2012: The DBS Library Website Odyssey
An evaluation based on users’ feedback

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3.4.1 Survey structure and procedures ......................................................... 23
3.4.2 The survey’s participants ................................................................. 24
3.4.3 Ethics ............................................................................................. 25
3.5 Research choice ..................................................................................... 25
3.6 Data analysis .......................................................................................... 26
  3.6.1 Analysis of demographics ............................................................... 26
  3.6.2 Analysis of close-ended questions ..................................................... 27
  3.6.3 Analysis of open-ended questions ..................................................... 27
3.7 Limitations ............................................................................................ 27
3.8 Conclusion ............................................................................................ 28

Chapter 4: Results ....................................................................................... 29

Chapter Summary ....................................................................................... 29

4.1 Demographics ....................................................................................... 29

4.2 Evaluation of DBS library website ....................................................... 36
  4.2.1 Context of use (content and design) ................................................... 37
  4.2.2 Clarity, utility and assistance of the website (usability) ...................... 38
  4.2.3 Clarity ............................................................................................. 38
  4.2.4 Utility .............................................................................................. 40
  4.2.5 Assistance of the website ................................................................. 43
  4.2.6 Links to intranet and internet (services) ............................................ 45
  4.2.7 Intranet services ............................................................................. 45
  4.2.8 Links to internet .............................................................................. 48

4.3 Open-ended questions ........................................................................... 50

4.4 Conclusion ............................................................................................ 52

Chapter 5: Discussion .................................................................................. 54

Chapter Summary ....................................................................................... 54

5.1 What is the context of use (reasons) of the DBS library website? .......... 55
  5.1.1 Participants’ academic provenance .................................................... 55
  5.1.2 Access the DBS library website for intranet services ....................... 56

5.2 How do users feel about the site (visual appeal, language, technical aspect, etc.)? 56
  5.2.1 Visual appeal of the DBS library website ......................................... 56
  5.2.2 Language of the content of the DBS library website ....................... 57
  5.2.3 Technical aspect of the content of DBS library website ................. 58

5.3 Are the participants satisfied with the resources and services offered by the site? 58
  5.3.1 Links to external information within the DBS library website .......... 59
5.4 Is the users’ academic success linked to the library website?................................. 60
  5.4.1 Survey participants in detail.............................................................................. 60
  5.4.2 Survey questions analysis.................................................................................. 60
  5.5 What suggestions do users have to improve the current site?................................. 61
  5.6 Conclusion............................................................................................................... 62

Chapter 6: Conclusion & Recommendations.................................................................. 64
Chapter Summary............................................................................................................ 64
  6.1 Positive feedback....................................................................................................... 64
  6.2 Negative feedback and recommendations................................................................. 64
  6.3 Future researches about this topic........................................................................... 65
  6.4 Conclusion................................................................................................................. 66

Chapter 7: Self-Reflection on Learning and Skills Development.............................. 67
Chapter Summary............................................................................................................ 67
  7.1 Learning styles and the learning cycle...................................................................... 67
  7.2 Approaching the research topic................................................................................. 70
  7.3 Designing the survey and writing the content........................................................... 71
  7.4 Plans for the future?................................................................................................... 72
  7.5 Conclusion................................................................................................................. 72

Bibliography.................................................................................................................. 73

Appendices..................................................................................................................... 77
  Appendix A: Survey........................................................................................................ 77
Figures and Tables

Figures
3.1: Objectives of the research.......................................................... 18
3.2: The Research Onion............................................................... 19
4.1: Participants’ subject area......................................................... 30
4.2: Age groups and if attended college in the past......................... 32
4.3: Participants’ work situation..................................................... 33
4.4: Column chart relationship between participants’ address and accessing website... 34
4.5: Accessing the Library website from a smartphone..................... 34
4.6: Type of Internet connection.................................................... 35
4.7: Frequency of accessing the Library web site............................ 36
4.8: Level of accessing the subject portals....................................... 37
4.9: Rating the appearance of the website....................................... 38
4.10: Rating the vocabulary used on the Library web site.................. 39
4.11: Rating the information offered on the Library web site.............. 40
4.12: Research-benefit of the Library website................................. 41
4.13: Utility of web site in participants’ academic successes............... 42
4.14: Utility of web site in participants’ lives.................................... 43
4.15: Quality of support given by “Search Electronic Resources”......... 44
4.16: Quality of support given by librarians on the web site.............. 45
4.17: Intranet services: OPAC, databases, reference materials, etc........ 47
4.18: Level of accessing the Library website for information about the services offered 47
4.19: Level of accessing the Library website for information about policies, contact details, etc.......................................................... 48
4.20: Level of utilising widgets embedded in the Library website........ 49
4.21: Gauging links to external information embedded in the Library website.... 50
7.1: The learning cycle.................................................................... 68
7.2: Learning styles and the learning cycle....................................... 69

Tables
4.1: Cross tabulation of subject area and course level........................ 30
4.2: Cross tabulation of subject area and course mode..................... 31
4.3: Cross tabulation relationship between participants’ address and accessing website 33
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Abstract

Academic libraries play a decisive part in advocating universities to fulfill their targets in teaching and researching. Therefore they have been the pulsating heart for the last couple of centuries of many institutions and students have relied greatly on their collections, their reading-rooms, their equipment and their services. With the integration of electronic collections, libraries have begun to offer their services through their library websites, which are the virtual gateways to information.

The purpose of this dissertation is to determine the extent to which the DBS library website meets the needs of its users; hence it is an evaluation of the website from the users’ perspective. The research objectives were achieved by applying a mixed-methods deductive approach in collecting, analysing and discussing the data. An intranet web-based survey with closed and open-ended questions has been designed and emailed to various DBS students and staff. The goal of the survey was to gather opinions from users about a list of characteristics of the website such as: design, content, technical aspects, internet/intranet links and the impact the site has had on their academic success.

The broad trend of the research findings indicate an easy-to-access Library website and a positive perception of its resources and services, albeit with some technical and design shortfalls. Some users did not wish to assess the quality of support given by librarians within the website and some admitted to never utilising tools like ‘Ask a Librarian’ or Library blog and links to Facebook or Twitter. In addition, the website was described as the nexus to its users’ academic successes.

The research provides current users’ feedback about the DBS library website and it is hoped that the findings of this research will be of interest to library staff endeavouring to apply beneficial changes that will meet users’ requirements.
Chapter 1: Introduction

I don’t see how an epigram, being a bolt from the blue, with no introduction or cue, ever gets itself writ.
(William James)

Chapter Summary
The content of this chapter will comprise the background of the study with a brief overview of the history of Dublin Business School (DBS), the DBS library and the reasons which led to choosing the research subject area with the aims intended to be achieved. This is followed by a concise introduction of the research methodology with the major contributions and limitations of the study. The organization of the thesis will conclude this introductory chapter.

1.1 Background
DBS was founded in 1975 as an institution offering evening courses for those students who were to sit examinations of the professional accounting bodies (History of DBS, no date). Since then it has expanded so much that it has evolved into the largest independent third-level institution in Ireland with over 9000 students from Ireland and abroad (Welcome to Dublin Business School, no date). DBS programmes include Honour Degrees, Higher Diplomas and Masters Programmes in Business, Marketing, Arts and Law (History of DBS, no date).

DBS Library consists of an Undergraduate library based at Aungier Street and a Postgraduate/Law library located at Dame Street. The library collection comprises over 50,000 books, 194 print journals, in excess of 750 e-book titles, 45,000 full-text electronic journals and an extensive portfolio of online databases (About the Library, no date). Every library information resources can be retrieved locally or remotely. Library staff strives constantly to introduce any latest technology for users’ convenience. An example has been the recent addition of Radio Frequency IDentification (RFID) self-service stations, which allow individuals to check out, renew and return multiple library items (About the Library, no date).

Why did I decide to engage in this sort of research for my thesis?
Belonging to a non-tech savvy generation, I have always been fascinated by the data and information arrangement within databases and web sites. It is well known that nowadays the World Wide Web has grown to be a source of knowledge and a potential substitute of information services offered by libraries (Qutab and Mahmood,
2009). However, since libraries entered the virtual environment of web sites in the 1990s, their users tend to visit library websites much more than going to their physical locations (Qutab and Mahmood, 2009; Aharony, 2012).

Why evaluating an academic library web site from users prospective? Because academic library web sites have become “the gateways to information that support faculty and student research” (Liu, 2008, p. 6), I was eager to find out how students from various faculties, and staff assess this tool, which is utilised daily for their research and their academic success.

The factor that focussed my attention on developing a study based on an analysis of the DBS library web site was an Information Technologies (IT) assignment that required creating a library web site from scratch. During the course of this project I looked at the structure of a web site thoroughly and realised that information professionals need to keep abreast of coding and the content management systems of websites to be successful in their field. In order to create a fictional and useful website, I concentrated on those elements I would like to have available on a library web site while researching for an academic task, hence the project could be defined as being a user-centred. Since this assignment required a certain level of technical knowledge for designing the site, I asked myself how a user would perceive my information architecture and if I was able to meet his/her requirements. For this reason, I started to read studies from the wealth of literature examining how students and academic staff rate a library web site (Kayongo and Helm, 2010; Rogers and Preston, 2009; Hoffmann et al., 2008; George, 2005). It was obvious that there is a lack of similar evaluations carried out in private colleges in Ireland and internationally, so my aim is to fill in this gap. In addition, one of the first papers I came across covers legal information and its management and distribution within an academic law library in Nigeria, a country where new technologies have been adopted to keep up with the fast pace of globalising legal information (John-Okeke, 2008). This prompted me to verify if the same has been applied within the DBS library website. Therefore I targeted the law faculty within DBS, from which I obtained a satisfactory response to my intranet survey.
1.2 Method and scope
The research objectives were achieved by applying a mixed-methods deductive approach in collecting, analysing and discussing data. An intranet web-based survey with closed and open-ended questions has been designed and emailed to various DBS students and staff using the online tool Survey Monkey. This was a pragmatic choice due to time restrictions and the difficulty in reaching a group of various participants. The goal of the survey was gathering opinions from users about the library website, specifically about a list of characteristics such as: design, content, technical aspects, internet/intranet links and the impact the site has had on their academic success.

The scope of the research was attaining suitable ways of evaluating an academic library web site via the literature review, which were applied to this analysis of a private Irish college library website. In addition, it is hoped that the findings of this research will be of interest to library staff endeavouring to apply beneficial changes that would meet users’ requirements.

Time constraints have been the major limitation of this research, hence I was not able to organise focus group interviews which may have provided a broader view of the library users’ thoughts. I was hoping to gather several detailed opinions through the open-ended questions of the survey, but only a few respondents went into depth in their answers. In addition, I have had some difficulties in spreading the survey across each faculty at DBS, resulting in having no response from certain groups of students and staff. Lacking sufficient time and knowledge about the specific topic of services for individuals with impairment were the reasons why I did not include questions about this in the web-survey. Therefore, assessing the use of disability services contained in the homepage of the DBS library website could be examined in future studies.

1.3 Thesis structure
Chapter one (Introduction) covers the reasons behind the research topic, introduces the research methodology, scope, its aims and how they were achieved.

The second chapter (Literature Review) sets up the purposes of carrying out a literature review within a research study along with exploring the available material
about each variable. It also provides corroboration of the selected methodology applied for this research.

The successive chapter (Methodology) contains the methodology utilised to conduct the research, including the way of gathering and interpreting data. The chapter opens with the research questions and objectives, followed by a summary of the main elements of the research process and its layers, where the choice of a mix-methods approach for this study is explained. Followed by an outline of the criteria used to develop the survey, how it was deployed and how the ethics were dealt with. Consequently, there is a summary of the procedure applied to interpret the data and the type of selected analysis to present the results. Finally, it is introduced a brief description of the limitations incurred during the research.

Chapter four (Results) presents the findings of the collected data, with descriptive statistics displayed on graphs and tables. It opens with the outline of rate relative to demographics. The next section describes the findings in relation with the main themes of this study: context of use (content and design); clarity, utility and assistance of the website (usability); links to intranet/internet (services). This chapter concludes with the analysis of the results obtained for the open-ended questions of the survey.

The discussion chapter scrutinises the findings from the survey in relation to the initial questions of the research, set against the results from the literature review, with the purpose of resolving the research questions. The chapter is structured in 5 sections and relative subparagraphs, in line with the 5 research questions. The most important findings are brought as examples and analysed critically in comparison with the results from similar studies from the literature review.

The sixth section (Conclusion and Recommendations) is dedicated to drawing the key conclusions of this research, based on the findings and their analysis along with an attempt to convey recommendations for the library staff and for future studies.

Chapter seven depicts the stages of personal skills development throughout the Master’s course and the thesis program. A personal reflection is emphasised along with the detailed challenges experienced during the various stages of this research.
This part ends with a description of methods to apply the apprehended skills into a future career path.

The bibliography and the appendices, with the questionnaire compiled to gather data for the research, bring to the end of this thesis.

**1.4 Conclusion**

The scope of this thesis is to use the findings of the research to convey an evaluation of the DBS library website from the users’ perspective; identifying areas of concern resulting from the participants’ responses and supporting proposed improvements. Throughout the duration of this research it was ascertained that there is a plethora of publications about benchmarking an academic library website. However, the number of studies carried out on Irish private colleges and their library websites is somewhat confined.

The next chapter will sum up some of other similar studies carried out within several international academic libraries.
Chapter 2: Literature Review

Twice and thrice over, as they say, good is it to repeat and review what is good.
(Plato)

Chapter Summary

The following literature review will examine the findings from the research into the factors used to evaluate an academic library website as an appropriate tool for students and staff. The first paragraph will introduce the importance of a literature review when conducting research and the three aims of this study will be used as a basis for reviewing the literature. The second paragraph will introduce an investigation of international research in the context of using an academic library website and how content and design impacts on users’ feedback. The third section will examine the link between the quality and usability of an academic library website. The last paragraph will present an overview of some services offered by different academic library websites and how their users respond to them.

2.1 What are the purposes of a literature review?

A literature review of past studies similar to the chosen topic generally provides the basis to justify the research questions and build the design of the study (Bryman and Bell, 2007). To be more specific the following four goals characterise a literature review:

- To refine the research aims.
- To widen the author’s perception in the research subject.
- To ameliorate the study methodology.
- To contextualise the research findings.

(Kumar, 2011; Pickard, 2007)

Completing a literature review implies a better understanding of the research topic by discovering what research has previously been completed in the area, how it was done, and the issues raised by this research (Hart, 1998).

This literature review aims to explore research into the functionality of an academic library website, based on the following topics:

- Context of use (content and design)
- Clarity, utility and assistance of the website (usability)
• Links to intranet and internet (services)

2.2 Context of use (content and design)
As mentioned before, an academic library web site is the presentation of the institution to the virtual world and is the gateway to knowledge that supports research accomplished by the university’s students and staff (Liu, 2008). Carrying out such a significant role implies that the content of an academic library web site should be organised with clarity and be user friendly. A research study on a number of academic library websites introducing “a yet unexplored dimension” (Aharony, 2012, p. 766), was carried out in the US over a period of 10 years from 2000 and compared 31 homepages. The first stage of this investigation involved utilising the Internet Archive - a digital library which collects web pages worth saving and information related to them - to select the academic library homepages that were also current at the time of the study (Aharony, 2012). The findings of this comparison unveil detailed changes that occurred in 10 years during which e-journals and Web 2.0 applications have become a core of these websites’ content, so that the design has been organised accordingly (Aharony, 2012). In addition, these libraries users’ opinions have turned out to be fundamental since 2000 in order to introduce modification to graphics and the design of their websites (Aharony, 2012). The researcher concludes her article by recommending increasing the 10 year comparison and introducing public libraries and/or international academic library websites (Aharony, 2012).

2.2.1 Web Content Management System
Since organising information in an academic library website is a tortuous operation, most universities tend to use a Web Content Management System (CMS) in order to gather, arrange, categorise and structure noesis in accordance with the institution’s needs (Black, 2011). Often these systems have to be specifically created, such as at the Ohio State University (OSU) Library. Building a CMS for a library requires “a dedicated in-house programming staff who would take on such an endeavour” (Black, 2011, p.186). Black’s study originated from the many content providers and web editors that were bewildered by the myriad file types and their design; hence the need to develop a system to allow content providers to concentrate on their content and leave the technical side to others (Black, 2011). In order to gather the requirements for creating the CMS necessitated by the OSU libraries, this study starts
with interviewing focus groups composed by the current content providers. The general inclination resulting from the collected data is to allow web content authors direct access to housekeep the web content without demanding HTML expertise from them (Black, 2011).

2.2.2 Website designers’ or users’ opinion?

It is a common theme that users are more likely to utilise a website that contributes to the completion of their tasks, hence the importance of a comprehensive design whose practicality should be assessed by the users (Kim, 2011). The success of a website is taken from the designer and its users’ opinions, which are not often on the same wavelength. In fact as indicated in Kim’s study, most web designers tend to rely more on their own personal judgment or from other technical experts about the usefulness of an academic library website, rather than the users’. Therefore the natural consequence within an academic context would be students turning to commercial websites for their research. Kim’s study (2011) concentrates on showing which factors make an academic library web site a success. For this, the data was collected from two groups of people: the current website designers from the University of Oklahoma, Tulsa, and the users (students from various levels). The website designers’ team were observed while planning and developing the library website, whereas a survey was sent around the faculties to gather students’ thoughts. The findings of this study confirmed that web designers consider their web site to be highly successful online and amongst users, primarily because it meets and satisfies users’ needs. According to the data, the respondents seemed to be aware of the usefulness of their university website, but they also admitted to rely on commercial web resources for their academic tasks rather than the library website (Kim, 2011). Therefore this study shows that the designers should consider essential the users’ opinion about a web site utility. In addition to this, Tulsa University information managers should conduct regular surveys amongst the users to “facilitate the utilization of the university library website resources” (Kim, 2011, p. 105).

2.2.3 What is relevant to include in a Library website esign?

In Pakistan, Qutab and Mahmood (2009) compared a number of academic and other specialised library web sites to analyse their content and navigational strengths and weaknesses, in order to give recommendations. This study was the first of its kind and the non-presence of a directory of library websites in Pakistan meant that the
researchers had to rely upon browsing the web. They employed a web based survey and an analysis based on a set checklist with 77 items divided into 10 categories to be tested (Qutab and Mahmood, 2009). Pakistan has seen an increase in web site usage for academic institutions since the mid-90s, for this reason some of the samples considered did not fit well into the international standards for a university web site and most did not seem to fulfill their users’ information needs (Qutab and Mahmood 2009). Hence the researchers conclude their article with a checklist to be used when developing or improving an institution website. In addition to this, it is suggested to train and involve librarians in web technology, because a good number of the analysed library web sites had their content not organised for a library promotion or marketing, for example functions like the OPAC, reference, circulation or other interactive services were not included in their content and design (Qutab and Mahmood 2009).

2.2.4 A design conceptual model
Some studies focused on design and content, for example, Liu (2008) examined 111 academic library websites in the USA and their use of modern features such as Web 2.0 tools, differentiating from the aforementioned analysis carried out by Aharony in 2012. The researcher compiled a conceptual model – that included 3 parts: Library Homepage, Portal Page for Undergraduate Students and My Library Space - for future academic websites, stressing the importance of involving user’s participation in improving the services offered by the website (Liu, 2008). Consequently, users would enter the site not only to search or gather information but “also to collaborate and share ideas” (Liu, 2008, p. 10). The author’s recommendation of creating portals within the library homepage for different groups of students, such as graduates from Business, would trigger the user’s input to improve services or resources (Liu, 2008). Therefore the content of the homepage in a particular area would be adjusted correspondingly. Also, future academic library web sites should “respond to users’ changing needs and give users a chance to express, share and learn” (Liu, 2008, p.14).

2.3 Clarity, utility and assistance of the website (usability)
2.3.1 Usability and quality of an academic library website
What is usability? It is the margin to which a product can be utilised by users to accomplish a target efficiently within a context (Poll, 2007). In other words, the
academic success of an academic library website for students and staff should be strictly dependent on their university library website, instead of commercial web sites such as Google or Wikipedia (George et al., 2006). There have been many studies carried out to confirm the impact that the quality of an academic library website has on usability. An example is the large study carried out by Morton-Owens (2011) in the New York University Health Science Libraries, whose results confirm that users’ experience of a website impacts positively on their opinion about the organisation.

Analysing the library web site usability can assist librarians and web developers to allocate information in ways that match the users’ seeking behaviours. Some academic library websites have been re-designed based on their clients’ feedback, an example of which is the Main Library site of St Augustine Campus in the West Indies (Rogers and Preston, 2009). The authors based their multi-method approach on a web-survey, focus groups, card sort and usability testing, in order to assess positive and negative characteristics of the present site and to discover how users find information (Rogers and Preston, 2009). The findings of this study have helped designers and developers to implement changes to satisfy users’ perception of a good, manageable academic website, including modifying the OPAC (Online Public Access Catalogue), re-labelling and reorganising the site’s content. The researchers conclude their article with a series of recommendations as well as usability training for staff (Rogers and Preston, 2009).

2.3.2 Clarity and assistance of an academic library website

Several key weaknesses in relation to navigation, design, labelling visual elements, search options and usability emerge from an analysis of the library web site of a public university in Pennsylvania: Carnegie Mellon University Libraries (George, 2005). The research methods included a multiple choice, rating scales web survey and think-aloud protocols, which resulted in quite a long procedure. However, involving a diverse group of people (library personnel, students from various levels and faculties and a design team), it produced valid results for redesigning the site (George, 2005). This study has proved how much attention is attracted by the colours and the design of a web site and the redesign of a website should endeavour consistency in font, colour and size (George, 2005). Another aspect, that was found by the think-aloud protocols, is the route users take to navigate the library site, to search databases and their preference for particular keywords. Many participants in this research study
indicated that the information labelling was so unclear on the website that it often led them to be “stuck in a loop”, hence the request for de-cluttering its homepage arose from the majority (George, 2005).

2.4 **Links to intranet and internet (services)**

The services offered by an academic library website are one aspect of those types of sites that tends to be shaped according to customers’ feedback. An example of which is provided by the study carried out in Wellington, New Zealand, at the Victoria University (Stevenson *et al.*, 2012) over a period of a year (2010-2011). This research study begins with the premise that the “libraries users are a good source of knowledge about their wants and needs” (Stevenson *et al.*, 2012, p. 470). For this reason the method involved a web based questionnaire followed by focus group interviews, which were the means to obtain realistic data from library users (Stevenson *et al.*, 2012). The importance of a survey for research within libraries is mentioned throughout the paper. Engaging with customers is another highlighted aspect of this study, an example of which is a wide whiteboard left at the entrance of the university library where staff used to annotate “updated information on daily disruptions and users could add their own ideas regarding changes to revamp the space and/or ask questions” (Stevenson *et al.*, 2012, p. 8). The library demonstrates that modifications have been introduced to the library web site and services, and that they were coming directly from the feedback gathered during the research (Stevenson *et al.*, 2012).

2.4.1 **Web 2.0 tools in an academic library website**

Amongst the wealth of studies about web-based information services provided with the use of modern technologies such as Web 2.0 tools, there are a couple that are worth noting: one carried out on a group of 14 academic library websites in Sri Lanka (Wickramanayake, 2012) and another similar study done on a number of universities in South India (Balaji and Kumar, 2011). The findings from both research groups prove how academic library websites need to keep pace with modern technologies and optimise their services to have the upper hand over the use of commercial search engines like Google, often preferred by students for its easy-to-use characteristics (Critz, *et al.*, 2012; Balaji and Kumar, 2011; George, *et al.*, 2006; De Rosa *et al.*, 2005). In Sri Lanka the analysis highlighted a general lack of library skills and information literacy amongst university students, confirming that librarians do not
consider themselves as those who should deliver tutorials on how to use the available library services to improve the students’ academic success (Wickramanayake, 2012). However, at the same time both studies, although taking place in two different countries, show that “the development of online services is still in its infancy as compared to those of international experience” (Wickramanayake, 2012, p. 387). On the contrary the previously mentioned study, carried out in the US comparing 31 homepages of academic library websites, shows how big the improvement has been regarding the services offered to users since 2000 (Aharony, 2012). In addition to this, the increasing presence of mobile phones has led to the creation of online library services suitable for fast support such as ‘Ask a Librarian’; this aspect has reiterated the depth to which the US academic libraries, analysed by Aharony (2012) from 2000-2010, have been focused on guiding users in employing the online library services. In 2000 most links to e-resources were to other bibliographic databases, while in 2010 library links were primarily to other reference sources (for the most part e-journals), OPAC, bibliographic databases and search engines, confirming a user-centred trend of the libraries websites (Aharony, 2012).

2.4.2 Customer services in an academic library website
Customers’ service satisfaction should be a core goal for libraries, but how can an academic librarian manage customer services on the limited “space” of a website and still endeavour to impress its users? It is possible, according to a study carried out with a group of postgraduate students from four public research universities in Malaysia. The methodology involved two phases: an extensive analysis of the literature on customer service in libraries to mark out the main procedures and problems; followed by a gathering of qualitative data from focus group interviews of postgraduate students. The researchers Kaur and Singh (2011) decided to confine the level of participant to postgraduates because they would have longer experience with an academic library website than undergraduates, so that they would provide “rich and valuable data” and would be more willing to take part in discussions. The findings of this study have brought to light the importance of establishing a librarian/student relationship in order to use effectively the digital services offered by an academic library website. An approach to develop this rapport could be giving a fast and competent response to customer’s queries (Kaur and Singh, 2011). Just like any other fields that imply a customers’ trust once their requests have been fulfilled, the same applies to an academic library whose users will always value a library and its services.
if they are heard, therefore, as mentioned in the article “high standard of customer service create higher visibility for the information service unit” (Kaur and Singh, 2011, p. 747). Another interesting point coming from the gathered qualitative data is the students’ opinion about the FAQs, which are welcomed as being a sign of a productive communication between librarians and users. However, FAQs need to be systematically and promptly updated with new services introduced within the website. For example if a collection of articles is added to the website in the format of a database, FAQs should contain the path to direct a user towards the guidelines of this new service. Hence time and speed seem to be imperative for a successful customer service within an academic library (Kaur and Singh, 2011).

2.4.3 Marketing the services in an academic library website

Services offered by an academic library rely on the marketing publicity generated via its website, an aspect observed by Kaur at the University of Malaya in Malaysia (2009). This research debates how a marketing strategy promoting visibility of an academic library website would lure the university community to the site, so that users would use it as their “first stop to seamless access to information, services and social networking” (Kaur, 2009, p. 466). The data was collected via comparisons of 22 library websites located in Malaysia and interviews with library managers. The findings highlight the necessity “to improve visibility of a library” and marketing that can be realised through an effective communication (Kaur, 2009, p. 466). This analysis has laid down the foundation for the successive study completed in 2011 by Kaur and Singh: when library users are ensured that their feedback is put in place for improvement, they would happily return to utilise the library services not solely for borrowing books (Kaur, 2009).

2.4.4 Benchmark services in an academic library website

How can the service quality of a company be measured? The SERVQUAL tool has been employed largely in the evaluation of service quality in marketing research. It has been modified according to the specific needs of an environment and it has been used in most universities across the Globe (Ahmed and Shoeb, 2009). A study conducted in Bangladesh on a public university library, Dhaka University Library (DUL), has showed how users’ expectations for a satisfactory service offered by their library website are seldom met (Ahmed and Shoeb, 2009). DUL services have been criticised long before this study took place in 2008, for being old fashioned, for not
fulfilling users’ needs and not using modern technology. An example is the library catalogue with its two formats: computerised and card, when it should be exclusively computerised. A SERQUAL questionnaire was distributed across the campus, which returned data from students of various levels, lecture staff and librarians. The participants were asked to assess various items linked to the library’s quality of service and the findings are the resulting gaps calculated between “users’ expected and perceived services” (Ahmed and Shoeb, 2009, p. 17). Unfortunately, the results have brought into the open that those services offered by DUL let down users’ expectations and the researchers’ recommendation is for the University Grants Commission to introduce a national standard for measuring library services, so that they meet the quality of academic libraries worldwide (Ahmed and Shoeb, 2009).

2.4.5 Podcast tools in an academic library website

In New Zealand, Angela Jowitt (2008) investigated the potential of using new technologies, like podcasts, embedded in the library web site of the Universal College of Learning (UCOL). A podcast has been utilised as an instructional tool within academic library websites only recently and this study aimed to provide evidence given by library users that it is worth continuing to invest in such a technology (Jowitt, 2008). The analysis involved a mixed methods study in order to gather qualitative and quantitative data. Six podcasts were recorded and they offered guidelines to access, search and view a user’s personal account on the library catalogue, instructions to raise a query online, and two orientation tours. The target population, UCOL students and staff, were required to express their opinions about the usage and the perception of these podcasts and their services, via an intranet web-survey (Jowitt, 2008). The findings confirmed the potential of podcast services and their positive impact, despite being a new phenomenon (Jowitt, 2008). Some respondents suggested adding videos to the recorded podcasts in order to further improve this already quite efficient way of delivering instructions. The percentage of disadvantages to this technology was low and it covered mainly technical issues such as low volume of the recording and the speed of downloading (Jowitt, 2008). Furthermore, the majority of the respondents commented on how invaluable and beneficial the podcasts have been in their academic successes (Jowitt, 2008).
2.5 Conclusion

Internationally there is a substantial amount of literature focusing on the quality of various aspects of an academic library website such as: the design, the content, the usability and the services offered by the sites. The majority of these studies have been based on a mix-methods type of approach, but they all concentrated on collecting data from library users via intranet surveys or focus group interviews. This is a confirmation that the academic library web site has become a user-centred technology in the last decade, even when a highly technical presence is expected, such as by reshaping the design and/or the content of the web site. It has been also found in the literature review that the clarity and utility of a page are the key roles in the content and design of an academic library website. Staff and students should approach their library website instead of commercial research engines for initiating their studies, which would ideally be accomplished by a manageable and easy-to-navigate homepage. The visual appeal and labelling of information in a comprehensive way would also enhance the usability. Librarians should strive to satisfy users’ requirements to improve the usability and visibility of their website.

Researchers have shown how Web 2.0 tools have created a positive effect when applied correctly to the services offered by the library web site. Services have improved significantly in the last 10 years for academic library websites, in order to keep up with a demanding IT era. In addition, when customers achieve an academic success via their library websites they would be loyal to it. ‘Ask a Librarian’ is an example of a Web 2.0 tool implemented into library websites, which have been considerably appreciated by users who can forward remotely their queries to a librarian and have a prompt answer, resulting in a successful and fast service for customers. Podcast technology is part of Web 2.0, but not commonly utilised as it requires training staff. However, library users seem to express only positive opinions about employing it as an instructional tool and including it in the website. The quality of a service needs to be monitored and improved constantly; libraries have done so with tools like SERVQUAL or LibQUAL+, which have reiterated the importance of library users’ feedback obtained via surveys. Confirmed by the wealth of literature reviews shown here, an intranet web-survey has been used to conduct this research as described in detail in the successive chapter. Since the purpose of the questionnaire was to collect qualitative and quantitative data, it has been composed of closed and open-ended questions.
To date the number of studies with a similar topic carried out within private universities has been extremely limited worldwide and in Ireland. This study is an attempt to fill that gap.

The next chapter will describe the methodology applied to carry out this research.


Chapter 3: Methodology

Chapter Summary

This chapter will depict the chosen methodology in order to accomplish this research and the procedures used to gather and analyse the data. It will start with the research questions and a diagram describing the objectives of the study. The research philosophy will follow, as it is defined by Saunders et al. (2009, p. 3): “procedures and techniques used to obtain and analyse data” and the methodology is the theory of how a research study should be carried out (Saunders et al., 2009). Therefore, in this part of the chapter the pivotal methodology of the research would be defined and proved it was the most appropriate with similar studies carried out in the past that used analogous means of gauging their research objectives. A description of methods and strategies to collect the data necessary to answer the research hypotheses, ways of interpreting the data, ethics and limitations of the designed methodology will conclude this chapter.

3.1 Research questions

The study was set out to answer the following questions:

- What is the context of use – i.e. reasons - of the DBS library web site?
- How do users feel about the site (visual appeal, language, technical aspect etc.)?
- Are the participants satisfied with the resources (intranet and internet) and services offered by the site?
- Is the users’ academic success linked to the library website?
- What suggestions do users have to improve the current site?

The following diagram describes the primary objectives of this research.
The next section will delineate the main elements of the research philosophy and the methodology that was employed for this study, focusing on investigating the possible characteristics that make an academic library website beneficial for students and staff.

### 3.2 Research philosophy

Streamlining a research project means identifying some practical issues (such as time constraints and financial aspects when collecting data, for example) that have a significant impact on the choice of methodology, which facilitates researchers in answering their questions (Saunders et al., 2009). In addition to this, the research philosophy selected for a study comprises assumptions about how the researcher views the world, assumptions which support the research methods undertaken. As per Saunders et al. (2009), the research process should be multi-layered and can be represented by a Research Onion that consists of the following segments:

- Research philosophy
- Research approach
- Research strategy

![Research Onion Diagram](image)
There are three branches of research philosophy: epistemology, ontology and axiology. Epistemology refers to the question of what constitutes acceptable knowledge in the field of study; ontology is concerned with the nature of reality; while axiology is about judgements of value (Saunders et al., 2009). Each branch can have a different perspective: positivism, realism, interpretivism and pragmatism, which are represented in the outer layer of the Research Onion. The positivism is a very structured approach taken by a researcher and this methodology helps to replicate or test the study theory (Saunders et al., 2009). With this philosophy the researcher will make interpretations about the data that will be gathered; hence this approach is deductive (Saunders et al., 2009).

The realism perspective is quite similar to positivism, but it differentiates by its adoption of a scientific approach for creating knowledge and with this approach there is a reality independent of the mind (Saunders et al., 2009). More specifically, our senses present to us what is true and that object exists separately from the human
mind (Saunders et al., 2009). Consequently, the realist’s position within research is constantly changing as the phenomenon is becoming different (Saunders et al., 2009).

The interpretivism perspective is appropriate in relation to business, leadership and management research, as the researcher needs to understand the difference between humans as ‘social actors’, which means that an empathetic perspective would need to be acquired in order to enter the subjects’ social world and understand their world from their point of view (Saunders et al., 2009).

The pragmatist argues that the most important determinant of the research philosophy is the research question, and one approach may be ‘better’ than the other for answering particular queries (Saunders et al., 2009). The pragmatic branch of philosophy facilitates the extraction of theory from practice. This conclusion can be developed over time and changed according to new findings.

In this research project the data was collected via a survey where participants’ personal opinion about various aspects of the DBS library web site was vital. For this reason, the data needed to be interpreted and revisited continuously throughout the analysis, without forgetting the research questions and objectives. As a result the nature of the data directed this study towards a blend of research philosophies: positivism, pragmatism and interpretivism. The positivism philosophy side of this research became clearly visible when formulating the questionnaire used to gather data to answer the study questions and most of all at the time of interpreting the findings where a deductive approach was employed. The research questions were the mainstay throughout the analysis of the data; hence the pragmatism side can be seen to be linked with the findings of this research. Lastly, the interpretivism branch of the research philosophy was applied when examining users’ feedback in relation to their personal details.

The next part will focus on the research approach and the steps that were taken to gather the required data in order to accomplish the objectives of the study.
3.3 Research approach

As shown in the Research Onion in figure 3.2, there are two types of research approaches:

- Inductive
- Deductive

(Saunders et al., 2009)

The researcher’s choice between these two approaches depends upon the technique used to collect and analyse data (Saunders et al., 2009). With the inductive approach a researcher develops a theory from observations and empirical evidence, hence a conclusion is drawn from the data accrued (Saunders et al., 2009). Thus it is a more flexible approach but it can involve a longer time for data collection (Saunders et al., 2009).

Applying a deductive approach to research involves developing a hypothesis (or hypotheses) and designing a research strategy to test the hypothesis (Saunders et al., 2009). With a deductive approach the research is focused on explaining causal relationships between variables and facts, which are analysed quantitatively (Saunders et al., 2009). Robson (2002, cited in Saunders et al., 2009) outlines five sequential stages for the deductive approach:

1. Stating the hypothesis or hypotheses from an existing theory.
2. Expressing the hypothesis or hypotheses in operational terms (specifying how the concepts or variables are to be measured), hence a relationship is established.
3. Testing the hypothesis or hypotheses (collection of data).
4. Examining the outcomes of testing of the hypothesis or hypotheses, which would confirm the theory or show the changes needed.
5. Modifying theory based on the findings.

Given the nature of the research questions for this study as described in paragraph 3.1, the number of objectives (as shown in figure 3.1) and their level of measurement, the deductive approach was considered the most appropriate to be employed throughout. Other factors that had an impact on going the deductive avenue were: time constraints and the data harvest based on a web based survey.
According to Saunders et al. (2009), a deductive research approach can be quicker to complete, even if time needs to be allocated to set up the study prior to data collection and analysis. In detail, the data gathering, based on a web survey, was originally planned to be completed within 3-4 weeks. Unfortunately a number of unexpected hurdles contributed to prolong the time allocated ab initio. Despite these, the number of responses (72) to the survey was larger and more proficuous than anticipated.

The plethora of literature existing for this topic provided a theoretical framework and hypotheses for this study (Saunders et al., 2009). For example Jowitt’s research carried out in New Zealand’s Universal College of Learning (2008), where users were asked to express their perception about a group of podcasts embedded in the Library website, was one of the many articles (Kim, 2011; Kayongo and Helm, 2010; Ahmed and Shoeb, 2009; Booth, 2009; Rogers and Preston, 2009; George, 2005) considered to support the methodology laid out for this research. Therefore, the data harvested via the web survey went through statistical analysis singularly, in pair or in groups according to the variables, but this topic will be outlined towards the end of the chapter.

3.4 Research strategy

The research strategy consists of a plan showing how the researcher will obtain answers for the study questions. The strategy is founded on clear and well-honed research objectives and is based on a detailed review of relevant literature, thus supporting the research dissertation. Saunders et al. (2009) indicated that there are several strategies that can be employed (see figure 3.2): experiments, surveys, case studies, action research, ethnography and archival research. For this study a survey type of research strategy was employed to answer the research question(s). A survey strategy is considered an authoritative means when there are people who are generally willing to participate (Saunders et al., 2009). Another advantage of using a survey is that the collected data can be utilised to suggest a particular relationship between variables (Saunders et al., 2009). There are drawbacks for this approach and an example is the fact that the data obtained via a survey is not as wide-ranging as those collected via other research strategies, due to the limited number of questions (Saunders et al., 2009).
On that account, was a survey the best solution for this type of research? It seems to be so without any doubt according to Pickard (2007), who mentioned that “questionnaires are the single most popular data collection tools in any research involving human subjects”. This study focused on evaluating the DBS library web site with its users’ feedback, and the numerous analogous studies examined in the second chapter confirmed that the choice of using a web survey was the most appropriate to furnish a users’ centred generalisation.

3.4.1 Survey structure and procedures

The survey – as included in the Appendices - was designed and managed via the online tool Survey Monkey, which is a web application that offers either a free subscription, with a limited number of questions and ways of analysing the data, or a monthly membership with a wider range of options. Unlike other online survey applications, creating a database to host the questionnaire was not needed (Survey Monkey User Manual, 2012).

The survey started with an introduction that explained the questionnaire’s purpose and introduced the researcher’s name and email address. An estimate was also given of how much time it would take to fill it in. Many survey takers wish to be reassured about the usage of the data collected, therefore the level of confidentiality was provided, which would be discussed in the paragraph 3.4.3.

The questionnaire was composed of a total of 32 questions, divided into three parts. Each section was preceded by general instructions on how to progress. The survey started with a demographics segment, which had 15 multiple-choice questions about the participants’ personal data, their role within DBS and technical queries relevant to the study. The questions in part two covered an evaluation of the Library website with 14 close-ended matrix and rating type questions, which are utilised when measuring a respondent’s ideas or feelings (Survey Monkey User Manual, 2012; Pickard, 2007). This survey was created using a Likert-style – named after its inventor R. Likert (Sapsford and Jupp, 2006) - rating set of queries in order to give the survey takers different aspects of the same attitudes, based on agree-disagree statements so that the respondents were offered a series of ‘attitude dimensions’ (Survey Monkey User Manual, 2012; Pickard, 2007). The preferred score was from 0 to 5, because a five-point rating scale tends to give enough discrimination and be understood easily by
individuals (Booth, 2009; Saunders et al., 2009). The zero corresponded to N/A (Not applicable), that was chosen to be included in the possible answers to allow a person to opt out due to unfamiliarity with a specific question (Survey Monkey User Manual, 2012). This was considered a potential factor to help increase the response rate and the level of honesty of the answers (Survey Monkey User Manual, 2012). The replies were structured with two positive and two negative statements and a neutral midpoint, in order to have a balanced breadth and facilitate the data analysis (Pickard, 2007).

The last section of the survey had three open-ended questions in order to allow participants to comment favourably or unfavourably about the Library website and to offer a space for suggestions. These sorts of queries were included in the hope to gather more descriptive and accurate answers than the precedents, even if it meant additional time for the analysis of their findings.

Prior to spreading the survey amongst the targeted population, it was pilot tested to obtain an assessment of the questions validity and reliability (Saunders et al., 2009). This helped to improve the sequence in the first part of the questionnaire, the statements used in the Likert-scale queries and the flow of the survey. In addition to this, the pilot testing verified the precision of the estimate duration mentioned in the introduction.

3.4.2 The survey’s participants
The intended population for this research study comprised DBS staff and students, and so the survey was sent via email with an embedded web link. The research was also introduced to DBS students via a web link contained in an email sent around by DBS faculties’ directors. Finally, the survey link was posted to the DBS Facebook wall. Each email listed the tasks that needed to be carried out within a specific time frame. This was intended to motivate the recipients to answer the questionnaire, which resulted in a reasonably good response (Saunders et al., 2009). There was one follow-up email addressed to all DBS staff, which also helped increase the rate of response. However, the way the survey findings were scrutinised would be outlined in detail subsequently.
3.4.3 Ethics

As stated by Sapsford and Jupp (2006), within the university environment ethics has grown to be an essential topic and concern recently, so it has been one of the requirements for every researcher to receive ethical approval before their researches were implemented. For this reason ethics approbation was sought and gained from the DBS Ethics Committee, which granted permission to email the survey to the diversified groups of students and staff. In addition to this, according to various sources (Creswell, 2009; Saunders et al., 2009; Punch, 2005) data collection can be associated with a range of ethical issues. One of which is linked to the storage of data and information consent that can impact on some of the respondents. On that account, this study survey was conducted anonymously and to relieve any possible anxiety amongst the participants, they were assured of the strictest confidentiality, that their data would not be shared with a third party and that although their responses may be quoted the source of the information would not be disclosed. Finally, the survey takers were invited to contact the researcher directly with any queries.

3.5 Research choice

There are three choices of data collection and analysis procedures:

- Mono-method
- Multi-methods
- Mix-methods

(Saunders et al., 2009)

The mono-method implies a combination of a single technique of data collection and analysis to answer the research questions, such as a quantitative data collection via a questionnaire with quantitative data analysis procedures or a single qualitative data collection technique (in-depth interviews) with qualitative analysis procedures (Saunders et al., 2009).

The combination of data collection techniques and analysis procedures occurs when a multi-methods research choice is selected for a study (Saunders et al., 2009).

The mix-methods approach is when both quantitative and qualitative data collection techniques and analysis procedures are used in a research design and implementation (Saunders et al., 2009).
This study was conducted applying the mix-methods research choice, with a self-administered survey composed of close and open-ended questions, and employing quantitative and qualitative data harvest and scrutiny.

3.6 Data analysis
The findings were examined with the help of Survey Monkey that calculated the frequency distribution of the dataset in relation to the number of samples for each question. The results were presented in various types of diagrams also created by the online software. The collected data were initially examined in a univariate form that refers to the analysis of one variable at a time (Bryman and Bell, 2007). Once the exactness of the data was verified for each query, questions were paired – applying the bivariate analysis of two variables – or grouped according to the research hypothesis (Bryman and Bell, 2007).

3.6.1 Analysis of demographics
The analysis initiated with the descriptive data resulting from the demographics, which comprised questions about the participants’ subject area, their course level and mode, their age group, their gender, their work situation, their area of provenance and their technical set up to access the Internet. Most findings from the questions of this section were extracted in a univariate form using bar and column charts, where frequencies were shown in percentage and/or absolute. Moreover, a few questions were paired and visualised in compound charts or cross-tabulation, in order to establish any possible links and correlation between two variables (Pickard, 2007; Sapsford and Jupp, 2006). An example were the results from questions five and six, which were examined in a bivariate form and represented in a compound column chart (see figure 4.2), where the respondents’ age group was compared to their previous attendance of a different university. Furthermore, the findings from questions one and three (see table 4.1) were analysed in bivariate form showing at which level each course is taken; questions one and four (see table 4.2) visualising at which mode each course is taken. Finally, questions nine and fifteen (see table 4.3) were presented in cross-tabulation to display the links between living far from a DBS library location and the way of accessing the website, in order to rank the utility of being able to access the Library website remotely.
3.6.2 Analysis of close-ended questions
The analysis of the findings from the second segment of the survey followed the list of variables of this study. Most questions after being grouped according to their aim, they were presented in a univariate form and their data were displayed in simple bar charts with the absolute and the question’s options on the axis. For some it was utilised a mix-methods analysis, in order to try to postulate respondents’ tendencies and theme from the datasets.

3.6.3 Analysis of open-ended questions
The aim of collecting qualitative data was providing this research with a detailed understanding of individuals’ opinions about the Library website, their suggestions for enhancements and potential changes. Unfortunately, the expected response rate to open-ended questions was not accomplished, resulting in a small amount of samples with a full descriptive answer rather than a simplistic Yes or No. In spite of this, a thorough analysis was carried out looking for frequency of comments and relevancy to the research variables. It was also possible to postulate trends and identify themes.

3.7 Limitations
Time constraints played a role in the scope of this research along with the availability of only a narrow segment of the total population anticipated to take part in the survey. It also took longer than planned to find out the suitable contacts to have the survey approved ethically, which delayed the data harvest. When designing the research method, it was hoped to gather qualitative data from focus group interviews with members of DBS staff and students, in order to grasp a better view of the perception of the Library website by its users. However, these were not feasible due to the scant number of email addresses entered during the survey and the total absence of the DBS library and teaching staff amongst them. Not to mention that the purpose of employing a web based survey was to reach a larger group of respondents across the various faculties including teaching representatives. The survey was left open for a longer period of time and reminder emails were sent around in the hope to increase the total count, which did not happen significantly.

When drafting the questionnaire, questions about evaluating disability services in the Library website were not included for two main reasons: a possible difficulty in contacting the suitable audience for feedback and the need for an exhaustive
knowledge about the topic. The chances of having a person who regularly used the
disability services respond to the survey was slim, especially when considering the
challenges in obtaining data in time that were mentioned earlier. This is unfortunate
when considering the report written by Poll (2007), which says when creating a
library website a substantial consideration should be paid to user groups and in
particular to those with special needs in order to achieve an effective homepage.

3.8 Conclusion
This chapter shaped the research methodology designed to meet the scope of this
study. It opened with the research questions and moved to present and examine the
methodological options that were taken. The focus has been the theoretical and
practical tools employed in the research to sufficiently examine the key concepts and
the reasons supporting the specific design of the methodology. It then moved on to
illustrate in detail the research approach and its strategy, showing the steps followed
to compose the survey to collect the data needed to reach the objectives of this study
and the ways used to spread the questionnaire across the campus. Without forgetting
the crucial matter concerning ethics and its restrictions when research requires
people’s input, it was discussed how the issue of confidentiality was tackled to ensure
participants were aware of how the data they provided would be used and that their
rights were protected. A closer look at the three research approaches and the data
analysis concluded the research model displayed in the Research Onion created by
Saunders et al. (2009) with details of the selected analysis employed in this study. The
final paragraph of this chapter centred briefly on the limitations incurred during the
research.

The next chapter will outline the results of the survey, presenting them in different
types of graphs and tables according to the research questions.
Chapter 4: Results

There are no facts only interpretations.
(Friedrich Nietzsche)

Chapter Summary

The findings from the survey will be illustrated in this section, in relation to the study research questions and their main themes:

- Context of use (content and design)
- Clarity, utility and assistance of the website (usability)
- Links to intranet and Internet (services)

According to Rudestam and Newton (2007), simplicity and data conciseness should be deployed in this chapter, in place of pages with diagrams and tables that are not related to the aims of the research. They also suggest beginning the results chapter with the analysis of the descriptive data, which is the foundation of any research study based on a survey (Rudestam and Newton, 2007). Therefore, a presentation of the demographics with some figures, bar and column charts and cross tabulated information will be contained in the opening paragraph. Some technical questions were included in the demographics in order to find a possible correlation between the survey participants’ satisfaction (or dissatisfaction) about the Library website and their technological setup. The findings of these queries positively proved their scope, but this would be covered in detail afterwards. The next section of this chapter will outline the evaluation of the website that will separately contain data relative to the above themes and their variables. An example from the collected input brought to light the favourable opinion about the “Search Electronic Resources” tool in contrast with the limited use of services like ‘Ask a Librarian’, Facebook and others. The last part will include an analysis of the open-ended questions with the survey takers’ feedback and suggestions about the DBS library website, whose findings showed that the respondents stated their positive and negative thoughts clearly instead of furnishing simple Yes or No answers. The broad trend indicated an easy-to-access website, albeit with some technical and design shortfalls.

4.1 Demographics

As mentioned in the second chapter, participants for the survey were gathered through emailing and posting the survey web link on the DBS Facebook page. The questionnaire was started by 72 people and a total of 64 terminated it, giving a completion rate of 88.9%. Despite using an automated tool for collecting the data, the
figures for each question were examined for exactness and if the responses were within range. The percentage of answers per faculty was highest for the Law School (50% a total of 36 respondents) and the lowest was Counselling and Psychotherapy (1.4% equal to 1 participant). There were no responses from Marketing, Media & Journalism and Professional Accountancy. There was a smaller amount from DBS staff (5.6% equal to 4 samples) than expected. Figure 4.1 is a bar chart with the answers for question number one (What course do you attend?):

![Figure 4.1: Participants’ subject area](image)

Table 4.1: Cross tabulation of subject area and course level

<table>
<thead>
<tr>
<th>Subject Area</th>
<th>Account. &amp; Finance</th>
<th>Arts</th>
<th>Business &amp; Manag.</th>
<th>Counselling &amp; Psychoth.</th>
<th>IT</th>
<th>Law</th>
<th>Psychology &amp; Social Science</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 9</td>
<td>1</td>
<td>0</td>
<td>12</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>Level 8</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>19</td>
<td>1</td>
<td>23</td>
</tr>
<tr>
<td>Level 7</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>13</td>
<td>5</td>
<td>27</td>
</tr>
<tr>
<td>Level 6</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
</tbody>
</table>

Total answered question 72
Table 4.1 introduces cross tabulation data expressed from question one (What course do you attend?) and question three (At what level are you currently studying?) showing that most of the total respondents came from a level 7 course (27), of which 13 students were from Law, 5 from Psychology & Social Science, 4 from Arts, 2 from Business & Management and one from each of the following faculty: Accounting & Finance, Counselling & Psychotherapy and IT. Whereas level 8 was the second highest rank with 23 participants, whose majority (19) was from Law. The sum for Level 9 returned 16 respondents, whose 12 were from Business & Management, 2 from Law, and 1 from Accounting & Finance and IT.

<table>
<thead>
<tr>
<th></th>
<th>Account &amp; Finance</th>
<th>Arts</th>
<th>Business &amp; Managem.</th>
<th>Counselling &amp; Psychoth.</th>
<th>IT</th>
<th>Law</th>
<th>Psychol. &amp; Social Science</th>
<th>Other</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Time Stds</td>
<td>2</td>
<td>4</td>
<td>15</td>
<td>1</td>
<td>3</td>
<td>12</td>
<td>6</td>
<td>0</td>
<td>43</td>
</tr>
<tr>
<td>Part Time Stds</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>23</td>
<td>0</td>
<td>0</td>
<td>25</td>
</tr>
<tr>
<td>Staff</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>

*Table 4.2: Cross tabulation of subject area and course mode*

Table 4.2 depicts cross tabulation figures from question one (What course do you attend?) and question four (Are you: Full Time Student, Part Time Student, Staff, Other) pointing out that full time students were the largest group of the total response count (43), but the part time Law students were the second most significant group of participants (23), followed by 15 full-time students of Business & Management, then 12 full-time students of Law and 6 full-time students of Psychology & Social Science. The rest of the samples were: 4 full-time students of Arts, 3 full-time students of IT, 2 full-time and 1 part-time students from Account & Finance and 1 full time student of Counselling & Psychotherapy. The 4 members of staff were from Law, Business & Management and 2 from Other.

The questionnaire was answered by a balanced group of both genders: 50% female and 50% male. The comparison of question five (Have you been to college before?) and six (How old are you?) returned a picture of how varied was the group who took part in the survey. Figure 4.2 indicates that those who went to college before DBS
were more than those who did not, for a total of 50 people of various ages. In addition, most of the respondents came from the age category 20-25 with 15 (30%) who went to college before, while 10 (45.5%) who did not. Within the age groups of 31-36 and 43-over there were a total of 22 (30.5%) respondents who answered positively to question five. It was interesting to observe that the number of participants who did not attend university in the past was getting progressively lower in the last four age categories (26-30, 31-36, 37-42 and 43-over).

![Figure 4.2: Age groups and if attended college in the past](image)

Question 8 (*Do you work?*) is visualised in a pie chart in figure 4.3. The majority of the respondents do not have an occupation (27 equal to 37.5%), the full-time employees seemed to be the second biggest group (26 equal to 36.1%) and there were only 19 (26.4%) with a part-time employment.
Table 4.3 contains cross tabulation data expressed from question nine (Where do you live?) and question fifteen (Where do you mostly access the library website?) in order to see if accessing a website remotely was a prerogative of those living away from the physical location of the Library. Though a smaller sample of answers, the majority of those coming from a rural area seemed to access the Library website remotely, proving the purpose of the comparison of the two questions. Moreover, according to the response count most participants confirmed they accessed the Library website from home (51 individuals equal to 70.8%) while a smaller group of 21 people (29.2%) said they utilised it from the library. The column chart in figure 4.4 visualises in perspective the same data of table 4.3, showing that the largest category was of those who preferred accessing the website from home, despite their provenance. In addition, it was apparent that there existed a wide gap when it came to accessing from the library amongst the three categories: 18 Urban, 1 Rural and 2 Suburban.
In the era of smartphones, despite the high number in the category of owing one (52 individuals) according to the answers to question ten (Do you have a smartphone?), it was interesting to note that only 26 out of the 72 survey participants answered positively that they utilised their phone to log on into the Library website. This is depicted in the following column chart in figure 4.5:
Question twelve (What type of internet connection do you have at home?) was posed aiming to find out details about the quality of the respondents’ internet connection, which can have a direct impact on the speed of the Library website. For this reason a probable correlation could be established between the Library website users’ satisfaction and their internet specifications. According to the response count for this question the largest number of respondents declared to have WiFi (34 samples equal to 47.2%) and Broadband (32 samples equal to 44.4%). Whereas a total of 4 people said to utilise a dongle (3 samples equal to 4.2%) and dial-up (1 sample equal to 1.4%). One person stated not to have an Internet connection system at home and another one was ‘Not Sure’, as it is illustrated in figure 4.6.

![Figure 4.6: Type of Internet connection](image)

The majority of participants asserted that they used the Library branch located in Dame Street, 54 samples, when answering question thirteen (Which branch of the DBS library do you use mostly?) whereas 18 selected the one in Aungier Street. As regarding the frequency of accessing the website asked in question fourteen (In the last six months how frequently have you visited the DBS library website?), the greater number appeared to have done it ‘Weekly’ (35) while the rest of the samples were almost equally distributed amongst three options: 14 for ‘Monthly’, 12 for ‘Less than
once a month’ and 10 for ‘Daily’. There was one sample that ‘Never’ accessed the Library website, as shown in the bar chart in figure 4.7:

![Figure 4.7: Frequency of accessing the Library web site](image)

4.2 Evaluation of DBS library website

Consequentially to the demographics, the survey comprised fourteen statements with 6 options based on a Likert scale from 0-5, where respondents were supposed to select the most suited option to describe their opinion. Overall the response count fluctuated considerably, unlike for the demographics. The first 5 statements (from sixteen to twenty) were filled out by 71 respondents while one did not complete them; then three individuals skipped twenty-one to twenty-four, while five avoided twenty-five to twenty-nine. For this reason the total count was not as consistent as the one from the demographics.

The statements reflected the main themes of this research, ergo they were grouped and analysed accordingly, as depicted in the next paragraphs.
4.2.1 Context of use (content and design)

Two statements intended to collect participants’ point of view about the way the information is structured in the web site, were number nineteen (I use the DBS library website for: Accessing the subject portals) and number twenty-six (How would you rate the visual appeal of the website?), whose total count of samples varied: 71 samples for number nineteen and 67 for number twenty-six.

In statement number nineteen about describing the frequency of accessing the subject portals (as depicted in the bar chart of figure 4.8) the prevalence was given to ‘Often’ with 18 (25.4%) participants; ‘Sometimes’ was the second top choice with 16 samples (22.5%) whereas ‘Very Often’ was chosen by 15 people (21.1%). As regarding negative opinions, the total count of those ‘Never’ accessing the subject portals was 8 (11.3%), and 12 (16.9%) samples for ‘Seldom’. 2 individuals (2.8%) selected ‘Not Applicable’ (N/A).

![Figure 4.8: Level of accessing the subject portals](image)

Question twenty-six aimed to gather the respondents’ perspective about the website appearance, whose results (as shown in the bar char in figure 4.9) proved a general
consensus of being considered ‘Above Average’ (27 equal to 40.3%) and ‘Average’ (23 equal to 34.3%). On the other hand, the dominant level ‘Excellent’ was chosen by a small group of 6 individuals (9.0%). However, the unfavourable ranking descriptors ‘Very Poor’ and ‘Below Average’ were picked by a sum of 8 people (12%), respectively by 2 (3.0%) and 6 (9.0%). 3 respondents singled out ‘N/A’.

Figure 4.9: Rating the appearance of the website

4.2.2 Clarity, utility and assistance of the website (usability)

As mentioned in paragraph 2.3, usability is the margin to which a product can be utilised by users to accomplish a target efficiently within a context (Poll, 2007). Therefore when rating if an academic library web site is useful for users’ successes, the first unavoidable characteristic would be clarity in structuring and labelling information provided in the site. Hence seven statements and questions to evaluate usability were included in the survey.

4.2.3 Clarity

Statements relative to the clarity of the website were numbers twenty-one (The vocabulary used on the website is.....) and twenty-two (The information offered on the
website is...), where respondents were required to rate the comprehensibility of the information and vocabulary utilised on the Library website. The total number of respondents for both statements was 69 (see the bar charts in figure 4.10 and 4.11). The number of samples for ‘N/A’ was 2 for each statement. Both statements had overall very similar result. In the statement number twenty-one the prevalence was given to ‘Good’ with 44 participants (63.8%); ‘Very Good’ was the second top choice with 14 samples (20.3%). As regarding negative opinions, the total count of those describing the vocabulary used on the website as ‘Confusing’ was 2 (2.9%) and 2 (2.9%) for ‘Poor’. ‘Fair’ was chosen by 5 individuals (7.2%).

According to the results, ‘Good’ and ‘Very Good’ were the favourite options for the statement about the information offered on the web site with correspondingly 34 (49.3%) and 19 (27.5%) samples, whereas the number of people selecting ‘Fair’ was more than the previous statement with 10 (14.5%). ‘Confusing’ and ‘Poor’ had the same results as the preceding statement: 2 (2.9%) for each option as it is showed in figure 4.11.
4.2.4 Utility

Questions related to the practical use of the DBS library website were numbers twenty-three (*How useful is the website for your research?*), twenty-eight (*At what level has the library website contributed to your academic success?*) and twenty-nine (*To what extent has the Library website affected your life style*?). There were 69 samples for statement twenty-three, while the other two had a total count of 67.

For question twenty-three - as illustrated in the bar chart figure 4.12 - a total of 2 (2.9%) respondents were unfavourable to it being a useful website for their research, for 3 (4.3%) it was ‘Slightly’ important and for 15 (21.7%) it was a moderate help. The approving rate was higher than the negative with a group of 47 (68.1% individuals who ranked the website ‘Very’ (31 equal to 44.9%) and ‘Extremely’ (16 equal to 23.2%) efficacious. The number of respondents who selected N/A was 2 (2.9%).
Question twenty-eight asked participants to grade the utility of the website in their academic successes. As depicted in the bar chart in figure 4.13, a total of 7 samples ranked the website at the two lowest levels: ‘Not At All’ (1 equal to 1.5%) and ‘Slightly’ (6 equal to 9%). The highest result with 24 samples (35.8%) indicated that ‘Moderately’ was the overall preferred way of describing the website, whereas ‘Very’ and ‘Considerably’ had a sum of 20 (29.9%) and 12 (17.9%). There was an increase of samples choosing N/A at 4 (6%).
Figure 4.13: Utility of web site in participants’ academic successes

Question twenty-nine intended to determine the level of influence on users’ life style when utilising the website, in case there was a link between participants’ satisfaction of the Library website and their life style. In accordance to the findings shown in the bar chart in figure 4.14, the number of those selecting ‘Not At All’ increased in comparison to the previous question: 16 (23.9%). In addition, the ‘N/A’ group doubled to 8 (11.9%). ‘Slightly’ had 10 (14.9%) samples, but on the other hand ‘Moderately’ received the top score with 21 (31.2%). The two highest ranks ‘Very’ and ‘Considerably’ resulted in a total of 12 samples with respectively 9 (13.4%) and 3 (4.5%).
Questions associated to the quality of support offered within the DBS library website were numbers twenty-four (How useful is “Search Electronic Resources”?) and twenty-five (How would you rate the librarian assistance on the website?). There were a total of 69 samples for twenty-four and 67 for the other one.

As seen in the bar chart in figure 4.15, for question twenty-four the number of favourable opinions represented the majority with 41 (59.4%) samples distributed between ‘Very’ 26 (37.7%) and ‘Extremely’ 15 (21.7%), while on the contrary the number of negative responses was marginal with 4 (5.8%) for ‘Not Useful’. An overall number of 19 (27.5%) individuals selected ‘Slightly’ and ‘Moderately’, which corresponded to 4 (5.8%) and 15 (21.7%). ‘N/A’ was selected by 5 participants (7.2%).
As mentioned previously, 3 and 5 participants did not fill in the two questions about the level of assistance of the Library website. However, what became immediately evident from the results of question twenty-five (see figure 4.16) was the larger number of ‘N/A’ samples, 14 (20.9%), comparing to 5 (7.2%) in the preceding question, which indicated an unwillingness to grade the librarians’ help offered within the website. Whereas those who judged it beneficial were clearly the most with 22 (32.8%) ‘Above Average’ and 14 (20.9%) ‘Excellent’. Just 2 samples were not satisfied by the librarians’ assistance, 1 (1.5%) for ‘Very Poor’ and 1 for ‘Below Average’. ‘Average’ received a high selection of 15 (22.4%).
Figure 4.16: Quality of support given by librarians on the web site

4.2.6 Links to intranet and internet (services)

The questions and/or statements intended to evaluate the services available on the website were a group of 5 that asked the participants’ judgement about intranet resources and links to external information.

4.2.7 Intranet services

There were a number of statements about benchmarking the resources offered by the Library website, such as number sixteen (I use DBS library website: accessing library catalogue, databases, reference materials, text-books, e-books and DVDs), number seventeen (I use DBS library website: General information about services: research skills, library classes, intern-library loans, booking PC/room, printing/photocopying, etc.) and number eighteen (I use DBS library website: For the library’s opening hours, membership, policies, contact details, library news, etc.); these statements also showed participants’ usage of the site. The total count of answers for them was higher than for the preceding statements: 71 samples. It was curious to note that the findings for these statements were quite similar (see bar charts in figure 4.17, 4.18 and 4.19); in fact the majority of the respondents chose ‘Sometimes’: 29 (40.8%) for statement sixteen, 24 (33.8%) for seventeen and 26 (36.6%) for eighteen. In addition, ‘Often’
returned similar results for the three statements: 15 (21.1%) for sixteen, 17 (23.9%) for seventeen and 12 (16.9%) for eighteen. As regarding the other options each statement varied in their count. ‘Very Often’ had the highest count for sixteen, 18 samples (25.4%), while seventeen had a notably small group with 6 (8.5%), and eighteen the lowest with 3 (4.2%). The ‘N/A’s findings were remarkably similar too: 1 (1.4%) for sixteen and 2 (2.8%) for seventeen and eighteen. The negative options had mixed results per each statement: ‘Never’ had 1 (1.4%) sample in sixteen, 7 (9.9%) in seventeen and 6 (8.5%) in eighteen. ‘Seldom’ was selected by 7 individuals (9.9%) in statement sixteen, by 15 (21.1%) in seventeen and by 22 (31.0%) in eighteen, being the second top choice.
Figure 4.17: Intranet services: OPAC, databases, reference materials, etc.

Figure 4.18: Level of accessing the Library website for information about the services offered
4.2.8 Links to internet

The survey included two statements that aimed to collect participants' feedback about the frequency of use of a group of widgets and about the quality of links to external information, embedded in the Library website. They were number twenty (Using one of the following widgets: Ask a Librarian, Library Blog, Twitter or Facebook) and number twenty-seven (Links to external information are). Unfortunately the count was dissimilar: 71 for twenty while 67 for twenty-seven. Therefore they were examined separately.

Looking at the findings for the twentieth statement (see figure 4.20) what stood out immediately was the large number of those who selected ‘Never’ 24 (33.8%) along with ‘Seldom’ 14 (19.7%), which implied the limited usefulness of the listed services (Ask a Librarian, Library Blog, Twitter and Facebook). Those who opted ‘Sometimes’ were lower than ‘Never’: 19 (26.8%). Finally, the favourable options were singled out by a total of 10 samples (14.1%): 2 (2.8%) for ‘Often’ and 8 (11.3%) for ‘Very Often’. 4 (5.6%) respondents decided to go for ‘N/A’.

Figure 4.19: Level of accessing the Library website for information about policies, contact details, etc.
On the other hand, considering the results of the twenty-seventh statement, it was rewarding to observe that the survey participants evaluated positively the links to external information offered by the Library website (see bar chart in figure 4.21). A total of 47.7%, equal to 32 individuals, graded the links to outside information as being ‘Above Average’ (25 samples equal to 37.3%) and ‘Excellent’ (7 samples equal to 10.4%). ‘Average’ was singled out by 20 people (29.9%), whereas a sum of 8 individuals (12%) considered them ‘Very Poor’ (3 samples equal to 4.5%) and ‘Below Average’ (5 samples equal to 7.5%). 7 respondents (10.4%) chose ‘N/A’.
4.3 Open-ended questions

As denoted in paragraph 3.7, the survey had three open-ended questions in order to obtain the participants’ comments and possible suggestions. The total count varied, for question thirty (What do you MOST appreciate about DBS library website?) and thirty-one (What do you LEAST appreciate about DBS library website?) there were 64 samples, while only 36 individuals answered question number thirty-two (Do you have any other comments or suggestions?).

On the whole the answers given to question thirty showed a positive trend towards the design, the content, the technical aspects and the various services presented in the DBS library web site. In detail, 18 samples considered the web site ‘Easy to access’ ‘User friendly’ and the information ‘Clearly labelled’. There were a good number of people (11) enthusiastic about renewing and reserving the library resources remotely. One individual spoke of his/her favourable opinion about accessing legal information from home. Many (8 samples) expressed their positive judgment about the way the “Subject portals are laid out” and how “The subject portals are grouping relevant resources together”. In addition to these, a sum of 8 people mentioned ‘Ask a
librarian’ and how they were immediately supported with their technical issues. One person pointed out: “I have absolutely no complaints about the service and the supporting guidance we were given in class was excellent too”. The recent introduction of ‘Pay fee online’ for not renewing the library loans was praised too by 3 participants. The research utility has been rated favourably by 4 respondents and one in particular underlined: “Its usefulness to research databases by topic rather than title”. 3 samples specified how the structure of the content has been beneficial for their assignments. Finally, 7 samples were not specific in their comments and used out of context sentences such as: “Nice pictures”, “Peaceful”, “Why should I answer?” etc.

The prevailing line of orientation from the results of question thirty-one (What do you LEAST appreciate about DBS library website?) was not specifying the least appreciated factor in the Library web site, with 28 individuals having entered “N/A”, “Nothing” or “The site meets its purpose”. Others tended to criticise some technical functions and the design such as: “Being logged out after twenty minutes” (8 samples), “Outdated design” (5 samples), “Homepage is badly structured” (4 samples) and “The subject portal should be organised differently” (3 samples). 5 individuals commented about the ‘Search’ function for journals and databases being “Confusing” and “Slow” when accessed remotely. One respondent described the link to LexisNexis as being “Rather laborious, not straight forward”, and another one mentioned that the “Link to Athens sometimes doesn't work”. 2 people expressed their lack of usage of those widgets embedded in the site, such as: ask a librarian, library blog, Twitter or Facebook and they considered them irrelevant to have amongst the website services. One person brought up the “Library classes”, whereas another individual said that new students should be told how to utilise the website properly and to make the most of it. It was also mentioned by 1 sample about a “Lack of books”, and another person remarked “It is horrible”. For this question just 3 participants entered irrelevant comments, such as: “Why should I answer?”, “utyuty” and a dash.

With regards the last open-ended question the total count of samples dropped to 36 in comparison to the other two questions, amongst which just a small number of comments was considered beneficial for this research. 22 samples were for “No”, “N/A”, “None” and “Not this time”. 2 mentioned to improve the visual appearance of
the homepage, while 1 person asked to make the website easier to access and searching information more user-friendly. It was interesting to note that 2 participants spoke of e-thesis and their lack of organisation within the OPAC when searching, 1 of which made a pertinent suggestion: “The e-thesis section of the site should be re-categorised into course category and further segmented according to undergraduate and postgraduate dissertations in order to facilitate searching”. 1 individual made an observation about e-books, suggesting to extend the period of time to download them (currently 3 days). 3 people had some remarks about the resources offered within the Library’s two locations, such as increase the number of printing machines, PCs and extending the 3 days book loan to 5 (mentioned by a Law student), comments that were irrelevant to the research. 1 individual asked to “Simplify” the website without adding any ideas. 4 inputs were extraneous to the aims of this research.

At the end of the survey there was a request to enter the participants’ email addresses, for those who were willing to take part in a possible group interview. Unfortunately due to time constraint and the scant number of available respondents, this did not happen.

4.4 Conclusion

This chapter presented the results of the survey, which were grouped together according to the aims of the research. The first section examined the demographics, where some questions were paired together in order to give further details about the participants and their utilisation of the Library website. The findings from the harvested samples uncovered that the majority of respondents came from the Law School, which was an encouraging factor considering how important research is – and so library websites - when attending a Law degree. On the other hand the number from DBS staff was rather scant and they did not play an active role in the statistics of the raw data.

The core of the questionnaire was composed of fourteen statements aimed to answer the research questions listed in the first paragraph of chapter three. The statements were collected in groups of two or three and examined according to the objectives of this research and their variables. Hence there were seven sub-paragraphs of the
section ‘Evaluation of DBS library website’. The collected data brought out an overall positive perception of the site and its resources and services, which were considered practical, helpful and efficacious for the participants’ academic successes. From another point of view, the number of people who did not wish to assess the quality of support given by librarians within the website was surprisingly high, as was the number of respondents who never utilised tools like ‘Ask a Librarian’ or Library blog and links to Facebook or Twitter.

An outline of the results of the three open-ended questions concluded this chapter, whose findings pointed out a widely favourable opinion about the content and the various services offered by the Library website. However, some participants expressed their lack of enthusiasm about the design of the homepage and technical aspects such as the ‘Search’ tool for journals and databases, which seems to operate slowly when accessed remotely considering the high speed of the individuals’ Internet connection.

The next chapter will compare and contrast the survey findings with the results in the literature review.
Chapter 5: Discussion

*In one case out of a hundred a point is excessively discussed because it is obscure; in the ninety-nine remaining it is obscure because it is excessively discussed.*

(Edgar Allan Poe)

Chapter Summary

Up to now the research has covered the literature review about the findings relative to the main questions of the study, described the methodology engaged to achieve the scope of this analysis and streamlined details of the data collected with the web survey. This chapter will present an analytical comparison of the findings from the literature review with the survey results, grouped together according to the research questions and their themes. Referring to chapter three, this study was aiming to answer five questions:

- What is the context of use (reasons) of the DBS library web site?
- How do users feel about the site (visual appeal, language, technical aspects, etc.)?
- Are the participants satisfied with the resources (intranet and internet) and services offered by the site?
- Is the users’ academic success linked to the library website?
- What suggestions do users have to improve the current site?

Each section of this chapter will comprise an overview of the significant findings of the web-survey, integrating them with those from the literature and other research studies examining the same phenomenon. An example of which could be the larger presence of students and staff from the DBS Law School rather than other faculties who took part in the web-survey, outlining the recent development of legal information on the net as mentioned by John-Okeke (2008) and Doe (2006). Therefore, the interest in evaluating a library website could be considered notable amongst individuals from this cohort.
5.1 What is the context of use (reasons) of the DBS library website?

In light of the fact that a website for a library is regarded as ‘a means of prefatory and a place of bridge connecting the library staff and institutions’ as delineated by Balaji and Kumar (2011, p. 478), a broadly encouraging observation can be made about the quality of the resources offered by the DBS library website and the level of competence recognised by most respondents. This contrasts the results from the literature review examined in the second chapter and in particular those from the study carried out in South India by Balaji and Kumar (2011), in which the slow development of the academic web-based library services has been the mainstay of its results.

5.1.1 Participants’ academic provenance

According to the first question posed in the demographics segment (What course do you attend?) 50% of the respondents were from the Law School and the rest were a mix from Business and Management 23%, Psychology 8%, Arts 6%, Accounting and IT 4% each, and Counselling 2% (see figure 4.1), even though the questionnaire was sent equally amongst the different DBS faculties. This weighting towards the Law School validates the study carried out in Nigeria by John-Okeke (2008) and its conclusion of how legal information has evolved to be predominantly web-based. Hence the importance of developing information literacy skills amongst Law students of any levels has become a must for academic librarians in the last decade (Doe, 2006). The recent changes in publishing have had an impact on legal information, such as the appearance of a modified or enacted law on the net before being printed on paper (John-Okeke, 2008). There is a common view amongst Law and other faculties’ students that a librarian is not needed for their researchers with the plethora of information available online (Qutab and Mahmood, 2009; John-Okeke, 2008; Doe, 2006). However, emphasizing the danger of relying solely on commercial sites when accomplishing research is one of the main tasks of contemporary librarians (Pariser, 2011; John-Okeke, 2008; Doe, 2006). In the light of this, it is gratifying that such a large portion of respondents were from the DBS Law School to assess the Library website.
5.1.2 Access the DBS library website for intranet services

The Library website turned out to be moderately utilised for intranet services such as: library classes, inter-library loans, library timetable, policies, etc. As described in paragraph 4.2.7 and depicted in figure 4.17, 4.18 and 4.19, question sixteen (I use DBS library website: accessing library catalogue, databases, reference materials, text-books, e-books and DVDs), seventeen (I use DBS library website: General information about services: research skills, library classes, inter-library loans, booking PC/room, printing/photocopying, etc.) and eighteen (I use DBS library website: For the library's opening hours, membership, policies, contact details, library news, etc.) collected input about the reasons for accessing the website, whose findings returned that the size of the group of patrons who selected ‘Never’ was relatively small, respectively 1%, 9% and 8%. Moreover, the feedback of the open-ended questions showed that a good portion of the respondents (22%) utilise the website to ‘Pay fee online’, extend the loan term or reserve a resource. This confirms the findings from the literature review where a user-centred Library website enlarges the usability range (Stevenson et al., 2012; Ahmed and Shoeb, 2009; Rogers and Preston, 2009; Jowitt, 2008; Liu, 2008; George, 2005). Furthermore, it has been strongly suggested that the ‘virtual visits’ of a library are a sign of quality of those services offered by the physical library (Poll, 2007).

5.2 How do users feel about the site (visual appeal, language, technical aspect, etc.)?

Overall the participants evinced to be quite enthusiastic about the DBS library website and its visual appearance, language and technical setup. An example of the general consensus was the frequency of accessing the Library website that can demonstrate an extensive popularity of the site amongst the survey takers. Question fourteen asked about this topic (In the last six months how frequently have you visited the DBS library website?) and a group of almost 49% stated they access it ‘Weekly’.

5.2.1 Visual appeal of the DBS library website

Beside the frequency of accessing a website another factor that indicated an approving unanimity was the respondents’ opinion about the visual aspect of the DBS library website, whose majority of answers to question twenty-six (How would you rate the
visual appeal of the website?) was orientated towards the three favourable descriptors (Average, Above Average and Excellent) for a sum of 83%. Whereas just 12% described the visual appeal as ‘Very Poor’ and ‘Below Average’ and 14% of the input in the open-ended questions pointed to an ‘outdated design’ and ‘disorganised visual appearance of the homepage’, but no suggestions were furnished to ameliorate those flaws. A way to give incentive to patrons to access the Library website and scrutinise the content is via the utilisation of graphics, according to the findings of Aharony (2012) where a list of American academic library websites were studied for a decade. This agrees with George’s studies (2005), whose results from the loud-protocols shows that the colour and graphics scheme increase visibility of a website and engage with users. The survey findings contrast with those from Liu’s research (2008), where a list of detailed changes - including graphics and restructuring the content - is recommended to improve the present design of the 100 library websites examined in the study.

5.2.2 Language of the content of the DBS library website

Clarity according to the Oxford dictionary is ‘the state of being easy to see, hear or understand’, a necessary factor when the topic of a discussion deals with the language utilised within a website. The questionnaire presented two queries, twenty-one (The vocabulary used on the website is…) and twenty-two (The information offered on the website is…), that asked to rank the intelligibility of the information and vocabulary in the website. Not only were the questions alike but also the findings (see figure 4.10 and 4.11), which confirmed a broad positivity with a total of 84% for the vocabulary being ‘Good’ and ‘Very Good’ and 77% for the information. An exiguous number (6%) graded the website language and information ‘Confusing’ and ‘Poor’, in opposition with the 28% of those who described the website as ‘Clearly labelled’ in the last part of the survey. The latter is an achievement for the DBS library system staff considering how complex structuring information and employing an adequate terminology can be, in order to create a Web Content Management System for an academic environment that would suit the needs of an institution, as revealed in Black’s study (2011) mentioned in paragraph 2.2.1.
5.2.3 Technical aspect of the content of DBS library website

The demographics section contained a question (What type of internet connection do you have at home?) concerning the technical specification of the participants’ internet set up, in order to establish relevance between individuals’ satisfaction about the Library website technical characteristic and their Internet speed, which can influence the speed of the website. The results indicated that 91% of the participants possessed a hi-speed setup with either Wi-Fi or Broadband, compared to 6% with a slower USB modem or a dial-up, justifying the level of contentment. On this account, only 8% of the sample specifically complained about the ‘Search database tool being slow’ when accessed remotely, whereas 11% revealed to be entirely pleased with the same tool in comparable circumstances.

At the same time, question nineteen (I use the DBS library website for: Accessing the subject portals) aimed to observe the perception about the technical aspect of the content of the website and as illustrated in paragraph 4.2.1, 46% of the total answers chose accessing the subject portals ‘Often’ and ‘Very Often’. In addition, a good number of positive comments, equal to 17%, were entered in the last section of the questionnaire praising the efficiency of the structure of the content for academic successes. These findings confirmed that one of the fundamental characteristics for a successful academic library website is arranging resources in a subject portal as mentioned in Poll’s report (2007): “For academic libraries, access via subjects will be important, as the interests of students and staff will vary as to faculties”.

5.3 Are the participants satisfied with the resources and services offered by the site?

As aforementioned, the demographics segment comprised some technical questions in order to establish a possible link between the participant’s satisfaction with the Library website and their technological specification. The results presented an extensively favourable opinion about the intranet and internet resources and most services contained in the site, except the widgets ‘Ask a Librarian’, the Library Blog and links to social networks that seemed not to attract users’ attention. The results from the twentieth statement (Using one of the following widgets: Ask a Librarian, Library Blog, Twitter or Facebook) about frequency of usage of the widgets speak by
themselves with 34% of those who singled out ‘Never’ used them and with 14% positive answers and almost 6% of those who decided not to disclose their thoughts. There were also 3% of the population who expressly requested to eliminate these widgets from the homepage describing them as irrelevant for an academic library website. On the other hand 12% distinctly declared to appreciate the technical support quickly received via the ‘Ask a Librarian’ tool. These contrast with the purpose of a tool like ‘Ask a Librarian’ where a direct assistance can be obtained as soon as a problem arises and can offer an interaction between a user and a librarian. According to John-Okeke (2008), Law students should benefit from utilising a Library blog in keeping their legal knowledge up-to-date and the employment of Web 2.0 tools should transform the Library website in ‘a social network connecting both people and information’ (John-Okeke, 2008, p. 12). Aharony (2012) finds that encompassing Web 2.0 tools within a Library website adds value to the site and can reach a larger group of satisfied customers; this duplicate results from other studies achieved previously (Balajii and Kumar, 2011; Kaur and Singh, 2010; Liu, 2008).

5.3.1 Links to external information within the DBS library website
In an opposite direction, when gauging the links to external information in question number twenty-seven (Links to external information are.....) a large consensus resulted, with 47% of the population regarded them as being ‘Above Average’ and ‘Excellent’. An individual praised the wide range of availability of legal resources and the fact that he/she could easily access them remotely. 4% of respondents also stated in the last part of the survey the usefulness of the ‘Search’ tool for the external links when completing their assignments. These positive results are reassuring as users might refer to the DBS library website rather than commercial search engines such as Google or others, establishing DBS’s upper hand in this field. Furthermore, they have ascertained that the survey respondents show to possess cognition of information literacy equal to high level. The latter may be attributable to the ‘Library classes’ run on a regularly basis at DBS. This positive data contrasts with those from two studies noted in the literature review that were conducted in Sri Lanka (Wickramanayake, 2012) and in South India (Balaji and Kumar, 2011), where it is highlighted how the development of online services are in both cases at an early stage and moving forward at a very slow pace in combination with the lack of skilful library staff.
5.4 Is the users’ academic success linked to the library website?

5.4.1 Survey participants in detail

A brief description of the survey takers is necessary to understand their answers to this research question. According to the findings the group was composed by 54% of full time students, 35% of part time ones and 11% of staff. As shown in table 4.1 and 4.2, the preponderance of the cohort included 60% of students from the Law School from a mixed course levels: Level 7 (37%), Level 8 (32%) and Level 9 (22%). The samples depicted a variety as regarding the age of the participants: 35% were from 20-25, 17% from 31-36 and 43 & over, 14% from 26-30, 12% from 17-19 and 7% from 37-42. They were mostly unemployed 38%, with 36% of workers and the rest were employed part-time.

5.4.2 Survey questions analysis

The second segment of the questionnaire included three queries to investigate the utility of the Library website and its connection with the respondents’ academic success. These questions are illustrated in paragraph 4.2.4 and they are number twenty-three (*How useful is the website for your research?*), twenty-eight (*At what level has the library website contributed to your academic success?*) and twenty-nine (*To what extent has the Library website affected your life style?*). The results depicted an audience reasonably enthusiastic for the invaluable role that the website has played in their research with 68% ranking it ‘Very’ or ‘Extremely’ beneficial. Furthermore, when grading the Library website in their academic successes, the greater number went for ‘Moderately’ (36%) and the total of ‘N/A’ doubled from 3% for question twenty-three to 6% for twenty-eight. In view of the fact that the DBS staff population was 6% of the total respondents, it can be presumed that 3% of DBS workers do not utilise the website for their research and that for the entire staff section the website has not played a key role for their academic achievements. These results confirm the findings from Hughes’s study (2012) that looked at the DBS library usage and its students’ academic attainments. It was accomplished via an analysis of the data furnished by the library management system over a period of three years (2009-2010, 2010-2011 and 2011-2012) and a link between the final exam mark and logging into the DBS e-book platform, Dawsonera, has been found. As a matter of fact more than 65% of the DBS pupils who achieved a first class honours degree in 2011-2012
borrowed resources from the library and logged into the E-Library via the DBS library homepage, supporting the significant function of an academic library and its website in a student and lecturer’s lifespan.

Question twenty-nine was posed in order to establish a possible correlation between participants’ satisfaction of the DBS library website and their life style. But the lowest grade ‘Not At All’ was selected by the widest number of people 24% in the whole survey and the quantity for ‘N/A’ doubled question twenty-eight 12%. The majority of the remaining preference was given to ‘Moderately’ at 31%, indicating that the above link may have been amongst a smaller group of people than anticipated.

5.5 What suggestions do users have to improve the current site?

The fifth question of this research required an active participation from the survey respondents and it was clearly encompassed in the third open-ended query: Do you have any other comments or suggestions? However, the results from the second open-ended question (What do you LEAST appreciate about the DBS library website?) were also considered worthwhile during the analysis. The trend of the input for both questions was generally favourable, finding the Library website useful for the respondents’ researches. Suggestions were few (39% of the total respondents) and orientated towards improvements of the design and of some technical features of the website such as: restructure the homepage, update the design, extend the period of log in and categorise differently the e-thesis section. Surprisingly they were noticeable those answers that suggested eliminating tools like ‘Ask a Librarian’, the library blog and links to Facebook and Twitter, though it does confirm the results from question twenty (Using one of the following widgets: Ask a Librarian, Library Blog, Twitter or Facebook) where almost 34% stated that they never used these widgets. This outcome contrasts with the current inclination towards social networks and blogs and their fame of being the most utilised widgets amongst people of the same age groups as the questionnaire takers. Even so, those links just direct users to the DBS Facebook and Twitter accounts, which may be the reason why respondents did not find them relevant. The unfavourable attitude towards ‘Ask a Librarian’ may be related to its volatile functionality, it is often offline during the Library opening times. In addition the earlier mentioned proposal differentiates totally from the findings of Jowitt’s
study (2008) where 71% of the respondents’ were supporting the use of podcasts, albeit relatively new tools at the time, utilised in the study for instructional purpose of certain services of their library website. The population who took part in this analysis suggested adding videos to the podcasts to improve their usefulness (Jowitt, 2008). Hence the researcher recommended investing into podcasts more than the institution considered was doing (Jowitt, 2008).

5% of the answers pointed out that the least appreciated feature of the website was being logged out after 20 minutes, implying a suggestion to increase the time allocated to be logged into the website. This is an example of how crucial is for the library staff to put in place those feedback offered by their stakeholders in order to keep them satisfied and to encourage them to utilise primarily the Library website instead of commercial sites. A user-centred academic library website arises from the wealth of literature review examined in the second chapter (Stevenson et al., 2012; Kayongo and Helm, 2010; Ahmed and Shoeb, 2009; Rogers and Preston, 2009; Jowitt, 2008; George, 2005), hence benchmarking the Library website should be realised regularly and improvements should be put in place according to users’ needs and requirements.

5.6 Conclusion
This chapter endeavoured to sum up the fundamental topics investigated in this study and compared the findings of the web-survey with those identified in the literature review in relation to the research questions posed at the start. The main findings of the study were underlined and compared to those from the literature review. One interpretation of the research findings is that the Library website users are distinctly content with it, which is similar to the results from the majority of the international studies examined in the literature. It was rewarding to note that the population who took part in the survey had mostly favourable opinions on the DBS library website and link their academic success to its usage. This differentiates from some international research studies where the library users were so unsatisfied with the content of the library homepage and its basic functions to induce them to refer to commercial or other academic websites (Wickramanayake, 2012; Qutab and Mahmood, 2009; George 2005).
Another aspect that was brought to light by this research was the low percentage of respondents that use the ‘Ask a Librarian’ feature and the request from some to eliminate it from the DBS library homepage. This contrasts with the analysis carried out in Malaysia by Kaur and Singh in 2011 where it was underlined the importance of establishing a librarian/student relationship in order to use effectively the digital services offered by an academic library website, and a way to develop this rapport could be by giving a fast and competent response to customers’ queries. Which way could be quicker than receiving support online via ‘Ask a Librarian’?

It has become evident during the research that one way to enhance the usability of the DBS library website is to deepen the binomial relationship between user feedback and website improvement. However, the next chapter will attempt to outline the recommendations singled out during the research.
Chapter 6: Conclusion and Recommendations

Chapter Summary
This final section will delineate the essential conclusions of the research and it will attempt to suggest some recommendations based on the survey results.

6.1 Positive feedback
Ahmed and Shoeb (2009) state that “the quality of a library has traditionally been measured by its collection size”, and they add that its users are the best connoisseurs when it comes to benchmarking services offered by a library. Since the integration of e-journals and other electronic material, the services supplied by an academic library have broadened well beyond the level given at an on-site premise (George, 2005). In consequence of that, an academic library website has grown to become the significant reference point for its users in the last number of years. Thus, across most institutions a thorough attention has been paid to the design and functionality of the website so that it can continue to furnish those essential services to library patrons efficiently (John-Okeke, 2008; George, 2005). Not forgetting that users’ feedback is crucial when assessing the essence of an academic library website, according to the plethora of studies examined in chapter two. Overall the services offered by the Library website were rated advantageous by survey takers, who answered positively to the third research question (Are the participants satisfied with the intranet and internet resources and services offered by the site?). In addition, the level of frequency of accessing the website demonstrates its wide spread approval.

6.2 Negative feedback and recommendations
Some pointed out their contrary opinions about the visual appeal, describing the homepage layout as too old fashioned and for others the website’s session timeout is too short. This is an example of a research finding that should be taken into account by the designers, because if for example a longer period of time for being logged into the site is allocated, the usability should improve as library patrons may access it...
more willingly for their research without the annoyance of entering their password as often. It has also become evident during this research that one way to ensure a bright future for the library is by opening up a channel of communication with library users and applying their possible suggestions to help satisfy their changing requirements, which has also been confirmed by the literature (Stevenson et al. 2012). Therefore, web-surveys or group interviews with library users should be organised regularly and stakeholders should be made aware of their requested changes that have been introduced on the website. A perceived commitment towards listening to users’ feedback should help individuals to feel a sense of loyalty that will make them return to the library website.

Social networks like Facebook and Twitter have been widely utilised by libraries as a means to promote their services and to reach out to users (Wickramanayake, 2012; Kaur and Singh 2011; Kaur, 2009). Although the results of this research revealed that for the majority of the respondents, the links to these widgets can be excluded from their Library website as they are not considered effective. Furthermore, the Library blog and Ask a Librarian were the other two tools that did not have a large approval, which defeats the purpose of them: one being a device to connect people and information and the other one representing direct user assistance by a librarian. According to results from various studies examined in the literature review, embracing these Web 2.0 widgets into an academic library website adds value to the site (Aharony, 2012; Balaji and Kumar, 2011). Thus a recommendation for the DBS library staff would be to consider organising library classes in order to introduce to the students the beneficial aspects of these tools when utilised properly. For example, they offer an additional way of broadcasting information in a method convenient for most students, and they are also a conveyance for sharing knowledge.

6.3 Future researches about this topic
This research focused on investigating how a library website that is part of the largest independent third-level institution in Ireland with over 9000 students, is assessed by its users. The research has met the starting aims and objectives; it answered the research questions with the aid of a web-survey distributed across the campus. The largest majority of respondents was from the DBS Law School, reflecting the fast
pace of globalising legal information and its distribution and management within an academic environment. Forthcoming researchers could extend the users’ assessment about the presence of legal information within the Library website.

Rating the use of disability services contained in the homepage of the DBS library website was not included in this research, due to insufficient time available and knowledge about the specific topic. Ergo this matter could also be examined in later studies.

6.4 Conclusion

This chapter introduced a summary of the most eye-catching conclusions gathered from the findings along with some recommendations for potential actions. It has stressed the importance of a user-centric library website, which will contribute to a rosy and efficient future for the library and its services. It is hoped that DBS library staff will avail of the findings from this study.
Chapter 7: Self-Reflection on Learning and Skills Development

The highest activity a human being can attain is learning for understanding, because to understand is to be free.
(Baruch Spinoza)

Chapter Summary

Kolb (1984) stated that “Learning is the process whereby knowledge is created through the transformation of experience” and this section will be focused on a self-reflection of the learning that occurred during the Masters and the writing of the thesis. After a brief presentation of the learning styles and cycle I will describe my basic cognitive process, how it was utilised in my past education and how it has changed since the beginning of the course. The first approach to the topic of this research and its challenges will follow. I will then go into depth about how I started putting the research into words and modelled the web-survey. Finally, I will mention briefly how I am going to use the new skills learnt in the last academic year, along with my existing ones, in my future career as a librarian.

7.1 Learning styles and the learning cycle

According to Kolb (1984) the element that sets apart human beings from other living organisms in Nature is the “process of learning” and the ability that humans possess to adapt to various types of environments. John Dewey in 1933 originated the importance of the experiential learning, after which other psychologists looked at this process, amongst which Piaget, whose theory was founded on illustrating how the human intelligence is formed by experience (Kolb, 1984). Piaget concentrated on studying the cognitive-development in human beings and his theory was formulated in the middle of the 20th century by observing groups of children from birth until adolescence (Kolb, 1984). This theory is about the nature and development of human intelligence that is not congenital, and is instead a product of the interaction between people and their environment (Kolb, 1984). Kolb in the early 80s determined a four stage learning cycle that embraces the process of having an experience, reviewing it, inferring and planning from it. This was later adapted by Honey and Mumford (figure 7.1) and associated to a classification of four types of learners: activist, reflector, theorist and pragmatist, as shown in figure 7.2 (Mumford, 1995).
Can the Honey and Mumford’s learning cycle be applied to the development of this dissertation? Yes, indeed. In fact having an experience can be associated to the choice of the research topic and experiencing the research itself. Transferring the research process into words implies reviewing. When terminating a study, conclusions come along in order to demonstrate how the research aims were achieved and what consequences they have uncovered. Analysing the various steps that drove towards the completion of this study involve a plan on how to carry forward and employ these new skills that were learnt during the experience, in forthcoming situations.

Based on the fact that each individual has a tendency to learn in one way rather than another one, Mumford (1995) illustrates a set of individual learning styles - developed with Honey - that duplicate the four stages identified by Kolb (figure 7.2).

Figure 7.1: The learning cycle (Mumford, 1995)
Since learning can be assimilated in a non-structured method, I can define my learning mode as a mix of an activist and a pragmatist style. The activists learn best from new activities carried out personally; they do not mind being thrown into the deep end with a difficult challenge; they rely on brainstorming and apprehend less from a passive activity, such as a speech at a conference (Mumford, 1995). The pragmatists need an activity with a connection between the topic and its theory; they learn best when they can experiment an event and they learn less where an activity is away from reality and there are no clear steps on how to do it (Mumford, 1995). As regards myself, I perform best when I have to face a task I am not familiar with so I can use my creativity to engross myself in it, in order to achieve the required aim. However, I would need some guidelines and a link between the topic and the problem to keep focussed.

Attaining this thesis was the apex of a complex period of academic and personal growth, which began when I commenced the Masters in information and library management. It was time that proved stressful on occasion, due to many demands that were more complicated to fulfil than anticipated. Being a mature student, I arguably started at a slight disadvantage compare to the rest of my class, which was mainly composed of students in their mid-twenties and freshly graduated from other colleges. Despite having a Master’s degree in linguistics, obtained almost 20 years ago, and a number of years’ experience working in IT and as a teacher, I confronted several issues before adjusting to the fast pace of the course. The way I faced those challenges
throughout the academic year and during the course of the dissertation have impacted positively on my learning style and my research skills, which have evolved notably.

7.2 Approaching the research topic
When did I begin to think about the research topic? This occurred during the course of the first semester and in particular while taking the Research Methods module, when the class was asked to select an area of interest for the dissertation. In my opinion it was quite premature as I had not had a comprehensive overview of all the course modules. Nevertheless, I was orientated towards a technical section with Library and Information Science (LIS). After an initial intention to take a subject concerning cataloguing specific resources related to veterinary science, and following a stage of familiarising myself with the related literature, I decided to focus on a connection between IT and LIS and how information is spread virtually. The Research Methods module contributed towards increasing and developing my skills, such as collecting data and conducting a quantitative and a qualitative analysis, which I was not acquainted with, besides my past involvement in writing a master’s thesis. However, that thesis did not require a statistical analysis of harvested data because it looked at the progression of mammalian names from Latin into Germanic languages, hence the completion of the dissertation required a thorough study of different lemmas.

The next step was choosing the type of method to employ for the research. In the meantime an assignment for IT, which involved designing a library website, helped me outline the investigation and particularly what questions to pose. Having no direct knowledge of how to plan and develop a website before, I referred to Piaget’s cognitive-development and emulated it by focusing on what I would like to find when logging on to a library website. Therefore I assumed a reflector type of learning style on this occasion, which also aided laying out the method for the research. The intention was to assess the Library website via its users’ feedback and being a teacher I am accustomed to listening to others’ opinion. In the light of this I decided to settle my study and to collect data through a survey, whose results were going to be analysed using a mix-methods approach, as explained in chapter three. This set up was also confirmed by the literature review. In spite of this, I felt frustrated and anxious about the selected research method and the possibility of either not covering
all bases of the investigation or not conveying answers to the research questions. With
the support from my supervisor, I managed to tackle this fear and used it towards my
learning curve; in fact I was able to become more flexible towards the research and to
consider introducing changes if I was coming across contradictory evidence from the
collected samples. An example of which was the survey participants’ dislike of Web
2.0 widgets embedded into the homepage, which was not foreseen.

A significant improvement in my organisational and critical analysis skills has
occurred while working on the literature review for the thesis. I have always been a
person keen on details, but the narrow timeframe allocated to accomplish this
dissertation increased my speed in extrapolating, summarising and connecting
theories of various studies. This acquired expertise would be useful for the fast pacing
of an LIS environment and for an ensuing career within that field.

7.3 Designing the survey and writing the content
Where to start? This has been the recurrent question when I had to approach an
assignment. During the first semester of the Master’s and mainly the Information
Organisation module I used to suffer from ‘confusion and information overloading’
when compiling material and ideas for the weekly mini essays, which meant that I
generally knew what to say but when I was putting it into a blank sheet I ended up
losing the core content. My activist learning style contributed to overcome this state
via a technique that comprised brainstorming, creating a draft of my ideas as they
were coming along without an order and finally reviewing them to structure them
logically and fulfil the set topic of the assignment. I applied this procedure when it
was time to write the content of this dissertation along with my supervisor’s suggested
order to produce the chapters. I have always being a keen writer since secondary
school, but I have noticed that my composing ability has progressed, obtaining more
confidence for any possible future research project.

Designing a survey was another area where I was a tabula rasa and in which I have
made a considerable advance. In the course of the Research Method module we learnt
how to utilise SPSS for analysing data collected with a survey. For this research I
employed Survey Monkey to design and distribute the questionnaire and scrutinise its
input. It was the most practical choice I have taken, and although having no knowledge of this software I managed to self-teach and via trial and error I contrived to obtain good results. I am very satisfied with the level of noesis I have acquired using this software, which seems to be a tool frequently implemented by libraries to benchmark their services.

7.4 Plans for the future?
This research has given me an opportunity to enlarge my awareness regarding ways to structure information on a website and what factors are most requested by users of an academic library website. During the research process I discovered problem solving was a specific element that I could use in a career in the information sector. Before starting this Masters I was also not fully enlightened that LIS had reached such a scale in the virtual world. I must admit I have been pretty interested in deepening my learning about this connection between LIS and IT, which is why in the last year I attended a couple of meetings organised by the Library Association of Ireland covering various IT aspects of LIS, which I found worthwhile. In addition, my working experience in the IT field and in Education has expanded my natural tendency for detailed information and skills sharing, fundamental factors for a librarian.

7.5 Conclusion
In this chapter I attempted to summarise the skills I have obtained throughout the duration of the Masters in information and library management and the thesis experience. Personally, I will set out to search for a role in a library, possibly a specialist library, where IT and teaching expertise are requested from the candidate in combination with knowledge of cataloguing and foreign languages. Considering the level of learning skills achieved, I have ascertained that engaging in this Masters has been a fruitful and invaluable episode of my life, which will contribute in my prospective career as an information officer.
Bibliography

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APPENDICES:

Appendix A: Survey

**<b>Evaluating the DBS Library website</b>**

**Introduction**

Dear Participant,

This survey is part of a research thesis being carried out by Ms. Lara Musto, a student of MSc in Information and Library Management, supervised by Dr. Clare Thorley. The purpose of this questionnaire is to determine factors that make the DBS library website useful for students and staff. The survey will take about 15-20 minutes to complete. Your contribution is valuable to this study. Please try to be as honest and accurate as possible and do not write your name on the survey. Please note that all the responses will be treated with the strictest sensitivity and are anonymous. If you are willing to be contacted for a possible interview, please leave your email address in the section dedicated below. If you have any questions, please do not hesitate to email the researcher: lara.musto@gmail.com Thank you for your cooperation.

**About you**

1. **What course do you attend? Please tick.**
   - Accounting and Finance
   - Arts
   - Business and Management
   - Counseling and Psychotherapy
   - Information Technology
   - Other (please specify):

2. **What course type? Please tick.**
   - Full-time Undergraduate
   - Postgraduate
   - Evening Degree
   - Other (please specify):

3. **At what level are you currently studying?**
   - Level 9
   - Level 8
   - Level 7
   - Level 6
   - Other (please specify):
**Evaluating the DBS Library website**

**4. Are you a:**
- Full Time Student
- Part Time Student
- Staff
- Other (please specify) [ ]

**5. Have you been to college before, other than DBS?**
- Yes [ ]
- No [ ]
- Other (please specify) [ ]

**6. How old are you?**
- 17-19 [ ]
- 20-25 [ ]
- 26-30 [ ]
- 31-35 [ ]
- 36-40 [ ]
- 41-45 [ ]
- 46 and over [ ]

**7. What is your gender?**
- Male [ ]
- Female [ ]

**8. Do you work?**
- Full-time [ ]
- Part-time [ ]
- No [ ]

**9. Where do you live?**
- Urban [ ]
- Rural [ ]
- Suburban [ ]

**10. Do you have a smartphone?**
- Yes [ ]
- No [ ]

**11. If so, do you use your smartphone to log on to the library website?**
- Yes [ ]
- No [ ]
Evaluating the DBS Library website

12. What type of internet connection do you have at home?
- Broadband
- WiFi
- Dial-up
- Dongle
- None
- Not sure

Library website evaluation

13. Which branch of the DBS library do you use mostly?
- Anglian Street
- Dame Street

14. In the last six months how frequently have you visited the DBS library website?
- Daily
- Weekly
- Monthly
- Less than once a month
- Never

15. Where do you mostly access the library website?
- From the library
- From home

16. Accessing library catalogue, databases, reference materials, text-books, e-books and DVDs
- Never
- Seldom
- Sometimes
- Often
- Very Often
- N/A

17. General information about services: research skills, library classes, intern-library loans, booking PC/room, printing/photocopying, etc.
- Never
- Seldom
- Sometimes
- Often
- Very Often
- N/A
### Evaluating the DBS Library website

**18. For the library’s opening hours, membership, policies, contact details, library news, etc.**

<table>
<thead>
<tr>
<th>Never</th>
<th>Seldom</th>
<th>Sometimes</th>
<th>Often</th>
<th>Very Often</th>
<th>NA</th>
</tr>
</thead>
</table>

**19. Accessing the subject portals**

<table>
<thead>
<tr>
<th>Never</th>
<th>Seldom</th>
<th>Sometimes</th>
<th>Often</th>
<th>Very Often</th>
<th>NA</th>
</tr>
</thead>
</table>

**20. Using one of the following widgets: Ask a Librarian, Library Blog, Twitter or Facebook**

<table>
<thead>
<tr>
<th>Never</th>
<th>Seldom</th>
<th>Sometimes</th>
<th>Often</th>
<th>Very Often</th>
<th>NA</th>
</tr>
</thead>
</table>

### Library website evaluation 2

**21. The vocabulary used on the website is**

<table>
<thead>
<tr>
<th>Confusing</th>
<th>Poor</th>
<th>Fair</th>
<th>Good</th>
<th>Very Good</th>
<th>NA</th>
</tr>
</thead>
</table>

**22. The information offered on the website is**

<table>
<thead>
<tr>
<th>Confusing</th>
<th>Poor</th>
<th>Fair</th>
<th>Good</th>
<th>Very Good</th>
<th>NA</th>
</tr>
</thead>
</table>

**23. How useful is the website for your research?**

<table>
<thead>
<tr>
<th>Not Useful</th>
<th>Slightly</th>
<th>Moderately</th>
<th>Very</th>
<th>Extremely</th>
<th>NA</th>
</tr>
</thead>
</table>

**24. How useful is “Search Electronic Resources”?**

<table>
<thead>
<tr>
<th>Not Useful</th>
<th>Slightly</th>
<th>Moderately</th>
<th>Very</th>
<th>Extremely</th>
<th>NA</th>
</tr>
</thead>
</table>

### Library website evaluation 3

**25. How would you rate the librarian assistance on the website?**

<table>
<thead>
<tr>
<th>Very Poor</th>
<th>Below Average</th>
<th>Average</th>
<th>Above Average</th>
<th>Excellent</th>
<th>NA</th>
</tr>
</thead>
</table>

**26. How would you rate the visual appeal of the website?**

<table>
<thead>
<tr>
<th>Very Poor</th>
<th>Below Average</th>
<th>Average</th>
<th>Above Average</th>
<th>Excellent</th>
<th>NA</th>
</tr>
</thead>
</table>

**27. Links to external information are:**

<table>
<thead>
<tr>
<th>Very Poor</th>
<th>Below Average</th>
<th>Average</th>
<th>Above Average</th>
<th>Excellent</th>
<th>NA</th>
</tr>
</thead>
</table>
Evaluating the DBS Library website

28. At what level has the library website contributed to your academic success?
   Not At All  Slightly  Moderately  Very  Considerably  N/A

29. To what extent has the library website affected your lifestyle?
   Not At All  Slightly  Moderately  Very  Considerably  N/A

Open ended questions

Please enter your comments for the following questions:

30. What do you MOST appreciate about DBS library website?

31. What do you LEAST appreciate about DBS library website?

32. Do you have any other comments or suggestions?

33. Please leave your email address if you wish to be interviewed by the researcher.