library tool, then they will not be able to take advantage of it. Librarians should be encouraged to take advantage from the portal. Therefore management or providers in charge of the Bazar portal should try to create a culture so that everyone in the organization knows about the intentions, services and advantages of it. The Bazar portal should be referred in annual reports, newsletters, during meetings, seminars and general discussions. All these will keep librarians updated and serve as constant reminders to using it often.

In the course of the interviews, the researcher realized that only a few of the branches had brochures on Bazar whilst others do not know about it. A sustained promotion is not only required for librarians but equally importantly, among the public (end-users, institutions in touch with immigrants population) in general. Librarians can also be asked to be an active part of Bazar portal promotion to users by giving out Brochures and leaflets. Posters and newsletters can also be disseminated to other institutions involved with immigrant groups and this should be constant. A portal cannot be significant and achieve the desired result until the management is Bazar is committed enough in doing all that is possible to promote its usage.

5.2.2   IMPROVEMENT OF CONTENT AND INTERFACE

Perhaps, addressing the problem of low usage of the Bazar portal among librarians in Deichmanske may require improvement on the content and interface of the Bazar. Librarians and end users will only use the portal if the content is relevant and easy to locate, if not they will perceive the portal as not useful. Thus it is very important that Bazar provides an easy interface and all the content that it expected users need.

Translation of descriptions: In order to make the Bazar easier to use and useful to librarians and end-user, description of links to published and search documents need to be translated in the various languages that the portal is focused on.

Layout: To attract and maintain users, it is recommended that designers reorganize their interface for a creative and an attractive layout of the Bazar portal.

Updating of content; In this regard, user needs and requirements should periodically be reviewed in order to see the changes and address them appropriately. In addition, dead links should be identified and updated regularly. There should be enough resources to ensure that there is a flow of new material into the portal.

5.2.3 TRAINING

A mechanism of training should be put in place to provide computer and internet training services to those library users who are unable to use the technology.

5.2.4 WORKSHOPS/SEMINARS

Workshops and seminars on the different cultural groups of users (Bazar) can be organised for librarians to improve on their understanding and knowledge of the backgrounds of users that they encounter.

5.3 FURTHER RESEARCH SUGGESTIONS

Since this study focused on analyzing the perception of librarians in Deichmanske library, it would be interesting to conduct similar research involving all librarians in the other public libraries in Norway as study population. This further research should analyze whether the results are the same between librarians from different Public libraries in the other parts of the country.

But for time limitation, it would have been an interesting outcome if the researcher had also conducted a study on the primary users of Bazar and compared their views with those of the librarians. This might have brought out the whole picture of the situation at hand. Thus, a further study in this area could be of valuable use.

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APPENDICES

APPENDIX ONE: SAMPLE OF EMAIL REQUEST TO RESPONDENTS

Dear Sir/Madam,

I am a student of the Oslo university college researching on the usage of library portals specifically the Bazar portal. I would like to kindly invite you to participate in a short online survey on the usage of library portals.

This survey intends to collect information on the perception/experiences of librarians on the use of portals.

Your participation and contribution will be useful to the restructuring of the Bazar portal of the Oslo Public library.

The survey takes a few minutes to complete. Please follow the link below to fill the questionnaire. Your views will be treated in the strictest confidence.

Thank you in advance for your valuable contribution.

Yours sincerely,

Esther Adu

Masters in Digital Library Learning

Oslo University College

APPENDIX TWO: ONLINE QUESTIONAIRES

Questionnaires for Bazar Users

1. Gender

○ Male

○ Female

---

2) Please indicate your Branch/Department in Deichmanske

○ Bjørnholt Branch

○ Bøler Branch

○ Furuset Branch

○ Gamle Oslo Branch

○ Grünerløkka Branch

○ Holmlia Branch

○ Majorstuen Branch

○ Nordtvet Branch

○ Oppsal Branch

○ Romsås Branch

○ Røa Branch

○ Smestad Branch

○ Stovner Branch

○ Torshov Branch

○ Rikshospitalet Patient Library

○ Central Lending and References Department

○ Music Department

○ Children and Youth Department

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3) Which kinds of problem related issues below have you encountered from users? Please check all that apply

☐ Where to find a job

☐ Taking care of the aged or elderly

☐ Norwegian Health system

☐ Norwegian language help

☐ Discrimination/Racism

☐ Educational system needs

☐ Visa related issues

☐ Medical assistance for refugees and asylum seekers

☐ Pregnancy and childbirth

☐ Parents and Children related issues

☐ Recreational information

☐ Learning Norwegian culture

☐ Religious issues

☐ Accomodation

☐ Domestic Violence

☐ Legal information help

☐ Other, please specify

---

4) Which group of users do you mostly receive such problems from? Select all that apply.

☐ Students

☐ Men

☐ The elderly

☐ Women/Mothers

☐ Other, please specify [   ]

---

5) Please indicate if you have used the Bazar library (of Diechmanske multilingual library) portal before

○ Yes

○ No

7) How often do you use this library portal?

○ Daily

○ Once or twice a week

○ Few times a month

○ Several times in a year

○ Rarely

○ Don't know

7) How often do you use this library portal?

○ Daily

○ Once or twice a week

○ Few times a month

○ Several times in a year

○ Rarely

○ Don't know

8) For what kinds of problems do you mainly use the library portal? Please select all that apply.

☐ Where to find a job

☐ Taking care of the aged or elderly

☐ Norwegian Health system

☐ Norwegian language help

☐ Discrimination/Racism

☐ Educational system needs

☐ Visa related issues

☐ Medical assistance for refugees and asylum seekers

☐ Pregnancy and childbirth

☐ Parents and Children related issues

☐ Recreational information

☐ Learning Norwegian culture

☐ Religious issues

☐ Accomodation

☐ Domestic Violence

☐ Legal information help

☐ Other, please specify

9) How often do users request assistance from you on the use of the portal?

○ Daily

○ Once or twice a week

○ Few times a month

○ Several times in a year

○ Rarely

○ Don't know

10) How often are you not able to find or retrieve content that you expected to be in the Bazar portal?

○ Daily

○ Once or twice a week

○ Few times a month

○ Several times in a year

○ Rarely

○ Don't know

11) Overall, how adequate is the content of the library portal for use with regards to your experiences with foreigners' problems?

○ Very adequate

○ Adequate

○ Somewhat adequate

○ Inadequate

12) If inadequate, in what respect? You have the option to respond in Norwegian

13) Have you had any problems using the Bazar portal?

○ Yes

○ No

14) If yes, please indicate the kinds of problems. Please check as appropriate

☐ Yes, I spend too much time in searching for information or resources which I know are available.

☐ Yes, the portal doesn't seem to contain the information or resource that I need for my work.

☐ Yes, the pages are slow in loading.

☐ Yes, there seems to be some dead links

☐ Other, please specify [   ]

15) Overall, how easy do you feel it is to use the library's portal system to find information resource for users?

○ Very Easy

○ Somewhat Easy

○ Undecided

○ Somewhat Difficult

○ Very Difficult

16) Please tell us what you like most about the Bazar library portal. (You have the option to respond in Norwegian)

17) Please tell us what, if anything, can be done to improve the library portal. (You have the option to respond in Norwegian)

Questionnaires for Bazar Non-Users

1. Gender

○ Male

○ Female

---

2) Please indicate your Branch/Department in Deichmanske

○ Bjørnholt Branch

○ Bøler Branch

○ Furuset Branch

○ Gamle Oslo Branch

○ Grünerløkka Branch

○ Holmlia Branch

○ Majorstuen Branch

○ Nordtvet Branch

○ Oppsal Branch

○ Romsås Branch

○ Røa Branch

○ Smestad Branch

○ Stovner Branch

○ Torshov Branch

○ Rikshospitalet Patient Library

○ Central Lending and References Department

○ Music Department

○ Children and Youth Department

---

3) Which kinds of problem related issues below have you encountered from users? Please check all that apply

☐ Where to find a job

☐ Taking care of the aged or elderly

- ☐ Norwegian Health system

- ☐ Norwegian language help

- ☐ Discrimination/Racism

- ☐ Educational system needs

- ☐ Visa related issues

- ☐ Medical assistance for refugees and asylum seekers

- ☐ Pregnancy and childbirth

- ☐ Parents and Children related issues

- ☐ Recreational information

- ☐ Learning Norwegian culture

- ☐ Religious issues

- ☐ Accomodation

- ☐ Domestic Violence

- ☐ Legal information help

- ☐ Other, please specify [＿＿＿＿＿＿＿＿＿＿＿＿]

---

4) Which group of users do you mostly receive such problems from? Select all that apply.

- ☐ Students

- ☐ Men

- ☐ The elderly

- ☐ Women/Mothers

- ☐ Other, please specify [＿＿＿＿＿＿＿＿＿＿＿＿]

---

5) Please indicate if you have used the Bazar library (of Diechmanske multilingual library) portal before

○ Yes

○ No

6) If no, for what reasons

☐ Had not considered it as a library/professional tool.

☐ I use other methods of locating such information for users.

☐ Not familiar with the technology

☐ I did not find it useful.

☐ Other, please specify

Brief definition: For purposes of this survey, the term "portal" describes a variety of web based interfaces, everything from a relatively static homepage with general product and contact information to a dynamic one-stop homepage where users can customize the content to meet their needs. Portals typically include search engines and large directories of websites.

7) To what extent are you familiar with the above concept?

○ Very familiar

○ Familiar

○ Not very familiar

○ Not familiar

8) Has any of the following resources been provided by the library to increase your understanding of library portal systems? Please check all that apply

☐ Seminars or lectures on library portals.

☐ Discussion about library portal with departmental library representatives.

☐ Sending of newsletters.

☐ None

☐ Other, please specify [   ]

9) In general, what kind of expectations would you have for the content of a library portal designed for immigrant populations or foreign citizens? Please tick all that apply and add some if possible

☐ Work related issue

☐ Pregnancy and Childbirth

☐ Marriage and Family related issues

☐ Welfare Centers

☐ Norwegian Health system

☐ Learning Norwegian language

☐ Norwegian Educational system

☐ Visa related issues

☐ Recreational information

☐ Learning Norwegian culture

☐ Religious issues

☐ Accomodation

☐ Human rights Issues

☐ News (from various countries of origin)

☐ Racism and Discrimination

☐ Other, please specify [   ]

10) Please select from below some suggestions about library portals which would encourage you to use them in your work.

☐ Better marketing and advertising of its existence.

☐ Creation of a manual on its use.

☐ User-friendly

☐ Current and up to date links to content information.

☐ Other, please specify [   ]

---

11) Kindly provide your email so I could contact you for a follow up interview

APPENDIX THREE: SAMPLE OF LETTER OF INVITATION FOR INTERVIEW

Dear Sir/Madam,

I am a student of the Oslo university college researching on the usage of library portals specifically the Barzar portal. My supervisor is Ragnar Nordlie of Oslo University College (Ragnar.Nordlie@jbi.hio.no). This research intends to collect information on the perception/experiences of librarians on the use and quality of the Barzar portal through the unique perspective of the librarian.

I would like to kindly invite you again to participate in the follow up interview as requested after the previous survey on the Barzar portal. Your participation and contribution will be useful to the restructuring of the Barzar portal of the Oslo Public library and helpful to my thesis. Your views will be treated in the strictest confidence.

It will be greatly appreciated if you could schedule and complete this interview by Wednesday 19th May 2010.
Thank you in advance for your valuable contribution.

Yours Sincerely
Esther Adu
International Masters in Digital Library Learning
Oslo University College

APPENDIX FOUR: INTERVIEW GUIDE

Brief Introduction

This research intends to collect information on the perception/experiences of librarians on the use and quality of the Bazar portal through the unique perspective of the librarian. The aim of the Bazar portal service is to promote and encourage integration and active participation of immigrants in the Norwegian society through access to information on Bazar. It's also to help immigrants keep in touch with their home land and provides them with other relevant information.

Your participation and contribution will be useful to the restructuring of the Bazar portal of the Oslo Public library (Deichmanske Bibliotek) and helpful to my thesis. Your views will be treated in the strictest confidence.

Motivation

> For what specific reasons did you use the Bazar portal or what motivates your use of the Bazar portal?

For what kinds of questions do you mainly use the Bazar library portal?

> How useful is the Bazar portal in your opinion as a librarian?

Expectations and satisfaction

> Recalling from your interactions with the Bazar portal; does it fulfil your expectations (having foreign citizens as targeted user groups)? Example in terms of :
> Relevance
> Adequacy
> Ease of use
> Give reasons?
> In your dealings with foreign population, what kinds of information would you say are missing in the Bazar portal? What exactly?

> Do users ask for information which you cannot find in the Bazar library portal? If yes, what exactly....

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What do you like about the Bazar library portal?

1. In your opinion, what developments would enhance or improve the use of the Bazar library portal?

   Any other general comment in relation to library portals or the Bazar portal in particular?

A short Interview Guide for portal managers

1. Can you tell me something about new Bazar? Aims, objectives…

2. How did you know that the old Bazar encountered problems? What is the motivation for its upgrading?