A User-Based Evaluation of the Communicative Functions of the University of Nairobi Website

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DECLARATION

This Research Project is my original work and has not been presented for the award of a degree in any University.

....DATE…………………………………

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This Research Project has been submitted withy my approval as the Supervisor

……………………………………………DATE……………………………………

DR. MUIRU NGUGI

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DEDICATION

To my dear and loving husband, Sam Kamau, a great man who has not only been a positive influence in my life but also a source of inspiration. I love you.

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ABSTRACT

This study sought to investigate the role of websites in academic institutions specifically focusing on the University of Nairobi website. The study establishes the role of the University of Nairobi website as an institutional communication tool, determines the effectiveness of the website in projecting and enhancing the university's image, as well as the relevance and usefulness of the website content from the users' perspective. The University of Nairobi management has put in place strategies geared towards improving the university's ranking. Recently, the website has undergone a lot of technical evaluations based on the Webometrics Ranking criteria, professionals to work specifically on the website have been hired, and colleges, departments and units websites have been given major facelifts. However, the evaluations have focused more on the website itself and the content therein. There has been little or no attempt to involve the actual users (University of Nairobi students and members of staff) of the website in these evaluations. This study therefore focuses on assessing the University of Nairobi website focusing more on the actual users of the website to determine the role of the website in the institution and more so as a communication tool. The study is guided by the Technology Acceptance Model (TAM) as it seeks to explain the individual acceptance and usage of the website in relations to its role as a communication tool. The research design for this study is an evaluation of the University of Nairobi website which was conducted through a survey. The target population for this study was the University of Nairobi community which consists of students and staff members. The instruments used included questionnaires which were self-administered to 200 randomly selected participants, two different sets of interview schedules targeting technical website professionals and communication experts, as well as a checklist which was used during the content analysis, and document analysis of the website. For the data processing and analysis, both quantitative and qualitative data analysis were done. Quantitative analysis was done using the Statistical Package for Social Sciences (SPSS) while qualitative data analysis was done manually

CHAPTER 1: BACKGROUND TO THE STUDY

1.0 Introduction

On October, 1995, the Federal Networking Council (FNC) unanimously passed a resolution defining the term 'Internet' as a global network of computers and related hardware that are linked through a backbone network, to provide services to millions of businesses, organizations and individuals worldwide(Parker 1998). Oxford English Dictionary defines the internet as a global computer network providing a variety of information and communication facilities, consisting of interconnected networks using standardized communication protocols. Abbate (1999) indicates that the internet carries a vast range of information resources and services, such as the inter-linked hypertext documents of the World Wide Web (www) and the infrastructure to support electronic mail.

Cerf and Khan (1974), Campbell-Kelly and Aspray (1996) and Berners-Lee (1996) are among the scholars who have traced the origins of the internet to as early as the 1960s when the United States Government commissioned the research and building of a robust, fault-tolerant communication via computer networks. However, Campbell-Kelly and Aspray (1996) and Berners-Lee (1996) agree that there is no consensus on the exact date when the 'modern' internet came into being, but sometime in the early to mid-1980s has been considered reasonable.

According to Robins and Hilliard (2002), the development of the internet was influenced by the need for faster, cost effective communication and decision making. As a result of advancement on the internet, the world has evolved into a digital village connected corner to corner. With the advancement in technology, the internet has become a basic necessity not only to organizations but individuals as well.

In Kenya, the internet, first became available in 1993 and was fully accessed in 1995 under the first Internet Service Provider (ISP), Formnet. The African Regional Centre for

Computing (ARCC), a Nairobi non- governmental organization, became the first provider of web-based internet services. Soon competition increased with the entry of three other ISPs. All the ISPs would lease analogue or digital data lines from Kenya to the US to access the internet backbone. Full internet services were rolled out in 1995 by private companies. Currently, over 20 ISPs are operating in Kenya, with most of them offering leased lines services and some of them having points of presence in other towns. (Source: KENIC)

Like the rest of the world, the use of internet in Kenya has been on a rising trend. According to the Communication Commission of Kenya (CCK) 2011/2012 sector report, Kenyan internet usage has increased by 95.63 per cent in the last one year. The number of internet users has grown to 17.38 million as at December 2012 compared to 8.89 million users in 2011. It is expected that the numbers will grow as the internet becomes a necessity in Kenyan lives.

To that effect, organizations have positioned themselves to tap into the power of the internet. According to the Kenya Network Information Centre (KENIC) which is the Internet Corporation for Assigned Names and Numbers (ICANN) affiliated organization in Kenya, charged with the registration of the .ke country domain names, there are over 26,000 organizations registered under .ke (as at December, 2012). This figure does not include organizations under the .com domain names.

All over the world, organizations have recognized the importance of using the internet in their operations. Public institutions, private institutions, small businesses and individuals have turned to the internet and particularly the website as a generally accepted communication tool.

Robins and Hilliard (2002) note that organizations across the globe have invested in websites in order to survive today's competitive world. By having an online presence, organizations not only have a professional look but are also able to reach, interact and inform stakeholders and customers. In many cases, customers' initial impressions about an

organization are influenced electronically via the website. They first visit the website before actually visiting the organization in its physical location.

Today's users are expecting interactive web pages which provide them with whatever information they need. It is important for establishments to recognize that the website should be the central source of information. Unfortunately, organizations do not update the website content therefore users do not get current information. In addition, the management of feedback from clients is poorly coordinated. As a result, the website becomes an ineffective and inefficient communication tool.

Globally, academic institutions have not been left behind. In Kenya, the Kenya Education Network (KENET) provides cost-effective internet connectivity to various educational and research institutions under the domain .ac.ke. Most of them have invested in websites as they recognize and appreciate the importance of having an online presence.

However, Websites are now more than just communication platforms; they have become a ranking criterion for academic institutions. Ranking using institutions' websites has become common with the Webometrics Ranking of World Universities (an initiative of the Cybermetrics Lab) and 4icu Ranking gaining popularity as universities strive to compete for the top position.

Since the beginning of the Webometrics Ranking, the University of Nairobi's website www.uonbi.ac.ke which was first set up in 1999 has performed steadily. In 2007, it was revamped and re-launched. The move was a deliberate effort to ensure that the university's performance in the ranking improved. The objective was to improve the website's support for information sharing within the university community, partners, associates and general public. The University of Nairobi website is supposed to update the students, members of staff and the general public, the latest developments such as news, announcements, upcoming events and job opportunities within the University. In addition, the student and

staff email, intranet and student portal are all accessed through the website. (Source: *Varsity Focus* July 2007).

Like any other academic institution website, the University of Nairobi's website is expected to provide up-to-date and relevant information. According to the University of Nairobi System of Website Policy Document (December 2012), the University of Nairobi students tend to look out for various academic programmes on offer and admission requirements for different courses. Researchers are keen on following research activities in progress, the findings, as well as grants and fellowships opportunities while academicians are interested in academic publications such as journals shared on the website.

Following the release of the February 2013 Webometrics Ranking where the University of Nairobi was ranked 1,326 worldwide, 12 in Africa and top in Kenya, the university's system of websites has been undergoing a major facelift.

1.1 Problem Statement

Following the release of the February 2013 Webometrics Ranking, there has been a lot of technical evaluation of the University of Nairobi system of websites. These evaluations were based on the findings and recommendations by a University Management Board Sub-Committee. The recommendations were drawn from a specified criteria- impact, openness, presence and excellence. In addition, the university has invested its resources, including hiring of new members of staff, revamping various college, departments and units websites with all these efforts geared towards improving the university's ranking further.

However, the evaluations have focused more on the website itself and the content therein. There has been little or no attempt to involve the actual users of the website in these evaluations. In this case, the actual users are the University of Nairobi students and members of staff. The students tend to look out for information on various intakes, academic programmes on offer, university life and admission requirements for different courses including the cost implications. Members of staff are able to follow news, announcements

and check their emails on the website. Researchers are keen on following research activities in progress, the findings, as well as grants and fellowships opportunities while academicians are interested in academic publications such as journals shared on the website.

Involving websites users in the evaluations will provide valuable insight into the effectiveness, relevance and impact of the website. This study therefore focuses on assessing the University of Nairobi website focusing more on the actual users of the website to determine the role of the website in an academic institution.

1.2 Purpose of the Study

The purpose of this study was to carry out an assessment of the University of Nairobi website focusing more on the actual users of the website to determine the role of the website as an effective institutional communication tool.

1.3 Objectives of the Study

The overall objective of this study was to carry out an assessment of the University of Nairobi website as a communication tool. Specifically, the study sought:

1. To establish the role of the University of Nairobi website as an institutional communication tool.
2. To determine the effectiveness of the website in projecting/enhancing the university's image
3. To determine the relevance and usefulness of the website content

1.4 Research Questions

The study sought to answer the following questions:

1. Is the University of Nairobi website an effective institutional communication tool?
2. Does the University of Nairobi website project/enhance the university's image?
3. How relevant and useful is the University of Nairobi website content?

1.5 Significance of the Study

This research was significant given the minimal research on the role of websites in academic institutions and the missing contribution/input of the users of the University of Nairobi website in developing an effective and efficient website.

The study sought to identify the key missing information that users are looking for when they visit the University of Nairobi website. It looked into the thoughts of the users. With the findings and recommendations that have been made, academic institutions will have a guide when developing or revamping their websites to meet the expectations of the users. As academic websites are being evaluated, the views of the actual users of the website will be put into consideration.

1.6 Limitations of the Study

The University of Nairobi has approximately 63,846 students - 52,795 are undergraduate students while 11,051 are post-graduate students in close to 400 programmes. These students are spread across six colleges, with various units, located in different parts of Nairobi City. The University also has satellite campuses in major towns in Kenya. (Source: University of Nairobi Factfile 2013)

Therefore, given the size of the university, the student and staff numbers, time and money constraints, it was not possible to reach all the website users thus it was necessary to sample and reduce the number to a limited size. The research targeted website users in the Main Campus which houses two colleges, College of Architecture and Engineering which has 5,775 students and the College of Humanities and Social Sciences with 29,977 students. 381 members of staff were drawn from the Central Administration Units.

CHAPTER 2: LITERATURE REVIEW

This chapter critically examines the available literature and studies that have been previously carried out and are relevant to this research. The chapter will shed light on the research problem to create a better understanding of the issues discussed.

2.0 Introduction

There has been growing research studies which have looked into various aspects of communication on the internet (Ravden and Johnson 1989, Esrock and Leichty 2000, Robins and Hilliard 2002, Flanagin, 2000). Some of these intensive and extensive studies have mainly focused on the importance and the role of the internet (Kent and Taylor 1998, Ki and Hon, 2006). Indeed, the development and accessibility of the internet has led to the development of websites which have over the years emerged as one of the most powerful communication tools.

Online communications have emerged as a major avenue for organizations to communicate with key publics (Wright 1998, Singh and Arun 2005, Wirtz and Ngondo 2013, Berger and Park 2000, Kang and Norton 2006). In the modern world, the internet is one of the key media of communication. Africa has not been left behind -a new and growing use of the internet as a means of communication is also developing (Robins and Hilliard 2002). In addition, the internet is viewed as a largely valuable research tool (Parker 1998).

At the moment, there are few studies of web-based communication which have looked at the role of websites in academic institutions; specifically the usefulness, effectiveness and satisfaction of the users. Much of the literature (Schimmel et al. 1999, Alberto 2012, Chung et al 2010, Clyde 2000, Kang and Norton 2006, Khalid 2009, Mentz and Whiteside 2003, Callahan 2005) is by respected experts in the field as well as academicians. The vast majority of research on websites is practical, descriptive and in a marketing-oriented direction (Mentz and Whiteside 2003).

This chapter will critically examine the available literature and studies that have been previously carried out and are relevant to this study.

2.1 Websites

As a result of development in the dynamic information, communication and technology field, developing of websites for organizations (large or small) has become easy (Flanagin 2000). Nowadays, one does not have to engage the services of web masters to design and develop websites for their companies (Falk 2000). Middleberg (1996) states that Information Technology experts have developed 'Do it yourself' simple and easy to use websites manuals that are available on the internet for free. He notes that these manuals enable users to develop simple websites for their organizations at minimal costs and that website templates targeting entities that seek to have unique websites are also available on the internet at affordable prices.

In Kenya, for example, an initiative by Google Kenya, 'Getting Kenyan Businesses Online'- offers Kenyan businesses a free kbo.co.ke web address including hosting, free easy to update, customized website and free access to tools, resources, support and training to ensure businesses have all the assistance they need to get online. The initiative which has attracted many users, is committed to helping small and medium businesses get online thus fueling the online ecosystem in Kenya. (Source: Getting Kenyan Businesses Online)

This trend clearly shows that organizations are turning to technology as a tool to enhance their image. Wright (1998) found that with the web becoming an important medium to reach target audiences, most organizations are rushing to express an 'internet presence.'
Flanagin (2000) established that many organizations were prompted to adopt new communications technologies as a result of social or institutional pressures, organizational visibility, or the organization's leadership position in the field.

Unfortunately, these organizations stop the ball at having a website. Websites are used as a status symbol for these organizations in that they are up to date with technology (Kent 1999,

Kent and Taylor 1998). It is believed that customers will take an organization seriously if it has an online presence as a website makes them look 'professional and trustworthy.' Websites make organizations look bigger than they actually are (The Westminster Model 2011, Wright 1998). In addition, some organizations have resulted to investing in websites in order to survive today's competitive world as having a website is a good networking forum which has a global reach (Middleberg 1996). He notes that with such a mindset, these organizations are not keen on utilizing the websites' full potential. The website ends up killing the business rather than growing it as it is reflecting a poor image of the organization.

It is clear that websites are yet to meet their full potential. According to Esrock and Leichty (2000), organizations that want to use websites effectively must strive to optimize use of interactivity and the other website capabilities. Beyond interactivity, online communications must be designed in ways that people find usable, trustworthy and satisfying. Phillips (2001) suggests that websites should be secure, trustworthy, convenient, private, fast and fun. Content should be timely, accurate, relevant and informative. Organization should seek to maximize the potential of websites by creating user-centered sites because the users are the target audience.

Many scholars agree on the potential impact of the having a website in terms of its advantage compared to other forms of media. Major strengths of the internet include worldwide reach, the amount of information available, saving paper, inexpensive research, low-cost e-mail and easy access (Wright, 1998). To realize the power of a website, website owners need to be assessed regularly with the users in mind to ensure effectiveness and efficiency.

2.2 Role of Websites in Organizational Communication

Esrock and Leichty (2000) state that, organizational communication includes both internal processes of communication, that is among the members of the organization itself, and communication towards the outside meaning how the organization presents itself and exchanges information with external stakeholders.

According to Johnson (1997) the website is an increasingly important component of organizational communication. He notes that organisations use websites to communicate and build relationships with key publics and that websites provide a variety of organizational information and services to a diverse group of stakeholders.

Grunig (1992) says that public relations professionals can communicate with audiences directly without the traditional channels such as printed materials for example press releases, which are now being placed by the World Wide Web. According to Grunig, one of the most distinctive features of a website in public relations is the ability it gives an organization to build an interactive relationships with stakeholders. However, he notes that some organizations are highly committed to the web and have invested significant resources to creating a web presence, while others have adopted a more measured approach. Organizations can use the website as a distribution channel, service channel or an information channel.

As Liu (1997) puts it:

> Most corporations use their home pages to announce their presence on the web, to promote the corporate image, to enhance public relations, to attract users to browse products and services and to collect user responses and other related data.

The study of the internet related to public relations begun in recent years. Johnson (1997) pointed out the impact of the web in public relations. He stated that the World Wide Web

could facilitate media relations, employee communication, government relations and customer relations, due to its interactive function. These findings indicate that most content materials on the World Wide Web are traditionally associated with public relations activities. Most of the researchers' classifications were based on marketing activity on the websites. He pointed out the impact of the web on public relations. He stated that the World Wide Web could facilitate media relations, employee communication, government relations and customer relations, due to its interactive function. These findings indicate that most content materials on the World Wide Web are traditionally associated with public relations activities. Most of the researchers' classifications were based on marketing activity on the websites.

Wirtz and Ngondo in *An Analysis of the Website Strategies of Top Fee-Generating U.S.-Based Public Relations Agencies* say that the use of organizational websites as a tool for facilitating two-way communication between organizations and their publics has been studied and advocated widely by public relations researchers. For example, Kent and Taylor (1998) argue that the nature of the internet and websites offers a unique opportunity to public relations practitioners to create dialogue with their publics. Park and Reber (2008) and Ki and Hon (2006) make similar arguments, and both sets of researchers recommend that online strategies should be an important part of the practitioner's tactical arsenal and that practitioners should create a comprehensive set of "best practices" by combining traditional public relations strategies with online strategies.

Communication content functions Hallahan (2001) proposed that interactive media are especially useful when employed by organizations to respond to inquiries from users, and to heighten the levels of a user's involvement by taking advantage of the interactivity inherent in websites. Most analyses of contents provide insights on what organizations put forth on their websites. Parker (1998) and Flanagin (2000) found that contents of websites usually consist of written or printed material from traditional brochures, advertising, or existing annual and quarterly reports which were already available.

According to Falk (2000), organizational communication through websites can be facilitated by creating content that the target audience will view, listen to, react to, or interact with. These messages can vary in terms of their content, including their relevance, timeliness, completeness, accuracy, and complexity. The content should be fresh and not just a duplicate of prospectus and brochures.

2.3 Elements of Effective Websites

Several researchers have stated what an effective website should have. Kent (1999) stresses three critical tests: availability of a dialogic or feedback loop (e-mail and direct response mechanisms), provision of ongoing services, intuitive and easy use. On the other hand, Falk (2000) stresses several important features, they are: the importance of workable links, availability of contact information, placement of information on the left side of the screen, ease of use and clarity of purpose.

Middleberg (1996) notes that a winning website is one that has a clear purpose, emphasis on content, lean text, showy graphics, easy navigation and interactive capabilities. The true test of a site, he says, is whether people return to the website frequently. Thus frequent updates and the addition of new content are imperative.

While Pavlik and Dozier (1996) state:

> The design of online communication should follow many of the same rules of message design in any other environment, including creativity, quality and consistency with overall organizational image. In addition, rules of the web and other new media should be considered, including keeping content fresh, interactive and uncluttered.

Raj (1995) points out that websites need to become more consumer-centric, aimed toward organization-sponsored programming. He says that effective websites must go beyond being a digital data sheet about the organization and need to be more 'compelling.'

Nielsen (1999), the guru of usability research, explained the importance of content this way:

> Content is the next frontier in web usability. Ultimately, content is king from a user's perspective. It is what users are there for. Usability studies tell us, when a page comes up— bong—people look in the middle of the content

Liu (1997) analyzed the content of home pages by looking for a set of features. He identified 14 features: company overview, products and services, what is new, search, employment opportunities, interactive feedback, customer assistance, index or directory, financial facts, link to other sites, online business, guest book, frequently asked questions (FAQs) and messages from the chief executive officer. He concluded that most corporations use their home pages to announce their presence on the web, to promote the corporate image, to enhance public relations, to attract users to browse products and services and to collect user responses and other related data.

It is clear that these website researchers agree on several elements of effective websites. A website accessibility and ease of use is important. A website's content might be interesting or to the prospective users but the information's utility will be diminished if the content cannot be accessed quickly, easily and in a way that is subjectively pleasing.

Organizations' focus should be on the user especially when it comes to developing sophisticated and technologically advanced websites. A well designed website is one that works. Rajani and Rosenberg (1999), in a study on website design observed that:

> Users were possibly impressed by novel ideas and high technology, but not necessarily concerned that the capabilities of the technology

were used to the fullest. If the technology was there, they found it interesting and fun to be able to use multiple channels in the interface but they also found some elements distracting, such as disturbing sound...the generally held assumptions that sites rich in color and animation with high tech sound to provide a "truly" human experience are good . . . have been shaken.

2.4 Importance of Reviewing Websites Regularly

'Communications is pointless without research and evaluation'- The Westminster Model, October 2011

Website evaluation is the use of research or investigative procedures to systematically determine the effectiveness of a web based information system on an ongoing basis. Evaluation plays a key role in organizational planning, monitoring website activities and services as well as feedback (Hallahan 2001).

As echoed by Clyde (2000), it is a good policy to evaluate sites on a regular basis. By doing so, one can ensure that the site is providing accurate and up-to-date information for its users. By evaluating the website, one can be sure that the site is 'reflecting the mission and goals of the organization' and that it 'presents and appropriate image.'

Unfortunately, most organizations do not evaluate their websites. This could be because of cost implications or even time restrictions. According to the Westminster Model, an evaluation does not need to be expensive nor overly complex. It says:

Start simple by doing whatever desk research you can in order to understand your audience and current issues. By also looking around to see what information already exists on a particular audience and how it behaves, thinks and feels about different

issues, you can quickly build up benchmarks to which you will be
able to compare later.

Nielsen (2000) states that a website should contribute to the growth and success of an organization and that this can only be possible if the web content is up-to-date, engaging and informative. In as much as it is important to ensure that the website goals are aligned to the owner's goals, the user's expectations when they visit the website should be met. According to Ravden and Johnson (1989) and (Hallahan 2001), the website is one of the many communication channels that need to be measured for successful communications evaluation. It is important to get users' opinions in website evaluation as the audience is at the heart of any communications activity.

2.5 Website Usability

Usability research has particular relevance for enhancing the effectiveness of websites and other new interactive techniques.

McCormick and Sanders (1989) define usability as a branch of ergonomics. They term usability as the study of design for human use. Ergonomics research is intended to maximize safety, efficiency and comfort by matching the requirements of technology to human capabilities and comfort.

Zimmerman and Muraski (1995) simply defined usability as 'how well the intended users can interact with a technology to carry out the assigned activity.'

Usability experts suggest a variety of reasons for conducting usability tests. Among them is the assurance of ease and satisfaction by users, establishment of a benchmark for future versions, minimization of service, training and support costs, increased use and support of the site by users and the imperative to be competitive. The real incentive for organizations to engage in usability research stems from what Nielsen (1998) terms 'design Darwinism.' It is

a matter of survival of the fittest: every single user votes with every single mouse click. He explains:

> (Website users) are extremely impatient. They want solutions and answers right away. Not only are they unwilling to wait for slow downloads, they are not interested in overblown or fancy design. Simplicity is the key to satisfying most users. They do not want to spend time learning how to use a site. The very concept of manuals or help text is laughable, since we know that users do not read instructions.

There has been extensive research on website usability. In 2001, Hallahan examined the nature and value of usability research and the elements of an effective website based on usability principles. According to Hallahan, usability involves subjecting websites to objective scrutiny in a laboratory where groups of typical users are asked to perform prescribed tasks. These assignments might involve searching for or comparing simple facts from information readily available on a website. More complex tasks might involve asking users to make judgments based upon available information or to make comparisons of judgments.

However, there are other methods of determining website usability besides laboratory tests. According to Nielsen (2000), usability researchers have developed alternative methods which are more than two dozen sophisticated, reliable approaches to usability assessment. These alternatives constitute of what Nielsen terms as 'discount usability engineering.'

Breaking it further, Hom (1996) categorized these techniques into two major categories - website inspection and user inquiry. Web inspection involves asking experts to make assessments about a site. For example, organizations might employ a consultant or staff member to conduct a formal usability inspection to examine every programming code in order to discover and record problems or defects.

Middleberg (1996) suggests:

> The best way to find out if your site is working is to get an
> independent evaluation from experts in the field. You do not want
> the designers who prepared your site to gauge its performance;
> leave that job to objective outsiders.

On the other hand, the user inquiry alternative involves directly observing and asking users questions that will identify problems and assess effectiveness outside the laboratory. A wide range of techniques falls into this category, including structured field interviews, ethnographic observations, interviews, focus groups, surveys and questionnaires. Usability also can be examined by asking users to complete journals in which they log their actions and observations.

Two of the website usability methods - laboratory and user inquiry- allow users to give their input on how useful the website is. Through their contribution, web owners are able to determine the efficiency and effectiveness of the sites. Interestingly, Madsen (1998) echoes the same sentiments. According to him, researchers in Europe favor conducting research in a more naturalistic environment (such as user's work site) and making usability testing a more cooperative activity that involves the usability testing group, end users and the website and software development team. Users thus take an active role in the discussion and evaluation which should be the case.

However, Nielsen opposes this notion. He says that users' opinions do not matter as they are not web experts. He argues that users can mislead usability researchers or distract them from quickly identifying workable solutions to defects on the websites. Apparently, users do not have web design or technical expertise. According to him, website inspection is the most ideal usability method.

This should not be the case. A website is put up to pass information to a target audience. Users visit website to get information and if a site does not meet the users' expectations, it is not effective. Therefore in any evaluation, the users' opinions should be considered.

Hallan (2001) found that various benchmarks found in the usability literature fall into four broad categories. First and foremost, the systems compatibility should be considered. Systems compatibility looks at the website's configuration technically compatible with the largest number of browsers, monitor sizes, screen resolutions and color systems that might be used by target publics. Secondly, the speed of use is also assessed. This looks at how the website pages load. Websites that require excessive loading time (because of large graphics files), long scrolls of text, or huge menus of choices are likely to be cumbersome and less satisfying for users. When given other choices to access information, users are likely to go elsewhere. Thirdly, Hallan suggests that the ease of navigation should be examined. Does the site allow users to move easily from page to page, aided by navigational devices that order the information in ways that are easily understood and intuitive to the user? A wide range of design features contributes to navigation. These include navigation bars and icons on every page, color and/typographic coding of similar classes of information, backlinks to tops of documents and main pages, key section breaks, and simplified main menus.

Lastly, the accuracy of use is also looked at. The site should be logically organized and intuitive to users. The features on the site should assist the users find the information they are seeking. Successful searches lead to satisfaction, assuming the information ultimately obtained is complete, accurate and relevant. From Hallan's findings, it is clear that the website experts and users opinions in website usability give a holistic usability analysis that is balanced.

A review of the usability literature suggests that two criteria are paramount in websites. That is content and design simplicity. Content issues focus on the utility dimension of usefulness. Does the content serve the needs of the user? This is an important issue that can be assessed by posing questions to participants during usability testing and user inquiry research.

2.6 Websites for Academic Institutions

2.6.1 The Role of Websites in Academic Institutions

Information technology, particularly the World Wide Web, is playing an increasingly integral role in higher education for delivery of academic, administrative and student services. Today, more and more academic institutions understand the magnitude of having an online presence. Universities share the same goal which is to reach its important publics, prospective students and their parents and attracting them to enroll into the institution. Media technology such as the World Wide Web may provide universities with a more effective strategy for their recruitment effort within a limited financial resource (Kang & Norton, 2006, Liu, 2007).

Clyde (2000) argues that in the second decade of the 21st century the web is key for the future of all the universities as it is already the most important scholarly communication tool, the future channel for the off-campus distance learning, the open forum for the community engagement and the universal showcase for attracting talent, funding and resources.

In addition, Callahan (2005) notes that academic institutions websites exist as a primary information-seeking source for prospective students by providing the relevant information they are looking for. As a result, the publics have a better chance to become well acquainted with the institutions the more often they visit the websites.

In a report by Schimmel and company, *The Importance of University Web Pages in Selecting a Higher Education Institution*, emphasis on the need for universities to have attractive and clearly understood webpages with readily navigable information on information such as programs, course offerings, location and relevant accreditations is given. For academic institutions, a website should be a marketing tool. An academic institution's website should be clear, precise, easy to understand, interesting and informative all at the same time. The target website users consist of prospective students, current

students, staff and the general public. The website should provide an intuitive flow for users when they are looking for information.

According to www.smallbusinessbible.org an academic institution's website should enable current or prospective parents and students to get an overview of the institution, its philosophy and workings, programs on offer and the curriculum. The website should also carry information on student life, scholarship opportunities, institutions research and partners. In addition, information on the work and achievements done by those in the institutions and links with the outside world in general, such as options for industrial links and overseas collaborations should be on the website.

Husain (2012), found that for an academic institution, the website should enable current or prospective parents and students get an overview of the institution, its philosophy and workings programs offered and the curriculum, view the work done by those in the institution, access the institution's publications, view the calendar of events, communicate with the staff members, check and submit assignments, understand student life, among others. He states that:

> A well-organized site will help users find key information quickly. It also will make the experience of using the website more coherent, intuitive and satisfying.

2.6.2 Packaging Website Content for Academic Institutions

Husain (2012) says that website designing for educational institutions involves creating a website that is only functional but is attractive, informational and dynamic as well. An educational institution's website is now more than just an informational site, it works to advertise and promote the particular school, college or university's image.

"Webometrics Ranking of World Universities" an initiative of the Cybermetrics Lab gives several recommendations on good practices in institutional website that are intended to help

universities and research and development institutions worldwide to have an adequate web presence. Institutional websites should accurately represent their resources, activities and global performance, providing visitors with a clear vision of the institution. Webometrics encourage institutions to engage in medium and long term web presence projects that give priority to the publication of large volume of quality contents under Open Access type models.

Among the best practices recommended by Webometrics, institutions of higher learning should encourage and support a large number of scholars, researchers and graduate students to develop content thus creating a large web presence. Webometrics intends to motivate both institutions and scholars to have a web presence that reflect accurately their activities.

> The objective is not to evaluate websites, their design or usability or the popularity of their contents according to the number of visits or visitors. Web indicators are considered as proxies in the correct, comprehensive, deep evaluation of the university global performance, taking into account its activities and outputs and their relevance and impact (www.webometrics.info)

However, being top in the Webometrics ranking is not enough. The team behind the ranking believes that a university's Webometrics ranking correlates well with quality of education provided and academic prestige, but other non-academic variables need to be taken into account. They recommend that students who make decisions on which university to enroll into based on a university's ranking (whether global or international) should use additional criteria before making a concrete decision.

According to Mentz and Whiteside (2003) for academic institutions, it is crucial that the information on the websites reflect the user's perspective. The website should incorporate necessary information targeting international students to increase enrolment. A strategically well-designed university website may reflect higher information quality. Several scholars

(Mentz and Whiteside 2003, Kang and Norton 2006 and Liu 2007) give key dimensions of information quality for a well-designed website for universities seeking to attract and enroll both local and international students. They include the general information about the institution, application information, information about tuition costs and financial aid and academic information specifically targeting international students. They note that providing general information about the institution is fundamental in enrolling new students. Today universities act much like corporations while marketing academic programmes and other services therefore, a better recruitment approach to attract more students is to understand the connection between the educational process and the institution's services. The website of a university should identify the university's history, location, goal and mission statements, and tie in the school's academic programmes and facilities such as the libraries, lecture halls, students' halls of residence, sporting facilities.

Kang and Norton (2006) also operate from the same school of thought. In their study, they state that the web serves universities in many ways. For the external publics, the websites provide general information about missions, goal statements, policies and services. Departmental home pages also expand information about academic programmes and promote university recruitment. Faculty and staff members communicate with one another and collaborate together through the websites.

Unfortunately, most academic institutions are getting it wrong. A lot of information is cluttered on the respective websites and most times, users get lost. Again, without proper structures on operating a website, the many activities taking place in these academic institutions end up 'untold' on the websites. As we have said before, a website should reflect what is on the ground. Therefore, publishing a website is not a one-shot project, because the medium is interactive. Static, outdated information turns people off the webpage and could create a bad impression of the institution. One probable solution of ensuring diversity of content, academic institutions can employ a system that empowers the university community consisting of staff and students to create, update, manage and maintain content within the institutional websites**.**

2.7 Internationalization of Academic Institutions Websites

The web has effectively changed the way people communicate by providing millions of users with immediate and (usually) free access to information from any part of the world (Cronin 2003, Schäffner 2000).

Internationalization and localization have been already analyzed in several papers and research projects and the number of international conferences devoted to the topic has mushroomed in the last few years. However, internationalization of academic institutions' websites has not been researched widely.

The overwhelming power of the internet and the spread of globalization means that corporate websites including academic institutions websites can have a tremendous impact on the international level. Even though there are quite a few studies on website localization (Corte 2000, Jiménez Crespo 2008, Nauert 2007, Pym 2011) and some authors have analyzed the internationalization of websites of multinational companies (Singh and Pereira 2005, Yunker 2002), the case of institutional websites has not attracted the attention of scholars to the same extent.

The increased demand on diversity in the current society has been significantly reflected in academic institutions. The usage of university websites is expanded to enhance the reputation of the schools and to communicate with international students and their parents across different countries (Chapin & Fitzgerald 2002, Kang & Norton 2006; Liu 2007, Mentz & Whiteside 2003). Today's young generation is more likely to use the internet to research schools and communicate with them online (Mentz & Whiteside 2003). While prospective international students research and virtually visit universities far away from their homes, many enjoy the comfort of searching online, using the online application system and receiving instant messages on the admission requirements and processes (Kang & Norton 2006, Mentz & Whiteside 2003).

Liu (2007) states that a university website should be tailored toward both local and international students unfortunately, most academic institutions mainly focus on local students hence the information online does not address the needs of international students.

A case study of universities in the European Union (EU) on the internationalization of institutional websites was conducted in 2012 by Alberto Fernández Costales of the University of Oviedo, Spain. The study assessed 800 corporate university websites from the EU, observing any website standardization tendencies. It was established that there was clear tendency toward the standardization of university websites in the EU. According to Costales, this website homogenization can be observed not only in the kind of textual contents and the information provided to the users but also in the type of language used and in semiotic and non-verbal elements such as colors, images, website organization and distribution. However, this tendency cannot be concluded as a deliberate strategy.

Costales (2012) says that website localization is a thrilling research line where the nuts and bolts of the localization process are combined with the relevance and the global scope of the most powerful communication and promotional tool of the modern age which is the internet. The overwhelming power of the Internet and the spread of globalization mean that corporate websites can have a tremendous impact on the international level.

In a different study, Chung, Lee and Humphrey (2010) explore the extent to which universities utilize the benefits of the web to reach one of their major public relations goals to increase international student recruitment. The study compares the content of the websites of the United States, United Kingdom and South Korean universities in terms of information quality and system quality. A total of 261 university websites were content-analyzed checking for their usability, information utility and interaction with their international perspectives. It was found that most of the three countries' universities use their websites as an effective tool to utilize various public relations performances such as information providers but they are not effectively using their websites to connect with their publics.

Probably, internationalization of academic institutions websites can be picked from the language used on the website. The use of the English language for example which is the most used language in the world gives websites an 'across the border feel.' In addition, inclusion of sections carrying information for international students shows that the institution is looking to reach to a global audience. The common trend is toward an internationalized version of a website is in its content and information are provided to a global audience. The internet gives academic institutions an opportunity to get visibility beyond borders therefore it is up to the owners to give their sites an international feel by accommodating international enquiries. However, research on the World Wide Web should be extended to international countries since the medium is designed to send out information and to receive feedback in an international environment.

2.8 Theoretical Framework

2.8.1 Technology Acceptance Model (TAM)

There are several models existing that have been used to investigate adoption of technology. This study will apply the Technology Acceptance Model (TAM) to explain the individual acceptance and usage of a website.

Originally proposed by Davies in 1986, TAM is designed to predict user's acceptance of Information Technology and usage in an organizational context. TAM focuses on the attitude, explanations of intention to use a specific technology or service and has become a widely applied model for user acceptance and usage. According to Bertrand and Bouchard (2008) there are a number of meta-analyses on the TAM that have demonstrated that it is a valid, robust and powerful model for predicting user acceptance.

TAM model which deals with perceptions as opposed to real usage, suggests that when users are presented with a new technology, two important factors influence their decision about how and when they will use it (Davis, 1989). These key factors are:

1. Perceived usefulness (PU) - This was defined by Davis as "the degree to which a person believes that using a particular system would enhance his or her job performance."

2. Perceived Ease-of-Use (PEoU) - Davis defined this as "the degree to which a person believes that using a particular system would be free from effort."

2.8.2 Studies that have investigated TAM using the web as the application

Teo, Lim and Lai (1999) applied TAM in their study intrinsic and extrinsic motivation in internet usage and found that website usefulness and ease of use predicted usage, but that usefulness had a stronger effect. A different study by Morris and Dillon (1997) found that the ease of use of a website predicted usage. According to Lederer et al (2000), by supporting TAM, both studies suggest the importance of the antecedents to usefulness and ease of use. What makes the Web useful and easy to use? Therefore, in addition to employing previous measures of ease of use and usefulness, antecedents specific to the Web were sought.

Lederer et al (2000) validated TAM in the context of the World Wide Web. Their research had two purposes. The first purpose was to validate TAM with the website as the users' application and the second purpose was to identify antecedents to website ease of use and usefulness. By supporting TAM, Lederer and company hoped to help researchers understand the relationships between ease of use and usefulness and the acceptance of website technology by users. According to the researchers, their study confirmed that use of websites depended on the usefulness and ease of use of the site. It also helped in understanding the predictors of usefulness and ease of use for the website.

Heijden (2000) believes that the Technology Acceptance Model is a suitable model for explaining website usage, provided it is extended with the constructs developed and validated above. In his study, Heijden confirms that usefulness and entertainment value are

the primary drivers for website usage. Ease-of-Use significantly influences usefulness and presentation attractiveness significantly influences entertainment value.

These studies have contributed by applying TAM to lay the groundwork for understanding antecedents to ease of use and usefulness of websites. Such antecedents might affect web usage. An understanding of them could guide both website research and development.

2.8.3 Relevance to the Study

The Technology Acceptance Model (TAM) is applicable in this research since it seeks to carry out an assessment of the University of Nairobi website focusing more on the actual users of the website to determine the role of the website as an effective communication tool. By so doing, the study will establish the role of the University of Nairobi website as a communication tool, determine the effectiveness of the website in projecting/enhancing the university's image as well as the relevance and usefulness of the website content.

As indicated earlier, TAM model deals with perceptions as opposed to real usage and when users are presented with a new technology, two important factors influence their decision about how and when they will use it. Under Perceived Usefulness (PU), through the website, the University of Nairobi website users will get the information they need. Such information will not only keep them informed but also assist them in making decisions.

In applying Perceived Ease-of-Use (PEoU), the website users can navigate through the website without much effort and that they can rely on the website to get the information they need from wherever they are and therefore they do not have to physically visit the University of Nairobi to get it.

Websites are meant to be tools of communication and users are expecting interactive web pages that provide them with whatever information they need. It is important for establishments to recognize that the website should be the central source of information and the only way to find out is by getting the users' views and opinions on content and usability.

Organizations that want to use websites effectively must strive to optimize use of interactivity and the other website capabilities. Beyond interactivity, online communications must be designed in ways that people find usable, trustworthy and satisfying.

2.9 Conclusion

The overall objective of this study was to carry out an assessment of the University of Nairobi website as a communication tool. Specifically, the study sought to establish the role of the University of Nairobi website as a communication tool, determine the effectiveness of the website in projecting/enhancing the university's image, as well as the relevance and usefulness of the website content.

After a critical examination of the available literature and studies relevant to this study, it was established that there were few studies of web-based communication which have looked at the role of websites in academic institutions; specifically the usefulness, effectiveness and satisfaction of the users. Much of the literature, which is by respected experts in the field and academicians, have looked at various aspects of academic websites. There are studies on students marketing, student recruitment, admission and the role of websites in academic institutions such as Schimmel (1999) whose research was on the importance of university web pages in selecting a higher education institution, Mentz and Whiteside (2003) who determined the role of the internet college recruiting and marketing and Chung et al (2010) who did a comparative analysis on universities academic websites in the United States, United Kingdom and South Korea in a bid to establish whether the websites play a role in electronic-recruitment efforts on academic diversity for the institutions. Khalid (2009) did a comparative study between various aspects of the academic and nonacademic institutions websites while a study by Kang and Norton (2006) focused on colleges and universities' use of the World Wide Web as a public relations tool for the digital age. Alberto (2012) did a case study of universities in the European Union on the internationalization of institutional websites. In addition, there are studies that have focused on library websites (Clyde 2000), the cultural similarities and differences in the design of university websites (Callahan 2005)

and a content analysis of university websites in the United States with specific focus on the content and design for international students by Liu (2007).

Indeed, there has been research on the elements of effective websites (Kent 1999, Falk 2000, Middleberg 1996, Pavlik and Dozier 1996, Liu 1997) which stress important website features such as workable links, availability of contact information, placement of information, ease of use and clarity of purpose. Studies have also focused on packaging of website content for academic institutions (Husain 2012, Mentz and Whiteside 2003, Kang and Norton 2006, Liu 2007) give key dimensions of information quality for a well-designed website for universities seeking to attract and enroll both local and international students.

From the studies, it is clear that there has been research on diverse aspects of academic institutions' websites. Indeed, it has been established that there is minimal research on the role of websites in academic institutions and that the studies examined by this study have focused more on general websites for universities and not on a specific university. In addition, none has sought to asses an independent university with the involvement of the actual website users, in this case university students and members of staff to determine the role of the website as an effective communication tool. The gap identified by this study was that the contribution or input of the users of the websites in developing an effective and efficient website was missing. Therefore, the study sought to identify the key missing information that users are looking for when they visit the University of Nairobi website. With the findings and recommendations made, academic institutions will have a guide when developing or revamping their websites to meet the expectations of the users. As academic websites are being evaluated, the views of the actual users of the website will be put into consideration.

CHAPTER 3: METHODOLOGY

3.0 Introduction

This chapter discusses the methodological positions that have been adopted to meet the objectives of this study. It includes the research design, description of the area of study, target population, sampling design and sampling procedure, data collection methods and instruments as well as data processing and analysis.

3.1 Research Design

The research design for this study was an evaluation of the University of Nairobi website (www.uonbi.ac.ke) which was conducted through a survey. A survey was appropriate for this study since it is probably the best method available in collecting original data for the purposes of describing a population that is too large. It guided the researcher in getting factual data on the thoughts and attitudes of the University of Nairobi website users. The aim of the study was to carry out an assessment of the University of Nairobi website focusing more on the actual users of the website to determine the role of the website as an effective communication tool. Therefore questionnaires were administered by the researcher and research assistants to University of Nairobi students and staff.

In addition, key informant interviews with communication and website experts were conducted by the study. It was expected that these informants would provide expert opinions on the University of Nairobi website.

Further, as part of the research design, the study designed a checklist adapted from various website review recommendations, these were administered to website designers and administrators. It was assumed that this study group had no interests in the University of Nairobi and therefore would be able to give an unbiased opinion on the content and design of the website.

3.2 Area of Study

The area of study for this research was the University of Nairobi (UoN) and the University of Nairobi website.

Located in Kenya's Nairobi City, along University Way, UoN has approximately 63,000 students in over 300 programmes. These students are spread across six University Colleges namely Colleges of Agriculture and Veterinary Sciences, Architecture and Engineering, Biological and Physical Sciences, Education and External Studies, Health Sciences and Humanities and Social Sciences. These Colleges are located in different parts of the City. The Colleges have various Faculties, Schools, Centres, Departments and Units. In addition, the University has satellite campuses in major towns in Kenya including Mombasa and Kisumu. The University has 2,052 academic members of staff and 3,380 administration and technical staff. (Source: University of Nairobi, Fact File, 2013)

The other area of study was the University of Nairobi website which is available on the World Wide Web and is accessible on www.uonbi.ac.ke. This system of websites hosts relevant information from the University's Faculties, Schools, Centres, Departments and Units. (Source: University of Nairobi system of websites policy document, 2012)

3.3 Target Population

Mugenda and Mugenda (2003) define population as an entire group of individuals, events or objects with some common observable characteristics. A researcher has to define the population to which he or she wants to generalize the results. The target population is a complete set of individuals that have common characteristics to which the researcher is studying.

In this study, the researcher identified the target population as the University of Nairobi community. The University community includes the students and staff members. Members of the public to some extent are also part of the University community but they shall be

excluded from this study as it is assumed that before they became members of the University of Nairobi community they were members of the public.

According to figures released by the University of Nairobi in January 2013, the University has approximately 63,000 students, 2,052 academic members of staff and 3,380 administration and technical staff.

3.4 Sampling and Sampling Procedure

Patton (1990) defines sampling as the act, process or technique of selecting a suitable sample, or a representative part of a population for the purpose of determining parameters or characteristics of the whole population.

In this case, the target population was identified as the University of Nairobi community specifically the students and staff since they are the main users of the University of Nairobi website. However, the target population was too large for this kind of study. To this end, the researcher settled on a sample size of 200 participants determined through stratified random sampling in order to achieve desired representation from the population. Here, the researcher divided the population into two groups, that is, students and staff. From these groups, 120 students and 80 members of staff were randomly selected.

The participants were drawn from website users in the Main Campus which houses two Colleges, that of Architecture and Engineering and Humanities and Social Sciences. Members of staff from the central administration offices also located at the Main Campus were included in the study. The reason why the study concentrated on the Main Campus and not the other University of Nairobi Campuses is because the researcher did not see the possibility of getting different findings from these Campuses. The assumption was that the information would be the same because the website users in the other Campuses were still students and staff of the University.

The study also included website experts located at the ICT Centre which is in the University's Chiromo Campus. The Centre is charged with supporting the University's systems of websites. In addition, communication experts were also identified to give the necessary information. Here purposive sampling was done because the researcher was looking for in-depth information and therefore hand-picked key informants because they possess the required information on communication and website matters.

3.5 Data Collection Methods and Instruments

Primary data was collected through questionnaires, interviews and checklists. Mugenda and Mugenda (2003) states that researchers need to develop instruments with which to collect the necessary information.

3.5.1 Questionnaires

Questionnaires are used to obtain important information about the population. In this study, data was collected through questionnaires which were self-administered to the respondents. During the development of the instrument, the researcher ensured that the items on the questionnaires were developed against the set objectives of the study which sought to establish the role of the University of Nairobi website as a communication tool, determine the effectiveness of the website in projecting and enhancing the University's image as well as the relevance and usefulness of the website content from the users' perspective.

The questionnaires contained a mix of open-ended, close-ended and matrix questions. In the close-ended questions, the researcher provided a list of possible alternatives from which respondents selected the answer that best described their thoughts on the website. To probe for more information from the respondents, contingency questions in a close-ended format were also included. In the open-ended questions, correspondents were given the freedom of response (Mugenda and Mugenda, 2003). The questions concentrated on the reasons why the respondents visit the website and suggestions proposed by the respondents on ways of improving the website. The questionnaires also contained matrix questions whereby the respondents were asked to measure their opinions and views on a scale of 1 to 5 with 1

being 'strongly disagree' and 5 being 'strongly agree.' The researcher found it prudent to use such type of questions to give the respondents an easy time while filling them and also for easy coding during analysis.

The questionnaires were pretested to a selected sample which was similar to the actual sample planned for the study. From the pretesting, unclear questions were identified and rephrased and comments and suggestions by respondents were put into consideration. 120 students and 80 members of staff from the University of Nairobi's Main Campus were administered with questionnaires to complete.

3.5.2 Key Informant Interviews

Key informant interviews with communication and technical website experts were conducted by the study. It was expected that these informants would provide expert opinions on the University of Nairobi website. Indeed, in-depth information which would probably not have been possible to get through questionnaires alone was collected.

The researcher developed two different interview schedules: for communication experts and technical website experts. The interview schedule made it possible to obtain the necessary data required to meet the specific objectives of the study which are establishing the role of the University of Nairobi website as a communication tool, determining the effectiveness of the website in projecting and enhancing the university's image as well as the relevance and usefulness of the website content.

For both interview schedules, the interviews were unstructured. The main reason for this is because besides giving information on the University of Nairobi website, the experts had to give their general view of websites as communication tools, website usability, websites and the organization's image as well as the website content.

The researcher had to schedule appointments with the respondents and during the actual interview, the responses were recorded by taking notes.

3.5.3 Checklists

The study designed a checklist, adapted from various website review recommendations. These checklists were administered to website designers and administrators. It was assumed that this study group had no interests in the University of Nairobi and therefore would be able to give an unbiased opinion on the content and design of the website.

The respondents were required to assess the University of Nairobi website, looking at its content as well as design and checking it against the set minimum requirements for an effective website.

3.6 Data Processing and Analysis

Once data was collected through questionnaires, interviews, content analysis and document analysis, they were coded accurately. Coding refers to the process of assigning numbers to subjects' responses. The questionnaires contained both close-ended and open-ended questions. During the coding process, the close-ended questions, numbers were assigned to every question and the data was converted to numerical codes representing attributes or measurements of variables. For the open-ended questions, all the responses were categorized and assigned numbers.

The coded responses were then analysed using appropriate statistical procedures to obtain quantitative and qualitative data. For quantitative analysis, the Statistical Package for Social Sciences (SPSS) was used while for qualitative data analysis was done manually.

CHAPTER 4: RESEARCH FINDINGS AND DISCUSSION

4.0 Introduction

In this chapter the results of the data analysis are presented. The data was collected and then processed in response to the objectives of this study. 200 questionnaires were distributed to University of Nairobi website users. 186 questionnaires were received from 103 students and 83 members of staff.

4.1 Section 1: Demographics

This section illustrates the demographic details of the sampled population. It includes the gender, age and affiliation of the respondents to the University of Nairobi.

4.1.1 Respondents' Affiliation to the University of Nairobi

From the responses received 55.4% of the respondents sampled were students while 44.6% were members of staff of the University of Nairobi (Figure 1).
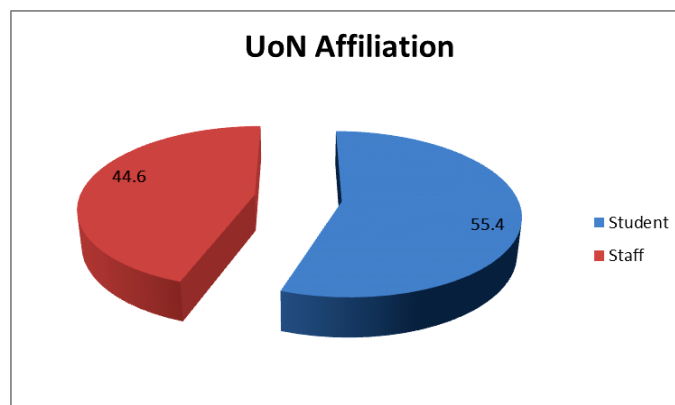

Figure 1: University of Nairobi affiliation

4.1.2 Respondents' Gender

According to Figure 2, more than half of the students sampled were male while more than half of the members of staff sampled were female. In addition, 40% of the students sampled were female while 45.8% of the staff were male.
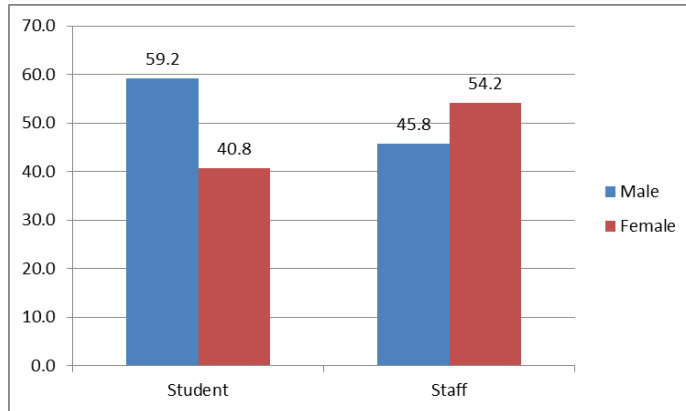
Figure 2: Respondents' Gender

4.1.3 Respondents' Ages

Figure 3 shows the ages of the respondents. An overwhelming majority of those sampled were students between the ages of 18 and 24. The main reason attributed to this findings is that majority of students enrolled into a university are in this age bracket. From the figure, members of staff were equally distributed between the ages of 25 and 39 and above.
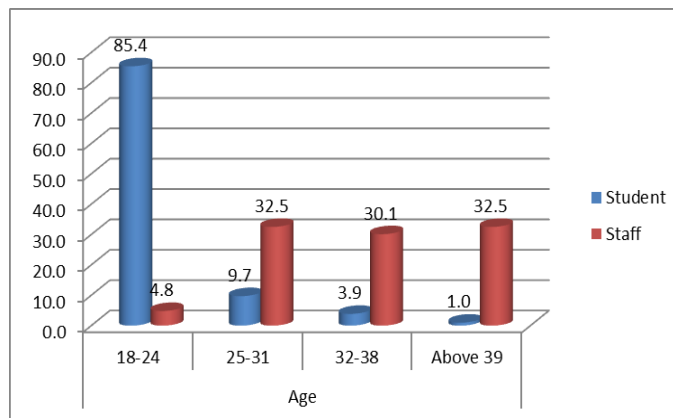

Figure 3: Respondents' Age

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4.2 Section 2: Accessibility

The respondents' accessibility and use of the University of Nairobi website was determined in the section. All of those sampled in this study indicated that they access and use the University of Nairobi website.

4.2.1 Website Access Frequency

An overwhelming majority of members of staff sampled access the University of Nairobi website on a daily basis. This shows that staff members use the website frequently in their day to day activities. As for students, 28.4% use the website twice a week with a majority of them accessing it sparingly either daily, once a week, fortnightly or once a month. The findings probably indicate that the students' activities do not wholly rely on accessing the websites as frequently as the members of staff do (Figure 4).
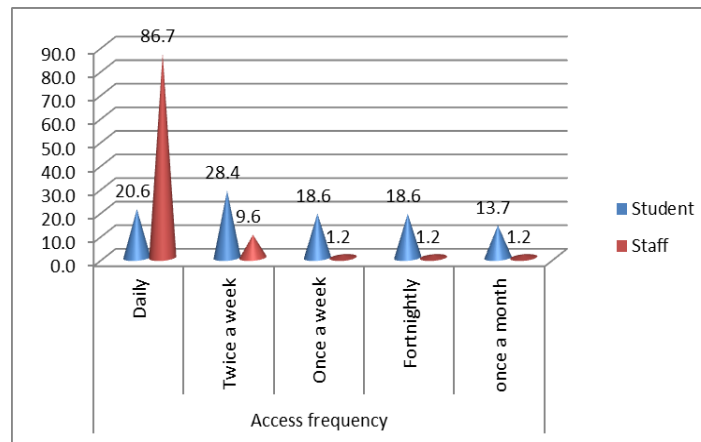
Figure 4: Website access frequency

4.2.2 Respondents' Mode of Access

According to figure 5, an overwhelming majority of the staff members sampled access the website directly on www.uonbi.ac.ke. This could be attributed to their daily use of the website hence the mastery of the website address. Two thirds of the students sampled access the website through Google. This is probably because of their unfamiliarity of the website address which is as a result of their infrequent use of the site. In addition, from the analysis,

it is observed that the use of social media, in this case Facebook and Twitter, in accessing the University of Nairobi website is poor.

Figure 5: Respondents' mode of access

4.2.3 Respondents' Reason for Visiting the Website

The respondents were asked the reasons why they visit the University of Nairobi website. An overwhelming majority of the students and members of staff sampled in this study indicated that they visit the website to get information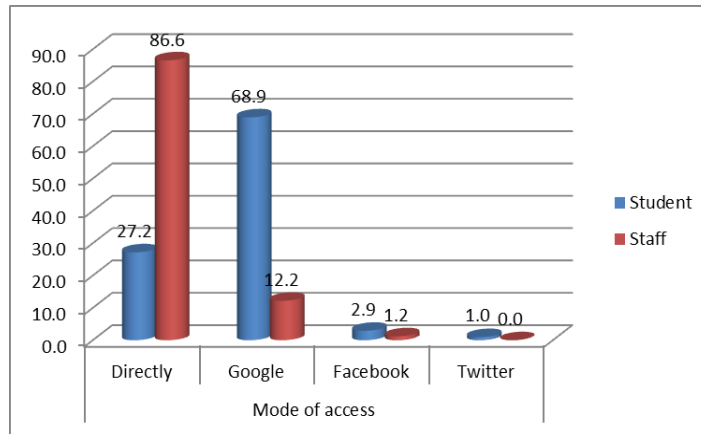 specifically announcements, news and events scheduled to take place. In addition, the students highlighted the student portal as their major reason behind visiting the website. From the student portal, the respondents indicated that they are able to access their results, class and exam timetables, fee statements and register units. On the other hand, the members of staff surveyed in this study indicated that the staff portal is among the reasons why they visit the website. From the staff portal, the respondents indicated that they are able to access the personal profiles, download work related documents as well as apply for leave.

4.2.4 Respondents' Site Load Time

According to figure 6, more than half of the students and staff sampled in the study find the speed at which the University of Nairobi website loads reasonable. A significant number of the respondents do not think that the website is fast. From the almost unanimous polling

outcome by the respondents, indeed the University of Nairobi loading time is not as fast as the users would like.
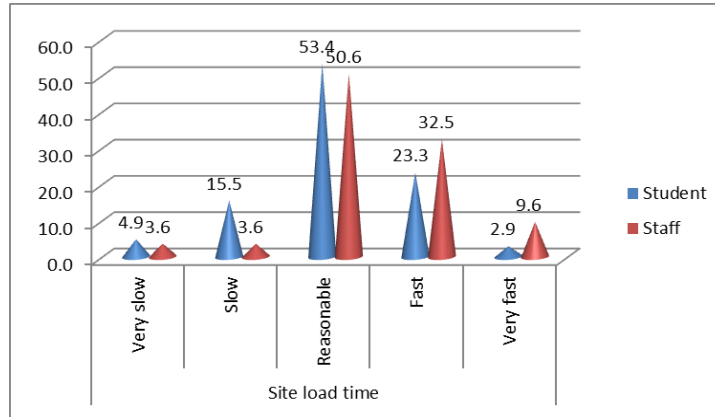
Figure 6: Respondents' site load time

4.2.5 Respondents' General Ease of Use

More than half of both the students and members of staff sampled in this study indicated that it is easy to find the appropriate link for the information one is looking for. 40.8% of the students and 43.9% of the members of staff rated the University of Nairobi website ease of use as average while a negligible percentage of the two groups of the respondents find it difficult to use the site. The findings could be an indication that the items on the website are well place thus usability is not really a challenge facing the respondents on the site although some changes may need to made to make it easy for the users that find it average to use (Figure 7).

Figure 7: Respondents' general ease of use

4.3 Section 3: Website Content

Data was collected in order to find out from those sampled their take on the Univeristy of Nairobi website content and its usefulness to the users. The respondents were asked to firstly indicate how often they use variuos menu items on the website from daily to never and secondly to rate the website content accroding to variuos statements.

4.3.1 Use of Student and Staff Portal
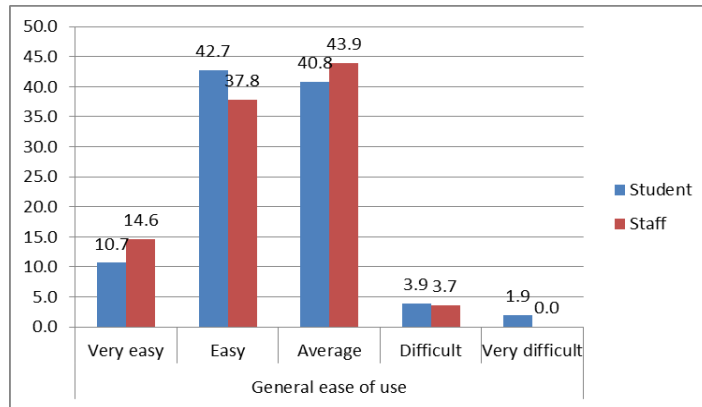
The University of Nairobi website has a provision for both students and members of staff whereby all the useful links and information specifically for the two groups is shared. These links are known as the student portal and staff portal. To access the portals, users need to have a password protected university account. In the student portal, students are able to register for courses, check class and exam timetables, results, announcements as well as fee balances while in the staff portal, members of staff access their emails, personal profiles, apply for leave and other entitlements. Therefore, these portals are key for any University of Nairobi student or staff.

Figure 8 and 9 illustrates the use of both the student and staff portal by the targeted users. According to figure 8, a third of the students sampled use the student portal once a month while the other third use it twice a week. Interestingly, 18.6% of the students use the portal

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once a week. From the data analyzed, it is indeed safe to state that the students sampled in this study find the student portal useful and relevant thus the almost balanced use of the site.

On the other hand, according to figure 9, two thirds of the members of staff sampled access the staff portal frequently. The significant daily use of the portal confirms the users' activities whereby 87.5% of the sampled members of staff access their e-mails daily while a third of them access the University of Nairobi intranet daily. (See table 2)
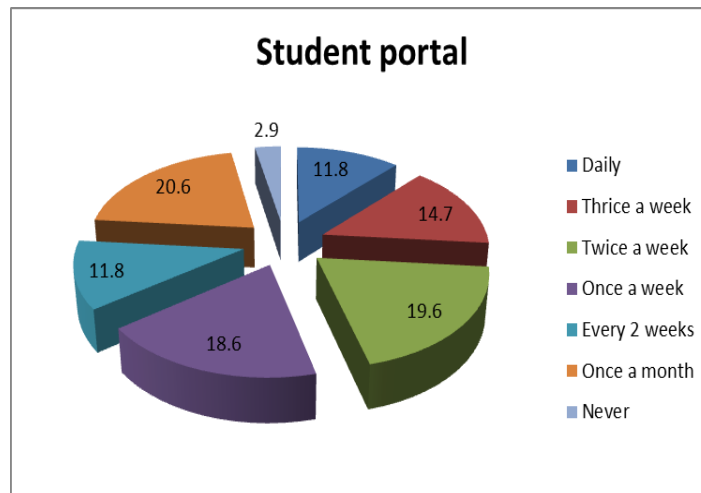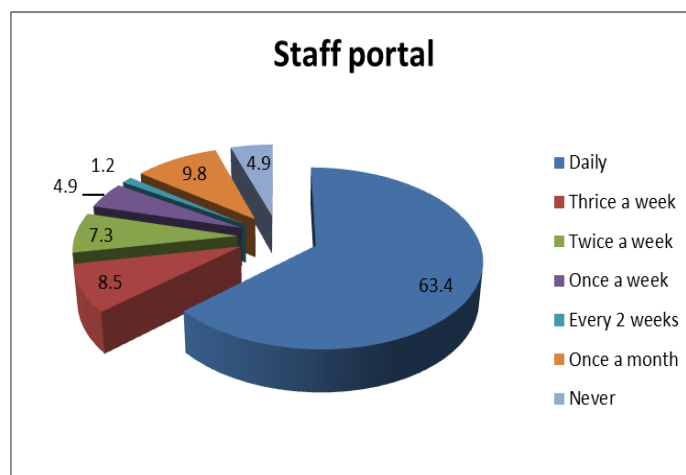

Figure 8: Student use of student portal

Figure 9: Staff use of staff portal

4.3.2 Use of Various Items on the Website

Table 1 illustrates how often the students sampled in this study use various items on the University of Nairobi website. The library portal is a popular site for students as at least a third of the students sampled visit it either daily, thrice a week or every two weeks. The use of the library portal could be advised by the fact that the library has always been the most critical establishment for any student.

Table 1 reveals that a significant number of the students sampled do not use the website items deemed important by this study. An overwhelming number of the respondents have never accessed the repository, a site that holds a lot of academic information while more than half have never explored the research item. Half of those sampled have never visited the university life menu, slightly below half of the respondents have never checked the admission tab while 41.5% have never used the E-learning portal. From the analysis it clearly shows that a significant percentage of the students sampled do not use the on-line resources provided for on the University of Nairobi website for academic purposes. They probably rely on other sources of information such as the internet and library.

Majority of the respondents have never visited the menu options that give information on the activities taking place in the University of Nairobi. 62.0% have never visited the media centre, 29.3% have never checked the news menu item and 37.9% have never gone through the announcements link. Again, students are not active users of the student email with only 25.2% access it at least once a week while 14.1% access it at least once a week.

This could be attributed to the fact that probably the students sampled are not keen on the happenings in the University or the website does not carry useful information that could keep them checking from time to time. Indeed this is a serious situation as the website has information geared towards enhancing the students' academic growth such as scholarships, grants, exchange programmes, competitions, internship opportunities, among others.

On the other hand, according to table 2, on a daily basis, an overwhelming number of staff members sampled in this study access their emails while more than two thirds view the news

and 57.5% check the announcements. This shows that a significant number of the respondents sampled rely on the University of Nairobi website for information on the developments taking place in the university.

A third of the respondents use the intranet daily and at least 19.5% access it once a week. This is significant as the University of Nairobi intranet holds information and on-line services specifically tailored for staff members.

As expected, members of staff sampled in this study are not ardent users of menu options that hold academic content. This is so because at least a third of the respondents have never accessed the repository nor the research menu.

Table 1: Use of various items on the website by students

		News	Announcements	About UoN	Academics	Admission	University life	Media Centre	Repository	Research	E-learning	Library portal	Student email
Student	Daily	10.1	6.3	3.1	8.2	1.1	3.3	0.0	2.2	5.3	7.4	19.4	14.1
	Thrice a week	7.1	8.4	8.2	11.3	1.1	2.2	5.4	3.3	6.4	8.5	10.8	11.1
	Twice a week	8.1	10.5	13.4	10.3	1.1	2.2	2.2	1.1	8.5	5.3	5.4	12.1
	Once a week	20.2	14.7	11.3	10.3	6.6	6.5	5.4	4.3	6.4	16.0	7.5	14.1
	Every 2 weeks	5.1	7.4	5.2	8.2	3.3	4.3	5.4	3.3	5.3	10.6	15.1	11.1
	Once a month	19.2	14.7	26.8	20.6	41.8	31.5	19.6	8.7	13.8	10.6	8.6	13.1
	Never	29.3	37.9	32.0	30.9	45.1	50.0	62.0	77.2	54.3	41.5	33.3	24.2

Table 2: Use of various items on the website by staff

		News	Announcements	About UoN	Academics	Admission	University life	Media Centre	Repository	UoN intranet	Research	Staff email
Staff	Daily	68.7	57.5	42.0	16.9	7.8	24.4	31.3	22.2	34.1	13.4	87.5
	Thrice a week	9.6	7.5	7.4	7.8	9.1	2.6	6.3	4.9	11.0	8.5	3.8
	Twice a week	3.6	3.8	7.4	11.7	6.5	5.1	5.0	8.6	12.2	4.9	2.5
	Once a week	4.8	13.8	12.3	16.9	11.7	16.7	12.5	14.8	19.5	12.2	0.0
	Every 2 weeks	2.4	3.8	6.2	7.8	9.1	10.3	12.5	3.7	1.2	3.7	1.3
	Once a month	4.8	6.3	12.3	18.2	23.4	12.8	15.0	16.0	12.2	19.5	0.0
	Never	6.0	7.5	12.3	20.8	32.5	28.2	17.5	29.6	9.8	37.8	5.0

4.3.3 Get Information from the Website

According to figure 10, More than half of the members of staff sampled and a third of students sampled agree that they always get information they need about the university from the website. However, a significant percentage of the students are neutral on this statement meaning that they do not get all the information they need about the university from the website and therefore rely on other means for information. Again, it is important to note that the respondents do not strongly agree to this statement.
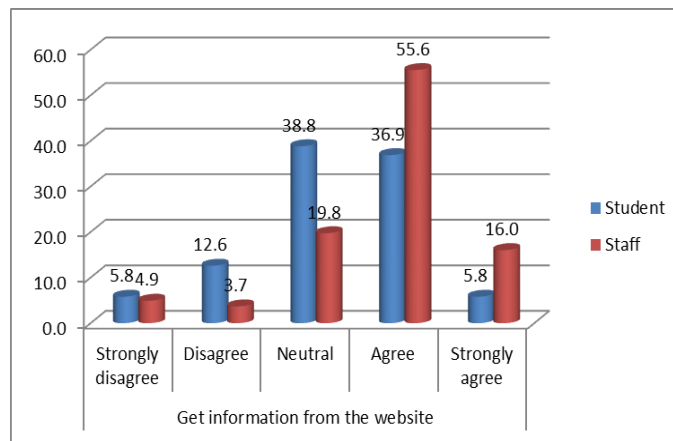
Figure 10: I get information from the website

4.3.4 Never Get Useful Information from the Website

From figure 11, it is safe to say that of those sampled in this study, an overwhelming percentage get useful information from the University of Nairobi website. However, there is a negligible percentage that is either neutral or agrees that one can never get any useful information on the website. This means that the respondents sampled get useful information from the website, therefore to some extent, the University of Nairobi website is a useful communication tool among the sampled users.
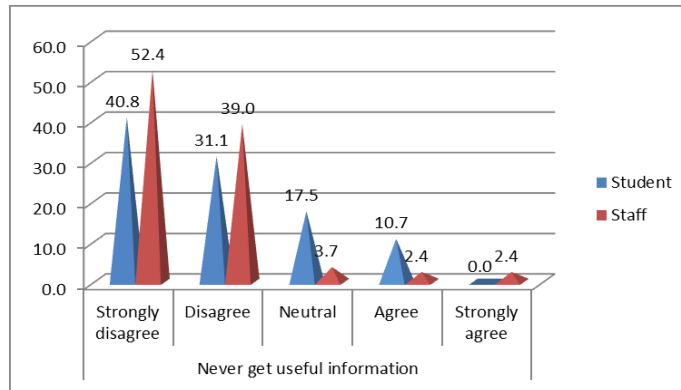
Figure 11: Never get useful information

4.3.5 When I Need Information I Check the Website

According to figure 12, more than two thirds of the students sampled and an overwhelming percentage of the staff members sampled check the University of Nairobi website when they need information about the university. This finding is significant as it shows that the website is the first point of reference for the respondents whenever they need information about the university.

Figure 12: When I need information I check the website

4.3.6 I Direct People to the Website

Half of the students sampled and slightly below two thirds of the members of staff sampled in this study direct people to the University of Nairobi website whenever they are asked questions about the university. This can be interpreted that of those sampled, a notable

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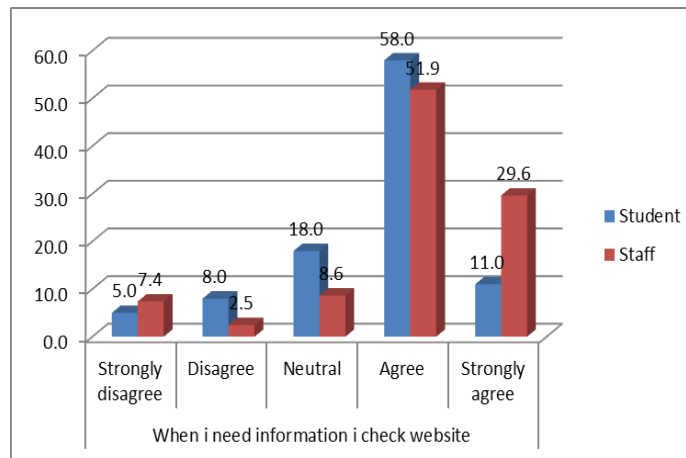percentage refer to the University of Nairobi website as a source of information and that they have no reservation in directing other people who have questions about the university of the website. (See figure 13)
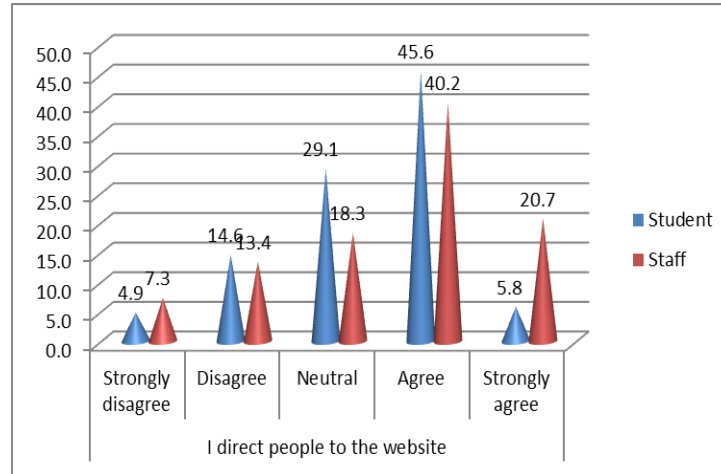
Figure 13: I direct people to the website

4.3.7 Get Answers from Website

According to figure 14, slightly below three quarters of the students sampled and more than half of the members of staff sampled get answers from the website whenever they are asked questions about the university. The findings indicate that the respondents in this study find the website useful as they are able to get answers from the site instead of probably physically visiting the university to get information they are looking at.
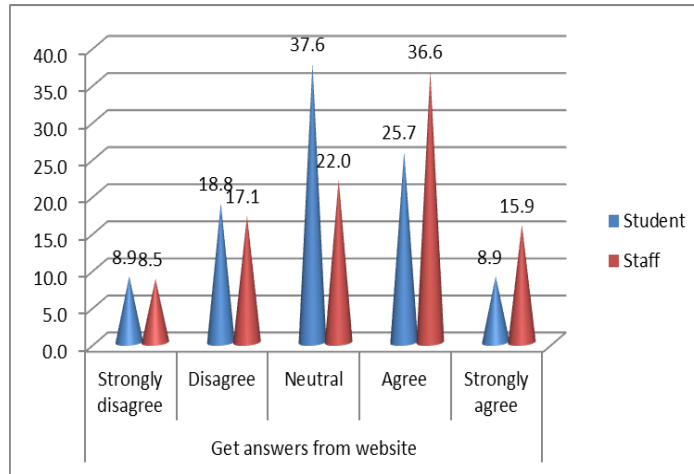
Figure 14: Get answers from website

4.3.8 Timely and Up-To-Date Information

According to figure 15, an overwhelming percentage of those sampled (both students and staff) find the information on the University of Nairobi website both timely and up-to-date. This means that the website is frequently updated thus making it a reliable source of information when one is trying to track what is happening in the university.

Figure 15: Timely and up-to-date information

4.3.9 Relevant Information

According to figure 16, an overwhelming percentage of members of staff sampled and slightly below three quarters of the students sampled find the information 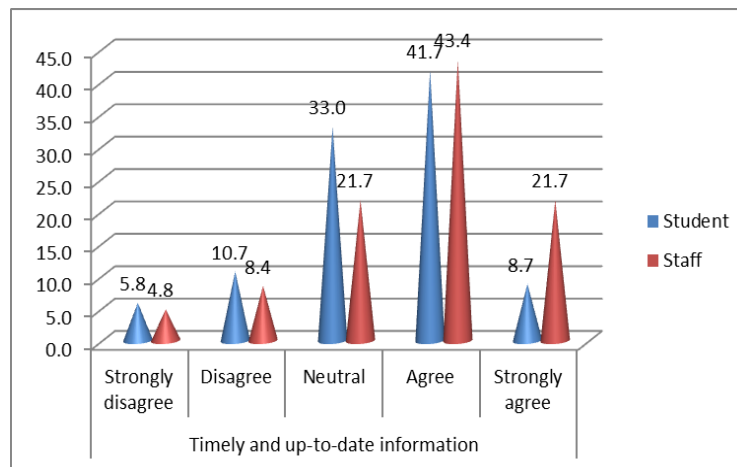on the University of Nairobi website relevant for the intended users. 21.4% of the students and 11.0% of the members of staff indicated a neutral stand on the relevance of the information. Interestingly, a negligible percentage of both the students and members of staff indicate that they disagree that the information is relevant. From the findings, we can say that the University of Nairobi website content is relevant as it should be to the targeted users who in this case are students and members of staff in the university.
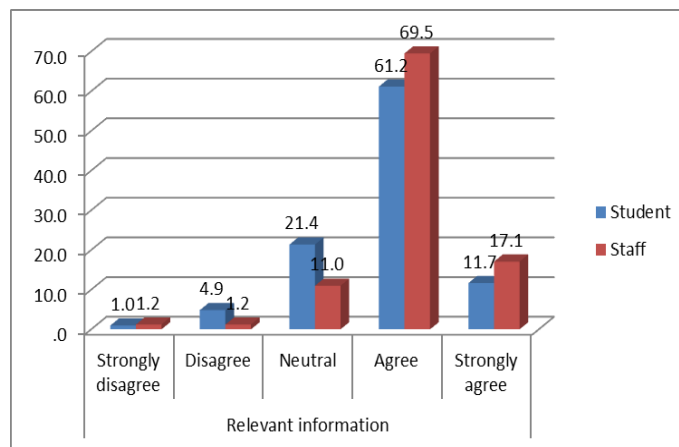
Figure 16: Relevant information

4.3.10 Clear and Easy to Understand Information

Figure 17 illustrates that 66% of the students sampled and 79.5% of the members of staff sampled find the information on website clear and easy to understand. 27.2% of the students and 16.9% of the members of staff surveyed have taken a neutral ground on this and a negligible percentage of both groups disagree with the statement that the website is clear and easy to understand. According to the findings, majority of the respondents find the information on website clear and easy to understand therefore the University of Nairobi website to a certain extent communicates to the users as it should.
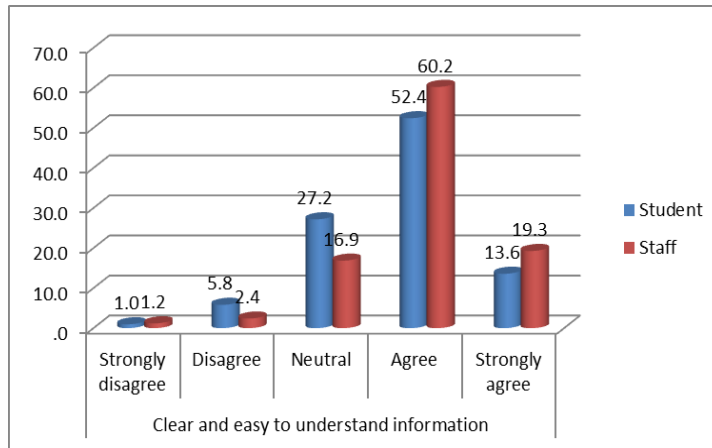
Figure 17: Clear and easy to understand information

4.3.11 Website is Useful and Reliable

Figure 18 clearly indicates that 75.7% of the students sampled and 82.9% of the members of staff sampled find the University of Nairobi website a useful and reliable source of information. However, 22.3% of the students and 15.9% of the members of staff surveyed in this study are neutral on this. A negligible percentage of 1.9% of the students and 1.2% of the members of staff disagree that the website is useful and reliable. From these findings, the website is rated as a useful and reliable source of information thereby it communicates to the users.
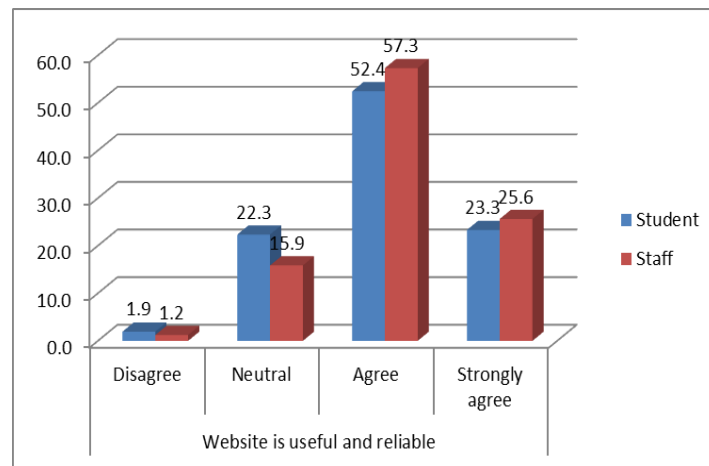
Figure 18: Website is useful and reliable

4.4 Section 4: General Appearance of the Website and Usability

This section deals with the general appearance of the University of Nairobi website and its usability in terms of how easy it is for the targeted audience to use the website.

4.4.1 General Appearance is Good

In reference to figure 19, slightly less than three quarters of the students sampled and an overwhelming majority of staff sampled agree that the general appearance of the website is good. It is important to note that a significant number of both the students and staff are either neutral or disagree with the notion. This clearly indicates that the respondents sampled like the general appearance of the website.
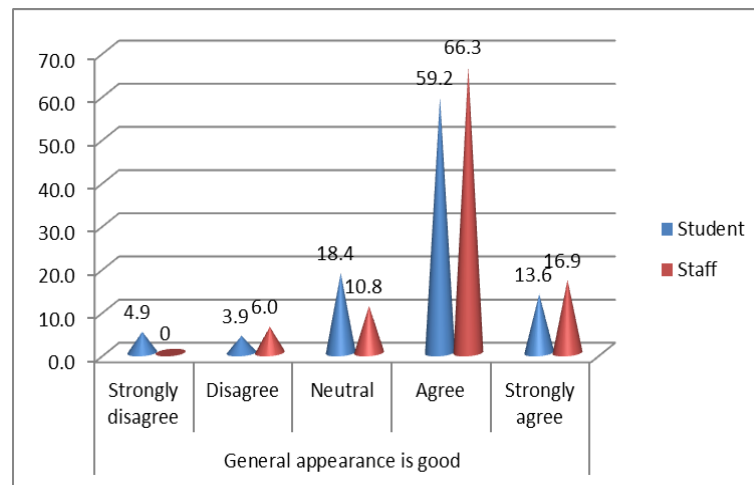
Figure 19: General appearance is good

4.4.2 Website is Visually Appealing

62.2% of the students and 77.1% of the members of staff in this study indicate that they find the University of Nairobi website visually appealing. However, 37.9% of the students and 22.9% of the members of staff in this study do not find the website visually appealing (See figure 20). The respondents' thoughts on the website's visual appeal clearly indicate that the website is good but something needs to be done to improve its visual appeal.
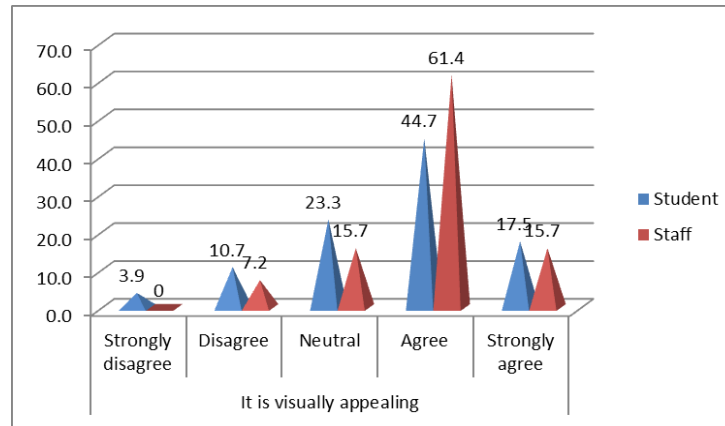
Figure 20: Website is visually appealing

4.4.3 Legible Font Size

According to figure 21, an overwhelming percentage of both the students and members of staff sampled in the study indicate that the font size used in the University of Nairobi website is legible. A significant percentage of the respondents in both groups are neutral on this while a negligible percentage disagree with the statement. These findings clearly show that the website users in this study like the font size used on the website.
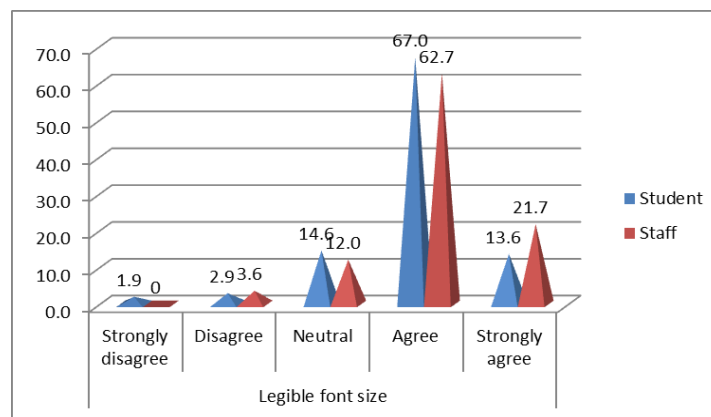
Figure 21: Legible font size

4.4.4 Pleasing Graphics

Figure 22 illustrates that at least two thirds of the students and staff sampled in this study find the graphics on the website pleasing. However, a third of both students and staff do not think the graphics are pleasing while at least a quarter of them have taken a neutral ground

on the statement neither finding the website graphics pleasing nor unpleasing. Again, these findings clearly show that the website users in this study are somewhat fine with the graphics used on the website.
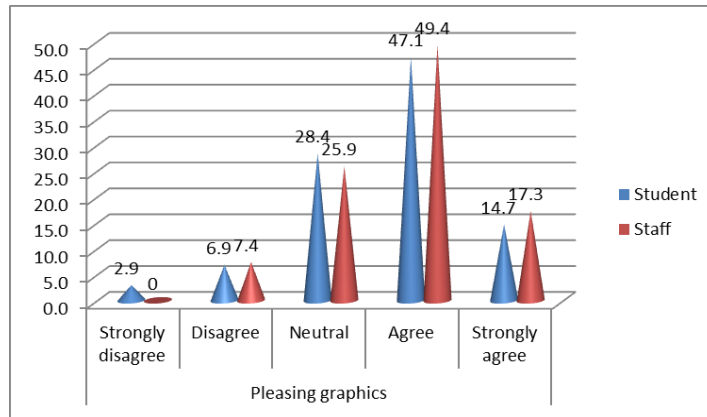
Figure 22: Pleasing graphics

4.4.5 Attractive Photos

46% of the students sampled in the study indicate that they do not find the photos on the University of Nairobi website attractive while 54.0% of the students find them attractive. 70.4% of the staff members sampled find the photos attractive while 29.7% do not find them attractive (See figure 23). Indeed, there is a notable difference in the thoughts of the respondents in reference to the photos on the website meaning that the users sampled in this study are not fully satisfied with the photos used on the website.
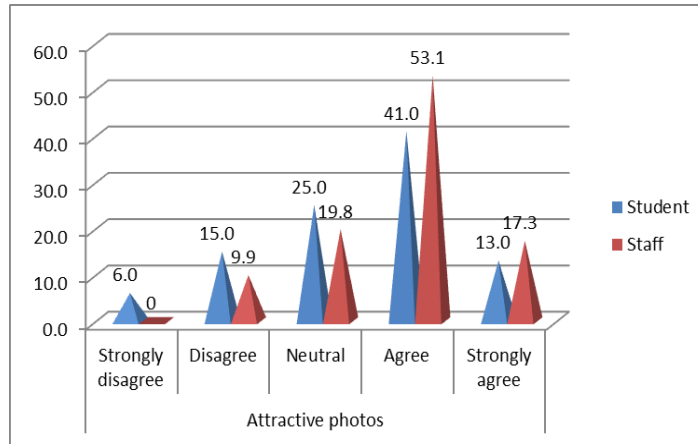
Figure 23: Attractive photos

4.4.6 Easy to Navigate

According to figure 24, 81.7% of the staff members sampled find the website easy to navigate through while 61.4% of the students surveyed agree. However, 38.7% of the students and a negligible percentage of the members of staff do not find it easy to navigate through the website. One of the reasons that could be attributed to this difference between the two groups of respondents is that the staff members use the website more frequently than students hence their familiarity with the site thus making it easy for them to navigate through.
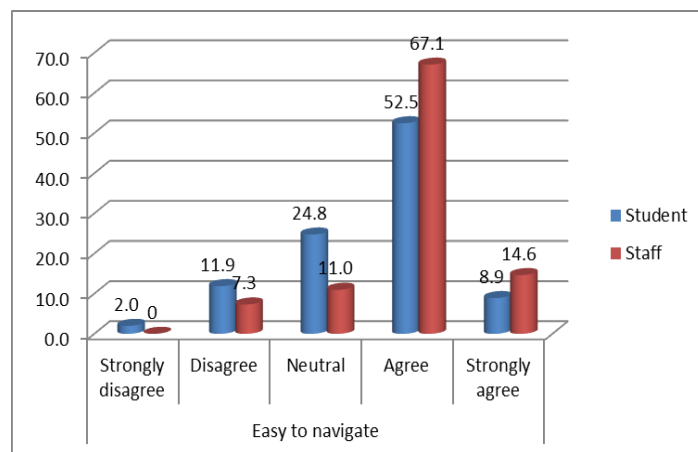
Figure 24: Easy to navigate

4.4.7 Well Placed Menu Items

Figure 25 shows that slightly less than two thirds of the students surveyed in this study indicate that they find the menu items on the University of Nairobi website well placed while more than a third disagrees. Conversely, an overwhelming percentage of members of staff surveyed think that the menu items are well placed with a negligible percentage differing to this. Again this can be attributed to the familiarity of the website by the members of staff sampled following their frequent use of the site.
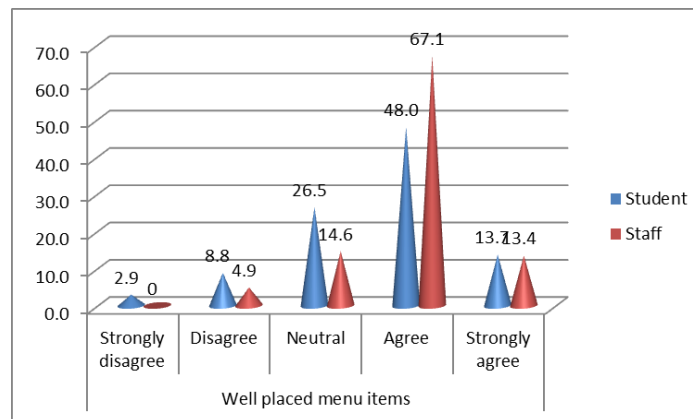
Figure 25: Well placed menu items

4.4.8 Information is Clear

According to figure 26, more than two thirds of both the students and staff sampled in this study agree that the organization of the information on the website is clear. However, a third of both groups of respondents feel that the organization of the information is not clear. Clarity of information is key in communication thereby the University of Nairobi website content probably needs to be revised to make the information clearer.
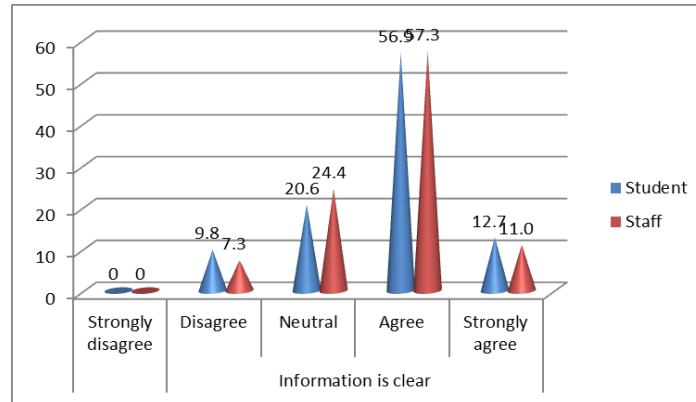
Figure 26: Information is clear

4.4.9 Easy to Find Information

Figure 27 illustrates that 70.7% of the members of staff surveyed and 55.5% of the students sampled in this study indicate that it is easy to find information they are looking for on the website. However, another 44.6% of the students sampled and 29.3% of the staff members say that they find it hard to get what they are looking for from the website meaning that the information is not well placed or could be scattered.
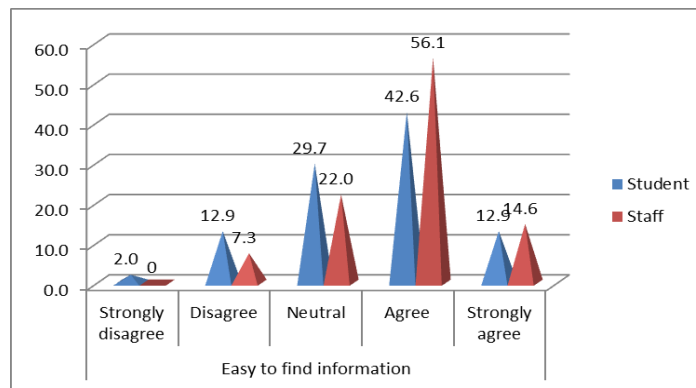
Figure 27: Easy to find information

4.4.10 Overall Organization is Easy to Understand

According to figure 28, two thirds of the students sampled and an overwhelming majority of the members of staff surveyed find the overall organization of the University of Nairobi website easy to understand. 33.3% of the students and 18.5% of the members of staff do not think the overall organization is easy to understand. The one third percentage of the students

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sampled dissatisfaction with the overall organization of the website can be linked to the fact that the respondents in this group indicated in figure 27 that it is not easy to find what they are looking for on the website.
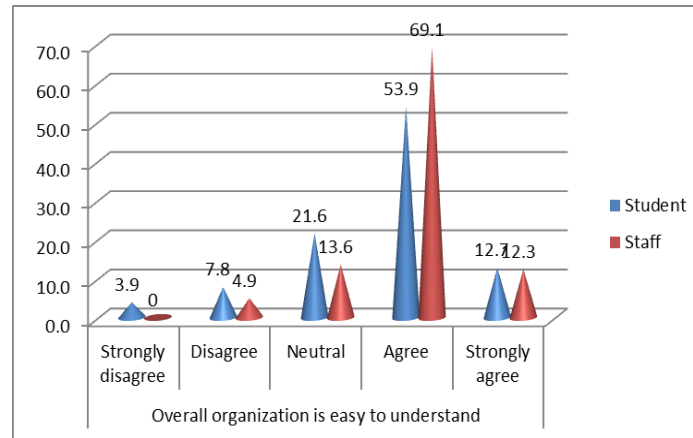
Figure 28: Overall organization is easy to understand

4.4.11 Comment or Query Submission

Interestingly, according to figure 29, only 15.8% of the students surveyed and 38.0% of the members of staff sampled in this study have ever submitted a comment or query via the University of Nairobi website. An overwhelming majority of the students and slightly less than two thirds of the members of staff in this survey have never submitted a comment or query through the website. The percentage of members of staff who have submitted a comment or query is significantly higher than that of students probably because they use the website more frequently and find the content appropriate. These findings could be attributed to the fact that both groups of users do not view the website as an appropriate communication tool and are therefore a passive website audience.
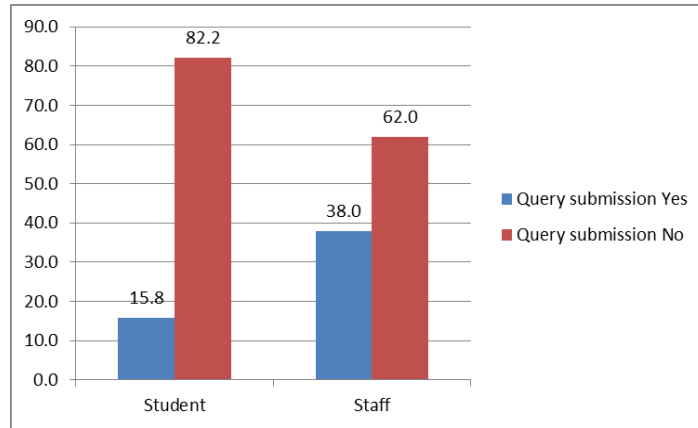
Figure 29: Comment or query submission

4.4.12 Ease of Comment or Query Submission

Of the sampled students and members of staff who have ever submitted a comment or query, slightly less than a fifth of the students and half of the members of staff found it easy to submit the comment or query. An overwhelming majority of the students found it either hard or neither hard nor easy to submit the comment or query. The same applies to the other half of the members of staff sampled in this survey. (See figure 30)
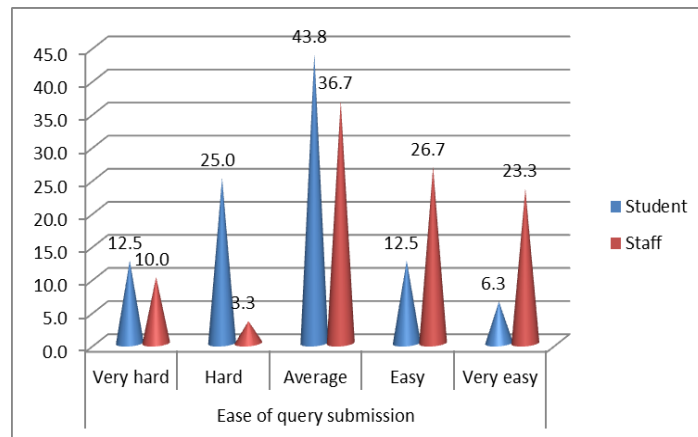
Figure 30: Ease of comment or query submission

4.5 Section 5: University of Nairobi's Image

The respondents were asked questions that captured data on the image reflected on the University of Nairobi.

4.5.1 Adequately Captures Information

According to figure 31, 69.9% of the members of staff and 41.2% of the students sampled in this survey think that information on the University of Nairobi is adequately captured on the website. 31.4% of the students and 15.7% of the members of staff do not think that this is so while 27.5% of the students and 14.5% of the members of staff are not sure. The reason why a majority of staff members think the website accurately captures the University of Nairobi is probably because they have much more information on the university than the students thereby they feel the website accurately captures this. In this case, the students may not be in a position to know whether the information on the university is adequately captured in the website.
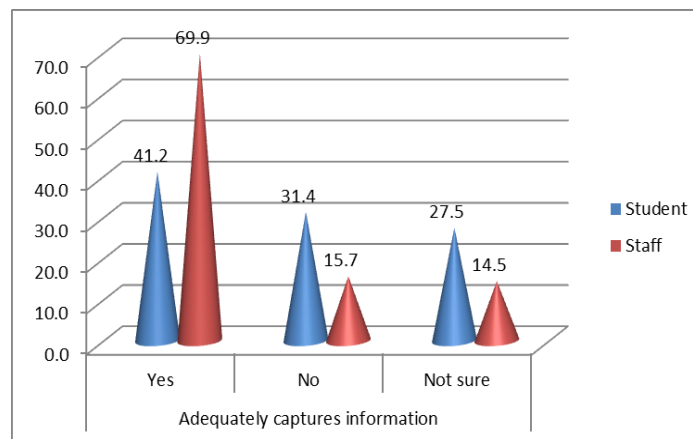
Figure 31: Adequately captures information

4.5.2 Overall Organization is Easy to Understand

According to figure 32, 55.3% of the students and 72.0% of the members of staff surveyed agree that the overall organization of the university of Nairobi website is easy to understand. Compared to figure 28 where the respondents were asked the same question, 66.6% of the students and 81.4% of the staff sampled feel that the overall organization of the university of

Nairobi website is easy to understand. There is a significant difference in this percentage presented by figure 28 and 32 by both the students and staff sampled which cannot be explained.

As per figure 32, at least 44.7% of the students and 28.1% of the members of staff in this study do not think that the overall organization of the website is easy to understand. According to figure 28, 33.3% of the students and 18.5% of the members of staff surveyed in this study indicate that they feel the same. When the findings in the two figures are compared, like before, there is still a significant difference.
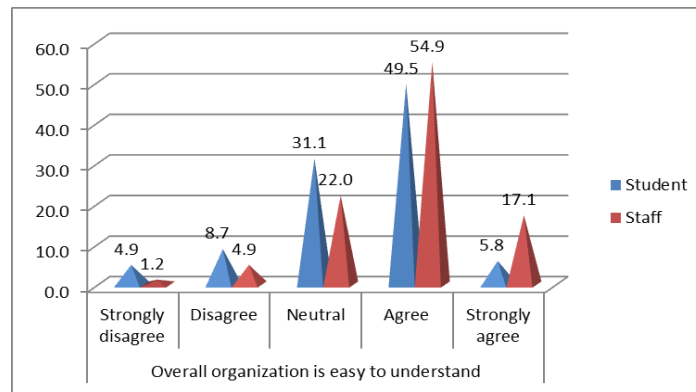
Figure 32: Overall organization is easy to understand

4.5.3 Website reflects University of Nairobi's Image

More than half of the students and three quarters of the members of staff sampled in this study indicate that the University of Nairobi website adequately reflects the image of the university. Slightly less than a fifth of the students and a negligible percentage of the members of staff surveyed disagree with this statement. A quarter of the students and a significant percentage of the members of staff in this study have taken a neutral stand on this. The response on the reflection of the university's image on the website by those sampled in this study clearly indicates that the users feel that the university is well represented by its online presence (See figure 33).
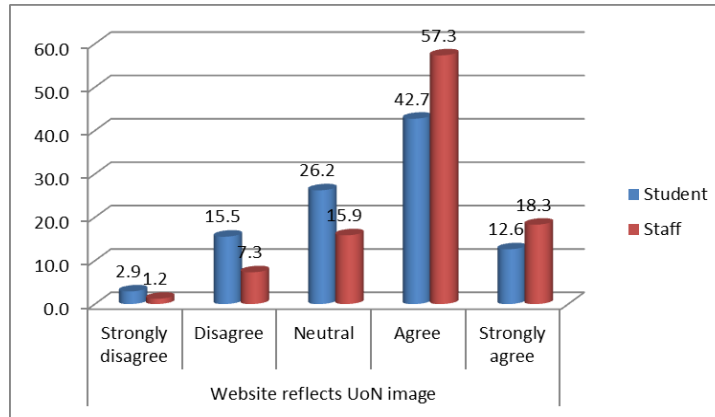
Figure 33: Website reflects University of Nairobi's image

4.5.4 From the Website One Understands the University

Figure 34 indicates that according to the students sampled in this survey 54.4% agree that by visiting the University of Nairobi website one can adequately understand the university while 12.6% disagree with this statement. Of the members of staff surveyed, 73.2% feel that from the website one adequately understand the university as opposed to the 7.3 % who do not feel the same. 33.0% of the students and 19.5% of the staff sampled are neutral about this statement. From the findings, the percentages of the students and members of staff who agree to the statement indicate that the University of Nairobi website provides adequate information. As compared to the students surveyed, there is a significant difference in the percentage of the members of staff who feel that from the website one adequately understands the university. Already the members of staff have more information on the university than the students since they work there, therefore, they can easily identify with the information shared on the website.
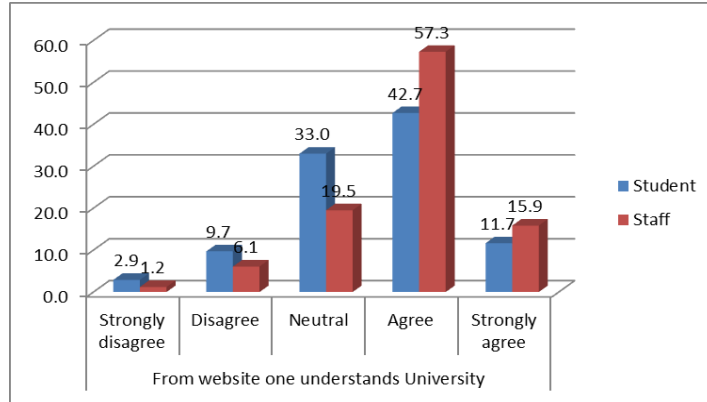
Figure 34: From the website one understands the university

4.5.5 Website Under Represents the University

According to figure 35, 43.7% of the members of staff and 38.8% of the students surveyed feel that the website under represents the University of Nairobi. 48.8% of the members of staff and 33.9% of the students sampled disagree that the website under represents the university while 22.3% of the students and 12.5% of the members of staff are neutral about this statement. The diverse views of the respondents clearly indicate that the users sampled have mixed views of the website in the context of representing the University of Nairobi image.
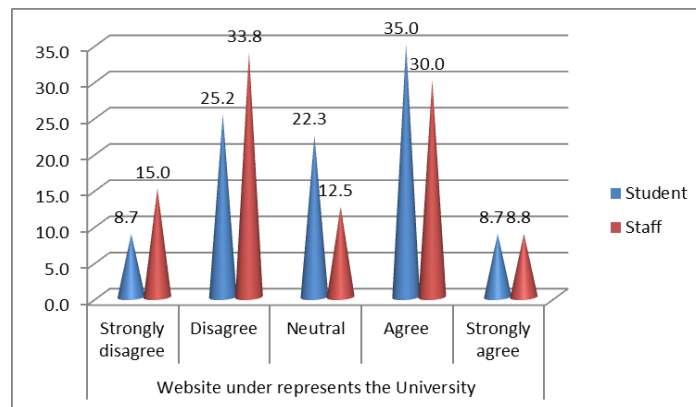
Figure 35: Website under represents the university

4.5.6 University's Image is Grossly Exaggerated

59.2% of the students and 67.6% of the members of staff surveyed indicate that the image of the university is not grossly exaggerated on the website. Another 26.2% of the students and 11.7% of the members of staff have taken a neutral ground on this. A significant percentage of the students and a fifth of the members of staff indicate that the website grossly exaggerates the university's image. In this findings, the students and members of staff surveyed somewhat agree that the website to some extent reflects the University of Nairobi image. (See figure 36)
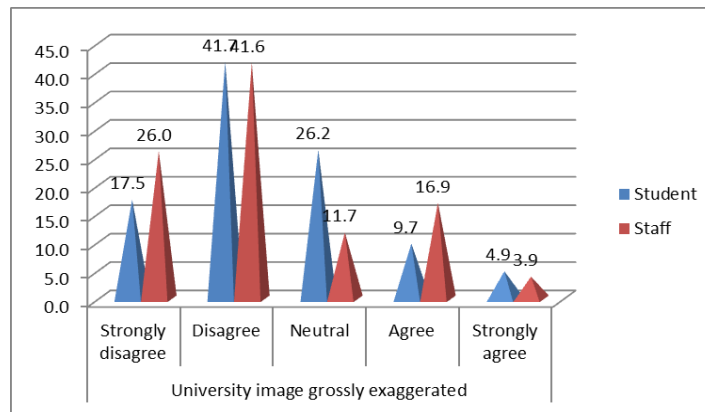
Figure 36: University's image is grossly exaggerated

4.6 Key Informant Interviews

Key informant interviews with communication and technical website experts were conducted by the study. The informants provided expert opinions and in-depth information on the University of Nairobi website.

4.6.1 Interview Schedule for Communication Experts

Two communication experts were interviewed in this study. From the data collected during the interviews, it emerged that they both agree that the University of Nairobi website is an effective communication tool though not a fully reliable one in that website users have to visit the university physically or follow up with a phone call for clarification whenever they

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are looking for information. According to the experts, important information on the university has been shared on-line but the information is a bit cluttered and might not be easy to use for first time users.

It also emerged that to a great extent, the University of Nairobi's image has been well projected online. A new user to the website can easily tell that the university is well placed in the academic arena. However, the interviewees feel that the university should make prominent its achievements over the years not only in the ranking, but also in the successes of its alumni, students and members of staff.

On the content, the interviewees highlighted that a look at the website, one quickly notes the lack of student's input on the site. Although administrative issues targeting the students such as admissions and graduations are captured on the admissions, university life, academics and announcements menu options, other extra-curricular and academic students' activities and achievements are not captured. The experts noted that the University of Nairobi website focuses more on the 'management' rather than the students.

During the interviews, it also emerged that the information on the website is not only relevant for the intended users but also timely and up-to-date. Announcements and events are captured as they happen thus making the website a reliable source for updates on what is happening in the university. However, it was noted that past events are still showing on the homepage.

On the overall look of the website, the experts indicated that the website graphics are well done though there is need for improvement and that some photos are of poor quality and not creatively taken.

4.6.2 Interview Schedule for Technical Website Experts

Two technical website experts were also interviewed in this study. Data collected during the interviews indicate that the University of Nairobi website meets most of the important website performance indicators. The interviewees point out that the website has attempted to meet the most critical component of a successful website which is its degree of usability which calls for a site to be easy to use in terms of navigation, legibility, among other elements.

They noted that the University of Nairobi website site load time is reasonable though at times it fluctuates from time to time. The interviewees note that the site load time should be fast and steady to avoid frustrating the users. In addition, the website captures vital information in a consistent layout which is accessed through links that are prominently placed on the homepage although these links have made the page cluttered. In addition, the content on the website has been linked to other web pages in the university system of websites. According to the interviewees, this is important as it gives the users a sense of direction while on the site and search engines are able to pick up the links.

The technical website experts indicated that the University of Nairobi website is compatible with the latest versions of various browsers such as Internet Explorer and Firefox.

4.7 Checklists

The study designed a checklist, adapted from various website review recommendations. These checklists were administered to website designers and administrators. It was assumed that this study group had no interests in the University of Nairobi and therefore would be able to give an unbiased opinion on the content and design of the website. The respondents were required to assess the University of Nairobi website, looking at its content as well as design and checking it against the set minimum requirements for an effective website.

From the data collected, there are some key information missing on the website such as the awards won and professional affiliations by the University and on-line feedback form. In addition, the fonts are not used consistently throughout the site as they should and that they do not accommodate different screen ratios. The respondents also indicated that the site cannot be used without scrolling horizontally as the horizontal bar is below the screen. To some extent, the website has a consistent, clearly recognizable look and feel that engages the users although attention-attracting features (such as animation, bold colours and size differentials) are used sparingly and only where relevant.

The home page contains meaningful information but it is cluttered with a lot of details. the respondents also indicate that useful content is presented on the home page or within one click of the home page although it requires reorganization and proper adherence to website design principles.

The link names on the website match the title of destination pages, so users know when they have reached the intended page and the headings and sub-headings are short, straightforward and descriptive. The words, phrases and concepts used are also familiar to the intended users with the acronyms and abbreviations being.

CHAPTER 5: SUMMARY OF KEY FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter presents the summary of the key findings in this study, the conclusions as well as the recommendations. The purpose of this study was to carry out an assessment of the University of Nairobi website focusing more on the actual users of the website to determine the role of the website as an effective communication tool.

This study sought to find out whether the University of Nairobi website was an effective communication tool and if the University of Nairobi website projects/enhances the university's image. In addition, the relevance and usefulness of the website content was also looked at.

The research was an evaluation of the University of Nairobi website (www.uonbi.ac.ke) which was conducted through a survey. Data collected from the respondents represented their perceptions regarding the role of the University of Nairobi website as a communication tool, the effectiveness of the website in projecting and enhancing the university's image as well as the relevance and usefulness of the website content to them.

Data was collected through questionnaires (Appendix A), key informant interviews with communication and technical website experts (Appendix B and C) and checklists (Appendix D).

5.1 Summary of Key Findings

All of the respondents sampled in this study indicated that they access and use the University of Nairobi website consisting 55.4% students and 44.6% members of staff in the university (Figure 1). In addition, an overwhelming majority of those sampled were students between the ages of 18 and 24. Members of staff were equally distributed between the ages of 25 and 39 and above (Figure 3). An overwhelming majority of the members of staff access the website on a daily basis, while 28.4% of the students use the website twice a

week with a majority of them accessing it sparingly either daily, once a week, fortnightly or once a month. The study established that an overwhelming majority of the members of staff access the website directly on www.uonbi.ac.ke while two thirds of the students access the site through Google. The use of social media, in this case Facebook and Twitter, in accessing the University of Nairobi website is poor with only 4.0% of the respondents using social networking sites to reach the site (Figure 5).

The respondents were asked to give their reasons for visiting the site. An overwhelming majority of the students and members of staff indicated that they visit the website to get information specifically the announcements, news and events scheduled to take place. In addition, the students highlighted the student portal as their major reason for visiting the website. From the student portal, the respondents are able to access their results, class and exam timetables, fee statements and register for units. On the other hand, the staff portal is one of the major reasons the members of staff visit the website. Through the staff portal, the respondents indicated that they are able to access the personal profiles, download work related documents as well as apply for leave. More than half of the students and staff found the University of Nairobi website loads at a reasonable speed. A significant number of the respondents did not think that the website was fast (Figure 6).

On the website usability, more than half of the students and members of staff find it easy to locate the appropriate link they are looking for. 40.8% of the students and 43.9% of the members of staff rated the website's general ease of use as average while a negligible percentage of the two groups of the respondents find it difficult (Figure 7).

The study sought to establish the role of the University of Nairobi website as a communication tool and determine the relevance and usefulness of the website content. When asked to rate their perceptions on the website, more than half of the members of staff and a third of the students indicated that they always get information they need about the university from the website. A significant percentage, 38.8%, of the students were neutral on this statement (Figure 10).

In addition, an overwhelming percentage indicated that they get useful information from the website. However, there was a negligible percentage that was either neutral or agreed that one can never get any useful information on the website (Figure 11). More so, more than two thirds of the students and an overwhelming number of the members of staff check the website whenever they need information about the university (Figure 12). Half of the students and slightly below two thirds of the members of staff direct people to the website whenever they are asked questions about the university (Figure 13) while slightly below three quarters of the students and more than half of the members of staff get answers from the website whenever they were asked questions about the university (Figure 14).

An overwhelming number find the information on the website both timely and up-to-date (Figure 15). Interestingly, an overwhelming percentage of members of staff (86.6%) and slightly below three quarters of the students (72.9%) find the information on the website relevant for the intended users. 21.4% of the students and 11.0% of the members of staff are neutral on the relevance of the information while a negligible percentage of both the students and members of staff find the information as irrelevant (Figure 16). A majority of the respondents find the information on website clear and easy to understand with 66.0% of the students and 79.5% of the members of staff, indicating that, the information on website is clear and easy to understand. 27.2% of the students and 16.9% of the members of staff are neutral while a negligible number of both groups disagree with the statement that the website is clear and easy to understand (Figure 17). 75.7% of the students and 82.9% of the members of staff find the website to be a useful and reliable source of information. However, 22.3% of the students and 15.9% of the members of staff are neutral on this while 1.9% of the students and 1.2% of the members of staff disagree that the website is useful and reliable (Figure 18).

More than two thirds of both the students and have indicated that the organization of the information on the website is clear. However, a third of both groups of respondents feel that the organization of the information is not clear (Figure 26). 70.7% of the members of staff

and 55.5% of the students find it easy to get the information they are looking for on the website. However, another 44.6% of the students and 29.3% of the staff members find it hard to get what they are looking for from the website (Figure 27). Two thirds of the students and an overwhelming majority of the members of staff find the overall organization of the website easy to understand. 33.3% of the students and 18.5% of the members of staff do not think the overall organization is easy to understand (Figure 28).

An overwhelming majority of the students and slightly less than two thirds of the members of staff have never submitted a comment or query through the website. 15.8% of the students and 38.0% of the members of staff indicated that they have submitted a comment or query via the website (Figure 29). Of these, slightly less than a fifth of the students and half of the members of staff found it easy to submit the comment or query while an overwhelming number of the students found it either hard or neither hard nor easy to submit the comment or query. The same applies to the other half of the members of staff sampled in this survey (Figure 30).

The respondents were asked to rate the general appearance of the website and its usability in terms of how easy it is for the targeted audience to use it. On the general appearance, slightly less than three quarters of the students and an overwhelming majority of the members of staff agreed that the general appearance of the website is good. A significant number of both the students and staff were either neutral or disagreed (Figure 19). 62.2% of the students and 77.1% of the members of staff find the website visually appealing. However, 37.9% of the students and 22.9% of the members of staff do not find the website visually appealing (Figure 20). An overwhelming percentage of both the students and members of staff feel that the website's font size is legible. A significant number of the respondents were neutral on this while a negligible percentage disagrees with the statement (Figure 21). At least two thirds of the students and staff find the graphics on the website pleasing. However, a third of both students and staff do not think the graphics are pleasing while at least a quarter of them took a neutral ground on the statement neither finding the website graphics pleasing nor unpleasing (Figure 22). 46.0% of the students do not find the

photos on the website attractive while 54.0% of the students find them attractive. 70.4% of the staff members find the photos attractive while 29.7% disagree (Figure 23). 81.7% of the members of staff and 61.4% of the students find the website easy to navigate through. However, 38.7% of the students and a negligible number of the members of staff disagree (Figure 24).

In order to determine the effectiveness of the website in projecting and enhancing the university's image, the respondents were asked questions that captured data on this. 69.9% of the members of staff and 41.2% of the students think the information on the university is adequately captured on the website. 31.4% of the students and 15.7% of the members of staff do not think that this is so while 27.5% of the students and 14.5% of the members of staff are not sure (Figure 31). More than half of the students and three quarters of the members of staff think the website adequately reflects the image of the university. Slightly less than a fifth of the students and a negligible number of the members of staff disagree. A quarter of the students and a significant percentage of the members of staff are neutral on this (Figure 33). 54.4% of the students agree that through the website, one adequately understands the university while 12.6% disagree with this statement. Of the members of staff, 73.2% feel that from the website one adequately understands the university as opposed to the 7.3 % who do not feel the same. 33.0% of the students and 19.5% of the staff are neutral (Figure 34).

43.7% of the members of staff and 38.8% of the students indicated that the website under represents the university. 48.8% of the members of staff and 33.9% of the students sampled disagree while 22.3% of the students and 12.5% of the members of staff are neutral on this (Figure 35). 59.2% of the students and 67.6% of the members of staff think that the image of the university is not grossly exaggerated on the website. Another 26.2% of the students and 11.7% of the members of staff are neutral while a significant percentage of the students and a fifth of the members of staff indicate that the website grossly exaggerates the university's image (Figure 36).

Key informant interviews with communication experts established that the University of Nairobi is an effective communication tool though not a fully reliable one. It has emerged that although important information on the university had been shared on-line, it is cluttered. It has been established that the university's image has been well projected online despite the fact that the university's achievements have not been captured. The interviewees indicated that the information on the website was not only relevant for the intended users but also timely and up-to-date. On the overall look of the website, the experts indicated that the graphics were well done and that some photos were of poor quality.

On the other hand, the technical website experts reported that website meets most of the important website performance indicators including usability, reasonable site load time, consistent layout, active links to more information and that the site is compatible with the latest versions of various browsers such as Internet Explorer and Firefox.

From the checklist, it was established that key information was missing on the website, the fonts used were not consistent throughout the site. It was noted that the site cannot be used without scrolling horizontally as the horizontal bar is below the screen. To some extent, the website has a consistent, clearly recognizable look and feel. The home page contains meaningful information which is cluttered with a lot of details.

5.2 Conclusions

The findings in this study indicate a positive perception of the University of Nairobi website by the respondents surveyed in this study. Indeed, the findings have established that the website is an effective communication tool for the users. This suggests that the users rely on the website as a source of information on the university.

It has been established that the members of staff use the website more frequently than the students. While acknowledging the weak areas of the website that need improvement, the respondents indicated that they rely on the site not only for information but also in their work and academic related operations. The users have indicated that they always get

information from the website that is useful, easy to understand, relevant, reliable, timely and up-to-date. This may indicate that indeed the University of Nairobi does communicate to its users.

However, more work needs to be done to raise the standards of the website thus adhering to the good practices of an institutional website such as accurately representing the institution's resources, activities and global performance, providing visitors with a clear vision of the institution, encouraging and supporting a large number of scholars, researchers and graduate students to develop content thus creating a large web presence.

From the study, several elements of the website have been rated poorly or almost poorly by the sampled users. The usability of the website is not a challenge to the users although it needs some reorganization of the menu items on the site. Some of the areas of concern include the website load time which was said to be reasonable though it fluctuates from time to time, the busy look of the homepage, the poor quality of the photos as well as the lack of student focused content on the site. This indicates that a lot of work needs to be done on the website to make the website better to increase the users' thoughts on the website from navigability to content. A well designed website is one that works.

In addition, the findings have indicated that the respondents have mixed views on the image of the university projected on the website. This is a clear indication that the website has not fully captured what is actually on the ground. As an academic institution's on-line communication tool, the website should accurately represent the university's resources, activities and global performance thus providing users with a clear view of the institution.

Indeed, the findings have met the objectives of this study which sought to establish the role of the University of Nairobi website as a communication tool, determine the effectiveness of the website in projecting and enhancing the university's image as well as the relevance and usefulness of the website content from the users' perspective.

5.3 Recommendations

Based on the findings of this study to establish the role of the University of Nairobi website as a communication tool, determine the effectiveness of the website in projecting and enhancing the university's image as well as the relevance and usefulness of the website content from the users' perspective, it is clear that the website is an important tool for the users. It is therefore important for the university management to look at the areas that the users have pointed out that need improvement.

This section thereby presents some of the recommendations that need to be implemented based on the findings of this study.

From the study, members of staff access the website more frequently than the students. Therefore, to increase the frequency of the students' use of the website, the university should publish more information specifically focusing on student activities rather than that of the management and members of staff. Probably a balance of the information can be put in place. This can be done by encouraging students to be part of developing the web content. In addition, the university should make prominent its achievements over the years not only in the ranking, but also in the successes of its alumni, students and members of staff. One probable solution of ensuring diversity of content, the university can employ a system that empowers the university community consisting of staff and students to create, update, manage and maintain content within the institutional website.

On the respondents' mode of access of the website, it was observed that the use of social media, in this case Facebook and Twitter, in accessing the University of Nairobi website was poor. The management needs to look at ways of fully utilizing the power of social media in attracting more users to the website.

It was also noted that the University of Nairobi website site load time is reasonable though at times it fluctuates from time to time. It is recommended that the management needs to

look at ways of making the site load time faster and steady than it is in order to avoid frustrating the users.

The organization of information on the website was also an area of concern. A good percentage of the respondents indicated that at times it is not easy to find the information one is look for, and that the homepage is a bit cluttered. It is advisable for the management to look at ways of sieving the information shared and reorganizing the overall layout of the site to reduce the busy look. This will make it easy for the users to find the information they are looking for on the website. The information can be organized hierarchically, from the general to the specific, making the organisation of the information clear and logical. On all pages, the most important information can be presented on the first screen of information after clicking on a link.

The university also needs to look at ways of archiving past events that are still showing on the homepage and only display the current and future events. There was also a concern over the quality of photos uploaded onto the website and the graphics used. Once these are looked into, the general appearance and visual appeal will improve.

The use of various items on the website by both the students and members of staff is not as good as it should be. From the analysis it emerged that a significant percentage of the students sampled do not use the on-line resources provided for on the University of Nairobi website for academic purposes. They probably rely on other sources of information such as the internet and library. Therefore, the university needs to sensitize students on the various on-line resources available to them such as the repository, research, student email, library portal and e-learning platform.

The university should also consider revising and improving the website content making it vary in terms of relevance, timeliness, completeness, accuracy, and complexity. To make the content fresh and not just a duplicate of prospectus and brochures, the university can consider using various mediums such as videos, audios, photos and written text.

5.3.1 Suggestions for Further Research

As this project research has shown, there is need for further research on the University of Nairobi system of websites. At the moment, the university has set up websites for the colleges, departments, institutes and centres. Research can be done focusing on these websites in order to determine whether the websites are effective as communication tools and if they projects/enhances the university's image. In addition, the relevance and usefulness of the various websites' content can be looked at. These assessments should focus on the users of the sites.

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APPENDIX A: QUESTIONNAIRE

This is a questionnaire for an academic study evaluating the University of Nairobi website. Your consent and participation is highly appreciated. Your answers will be held in utmost confidentiality and used only for the purpose of this study. Thank you for taking time to fill in this questionnaire.

Section 1: Demographics

Please tick where appropriate

1. What is your gender?

Male [   ]   Female [   ]

2. Please indicate your age (in years) bracket

18-24 [   ]   25-31 [   ]   32-38[   ]   39 and above [   ]

3. Affiliation to the University of Nairobi

Student [   ]   Staff [   ]   Other (Specify) _____

Section 2: Accessibility

1. Have you ever accessed the University of Nairobi website?

Yes [   ]   No [   ]

2. If yes, how often

Daily [   ]   Twice a week [   ]   Once a week [   ]   Fortnightly [   ]

Once a month [   ]

3. How do you access the University of Nairobi website?

Directly [   ]   Google [   ]   Facebook [   ]   Twitter [   ]   Other(Specify) _____

4. What is your major reason behind visiting the University of Nairobi website? *(List them below)*

   a. _____
   b. _____
   c. _____
   d. _____

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5. How would you rate the time taken for the site to open?

   Very slow [ ]   Slow [ ]   Reasonable [ ]   Fast [ ]   Very fast [ ]

6. On the homepage, how easy is it to find the appropriate link for the information you are looking for?

 Very easy [ ]   Easy [ ]   Average [ ]   Difficult [ ]   Very difficult [ ]

Section 3: Website content

1. Approximately how frequently do you normally use the following links on the University of Nairobi website?

	Daily	Thrice a week	Twice a week	Once a week	Every 2 weeks	Once a month	Never
Student Portal							
Staff Portal							
News							
Announcements							
About UoN							
Academics							
Admission							
University Life							
Media Centre							
UoN Digital Repository							
UoN Intranet							
Research							
Staff Email							
E-Learning Portal							
Library Services Portal							
Student Email							

2. On a scale of 1 - 5 how would you rate the following statements (*Tick where appropriate)*

	1 Strongly disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly agree
Whenever I need information, I always get it from the website.					
You can never get any useful information on the University of Nairobi website.					
Whenever I need information about University of Nairobi I check on the website.					
When people ask me questions about the University of Nairobi I direct them to the website.					
When asked questions about the University, I check the website for answers.					
The information on the University of Nairobi website is timely and up-to-date.					
The information on the University of Nairobi website is relevant for the intended user.					
The information website is clear and easy to understand.					
Overall, the University of Nairobi is a useful and reliable source of information.					

Section 4: General appearance of the website and usability

1. On a scale of 1 - 5 how would you rate the following statements (*Tick where appropriate)*

	1 Strongly disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly agree
The University of Nairobi website's general appearance is good.					
The University of Nairobi website is visually appealing.					
The University of Nairobi website font size is legible.					
The graphics on the University of Nairobi website are pleasing.					
I am attracted by the photos on the website					
It is easy to navigate through the University of Nairobi website.					
The menu items are well placed on the website.					
The organization of information on the University of Nairobi website is clear.					
It is easy to find what I want on this website.					
The overall organization of the University of Nairobi website is easy to understand.					

2. Have you ever submitted a comment or query on the University of Nairobi website?

Yes [   ]   No [   ]

3. If yes, how was it?

Very Hard [   ]   Hard [   ]   Average [   ]   Easy [   ]   Very easy [   ]

Section 5: University of Nairobi's image

1. Do you think information on the University of Nairobi is adequately captured on the website?

Yes [ ]   No [ ]   Not sure [ ]

2. On a scale of 1 - 5 how would you rate the following statements (*Tick where appropriate)*

	1 Strongly disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly agree
The overall organization of the University of Nairobi website is easy to understand.					
The University of Nairobi website adequately reflects the image of the University					
By visiting the University of Nairobi website one can adequately understand the University.					
The University of Nairobi website under represents the University					
The image of the University is grossly exaggerated on the website					

3. What changes or additional features would you suggest for this website? *(List them below)*

a. _____

b. _____

c. _____

d. _____

APPENDIX B: INTERVIEW SCHEDULE FOR COMMUNICATION EXPERTS

Website as a communication tool

1. What are some of the features that make a website an effective communication tool?

a. In your own opinion, is the University of Nairobi an effective communication tool? Give reasons for your answers.

b. From a communication point of view, what are some of the recommendations that you can make to ensure a website is a more effective communication tool?

2. What are some of the mechanisms that can be put in place to solicit feedback from the website users?

a. Of these, which are the most effective method(s) for academic institutions to use to get feedback from its users?

b. Do the users get responses on their queries posted on the website?

Websites and organization's image

1. A website is meant to project the company's image. What are some of the ways an organization can enhance its image online?

2. Does the University of Nairobi website project a good image of the University?

3. Would you say that the University of Nairobi website accurately projects what is on the ground?

Web content

1. The content that you put on your website is an important and crucial part of building a successful website. Looking at the University of Nairobi's website, what would you say about the content?

a. What are some of the recommendations you would make concerning the content?

2. As an academic institutions' website, what should the website communicate?

a. Does the University of Nairobi website content communicate what it should?

APPENDIX C: INTERVIEW SCHEDULE FOR TECHNICAL WEBSITE EXPERTS

Website as a communication tool

1. From a technical view of websites, what makes a successful website?
2. What are the most important performance indicators for an effective website?
3. Having gone through the University of Nairobi website, would you say that it is an effective website?
4. What are some of the mechanisms that can be put in place to solicit feedback from the website users?
a. Of these, which method(s) is the University of Nairobi using to get feedback from its users?
b. In your own opinion are they effective methods?
c. Do the users get responses on their queries posted on the website?

Website usability

1. Websites need careful planning from the start to ensure that the layout remains simple, effective and a positive experience for visitors. What are some of the things to consider in:
a. Developing a usable site?
b. Ensuring ease of navigation of a website?
c. Does the University of Nairobi website a logical and comprehensive structure and efficient navigation?
2. What is the most reasonable load time for any given website?
3. As a website expert, what are some of the measures you can take to ensure that your website visibility is felt?

APPENDIX D: WEBSITE REVIEW CHECKLIST

This is a standard website review checklist for an academic study evaluating the University of Nairobi website. Your consent and participation is highly appreciated. Your answers will be held in utmost confidentiality and used only for the purpose of this study. Thank you for taking time to fill in this checklist. (The checklist is adapted from various website review recommendations)

Reviewer's profession: _____

Affiliation to the University of Nairobi: _____

Instructions: For any item found on the website please check with a tick (✓) and a cross (X) for any missing item.

Content review

Tick (✓)/Cross (X)	Item	Comments
	About us	
	Awards/Professional affiliations	
	Customer quotes or testimonials	
	Job postings	
	Contact us	
	FAQs (frequently asked questions)	
	Feedback form	
	Maps of and directions to office locations	
	Events	
	News	
	Copyright statement	
	Privacy policy	
	Terms and conditions	
	Press centre	
	Contact details for PR department	
	Management/Key personnel	
	Press releases	
	Customer survey	
	Search	
	Useful links (related links to external sites)	

The home page

Tick (✓)/Cross(X)	Item	Comments
	The home page contains a search input box	
	Useful content is presented on the home page or within one click of the home page	
	There is a short list of items recently featured on the homepage, supplemented with a link to archival content	
	The home page contains meaningful information	
	Navigation choices are ordered in the most logical or task-oriented manner (with the less important corporate information at the bottom)	
	All corporate information is grouped in one distinct area (e.g. "About Us")	
	By just looking at the home page, the first time user will understand where to start	
	The home page shows all the major options	
	The home page is professionally designed and will create a positive first impression	
	The design of the home page will encourage people to explore the site	
	The information on the home page will encourage people to explore the site	

Content quality

Tick (✓)/Cross(X)	Item	Comments
	Information is organized hierarchically, from the general to the specific, and the organisation is clear and logical	
	Content has been specifically created for the web (web pages do not comprise repurposed material from print publications such as brochures)	
	Sentences are written in the active voice	
	Each page is clearly labeled with a descriptive and useful title that makes sense as a bookmark	
	Link names match the title of destination pages, so users will know when they have reached the intended page	
	The words, phrases and concepts used will be familiar to the typical user	

	Acronyms and abbreviations are defined when first used	
	Headings and sub-headings are short, straightforward and descriptive	
	The layout helps focus attention on what to do next	
	On all pages, the most important information (such as frequently used topics, features and functions) is presented on the first screenful of information	
	The site can be used without scrolling horizontally	
	Things that are clickable (like buttons) are obviously clickable	
	Items that aren't clickable do not have characteristics that suggest that they are	
	Fonts are used consistently	
	Fonts are readable	
	There is a clear visual "starting point" to every page	
	Each page on the site shares a consistent layout	
	Pages on the site are formatted for printing, or there is a printer-friendly version	
	Buttons and links show that they have been clicked	
	There is a good balance between information density and use of white space	
	The site is pleasant to look at	
	The site has a consistent, clearly recognizable look and feel that will engage users	
	The colours work well together and complicated backgrounds are avoided The organization's logo is placed in the same location on every page, and clicking the logo returns the user to the most logical page (e.g. the home page)	
	Attention-attracting features (such as animation, bold colours and size differentials) are used sparingly and only where relevant	