



An Analysis of Factors Influencing the Success of Social Networking Websites

A Case Study

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This thesis is submitted to the Faculty of Computing at Blekinge Institute of Technology in partial fulfilment of the requirements for the degree of Master of Science (60 credits) in Computer Science with a specialization in Informatics. The thesis is equivalent to 10 weeks of full time studies.

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ABSTRACT

Keywords: Social networking websites, Service features, Quality factors, Success determinants

Context. In today's ICT environment, social networking segment of the Internet is fast becoming most popular and most active segment of online platform. Present developments in ICT revealed that two-thirds of the Internet users in the world are active users or members of social networking sites. This study having its background in social informatics critically analyzed the success factors of social networking websites (SNWs) using Facebook (FB) as case study. The study carefully identified factors that motivate social networking users to register and become active members of specific social networking website.

Objectives. The study evaluates the determinants of quality service of social networking websites that impinge upon users' socialization behavioral characteristics and eventually translate into success (growth and developments) of social networking sites. That is, the study identifies and assesses quality service features that can influence the choice of users in the use of a particular social networking website, and how these quality service features can hold users spellbound to use such social networking website.

Methods. Firstly, there was a systematic review of article from several sources, including Compendex, Inspec, IEEE Xplore, ACM Digital Library, and Springer Link. Studies were selected after reading titles and abstracts to decide whether the articles are peer reviewed, and relevant to the subject. This was followed with the synthesis of information obtained from existing research work on various subject in the field of social informatics as well as other relevant literature. Having specified the research domain, the study proceeded to identify relevant quality factors and group them on concrete term. This research work looks at the success determinants from two different perspectives (users and business perspectives) using case study approach. The case study for this study is Facebook (FB)

Results. The study identified seven factors as being very important and influential in determining the success of social networking websites (SNWs). These factors include efficiency of the site; user friendliness of the site; real time update of the site; privacy security concern of the site; layout and navigability of the site; social connectedness; and liveliness of the site. The study went further to test the statistical significance of the relationship of these factors to the success (growth and development) of SNWs. The statistical investigation conducted revealed that all these factors are very important determinants of success of SNWs.

Conclusions. This study conclude that there are seven service features that are very crucial to the success of social networking websites (SNW) and thus, have very significant policy implications for the management and running of SNW. The study tested the relationship of the crucial service features to the frequency of usage of the website by the users. The study concludes that their relationship to the frequency of usage was positive.

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1. INTRODUCTION

1.1 Introduction

According to Flensburg and Kurti (Flensburg & Kurti, 2006), there was an unprecedented development in the field of information and communication technology (ICT) in the early 90's that led to the emergence of electronic information space (EIS) popularly known as the internet. In an earlier research study, Chris Batt (Batt, 1999), opined that the trends of the dynamics occurring in the field of information and communication technology (ICT), have the makings of a social revolution, similar to the Industrial Revolution. Notwithstanding the similarity, Nardi (Nardi, Whittaker, & Schwarz, 2002) argued that industrial revolution took place in relatively stable settings where large corporations employed many skilled and unskilled workers. As it were, workers were able to establish long-term business and interpersonal relationships (relationship between workers, businesses, suppliers, and customers/clients). On the contrary, the social revolution brought about by the emergence of the internet caused a dramatic transformation of the industrial society to an information society (UNESCO, 1996) (Nardi, Whittaker, & Schwarz, 2002). Unlike the industrial society, network society rely, mostly, on their own personal social networking activities to get things done (Nardi, Whittaker, & Schwarz, 2002). Suffice to say that personal relations are still indispensable in this technological world (Flensburg & Kurti, 2006). This ongoing scenario then leads to a concept known as social informatics.

Social Informatics (SI) is almost as old as the history of computerization processes itself. By definition, social informatics (SI) is the study of the social aspects of computerization. Unbelievably, research studies in Social Informatics have touched several areas of human and social life. Ethics, culture, politics, and law are a few areas within the realm of Social Informatics (Berleur, Nurminen, & Impagliazzo, 2006). The domain of social informatics has expanded even further towards economic, organizational, and technical issues by the conceptualizations of information societies and ICT policies (Berleur, Nurminen, & Impagliazzo, 2006). Furthermore, recent development issues on privacy, confidentiality and professional practices in information society vis-à-vis social change in the contextual environment are fast becoming relevant components of earlier definitions of social informatics. In essence, one can define SI more succinctly as the study of the use of information communication technology (ICT) and its effect on socio-cultural or institutional setting (Kling R. , 1999). Quoting Rob Kling (Kling R. , 1999), a

more formal definition of social informatics is "the interdisciplinary study of the design, uses and consequences of information technologies that takes into account their interaction with institutional and cultural contexts." Considerable research efforts in this contextual framework of social informatics have thus, generated useful results and views that are applicable to various forms of ICT especially the electronic information space (the Internet). These useful views, findings and brilliant ideas generated by research work in SI, according to (Kling R. , 2000), (Singh & Raja, 2010), and (Abida & Rahat, 2013), have eventually led to useful concept of 'computerized information systems (CIS) such as social networks (SN) and even technical networks. This concept in turn has helped a great deal in the understanding of the characteristics of internet and the information society (Abida & Rahat, 2013).

It is undeniable that information and communication technology and social revolution are changing the perceptions and the interaction status of the information society (Keith, 2015).

Quoting Keith (Keith, 2015) from his observation of the social revolution, "people today can stay in touch with friends on Facebook, share vacation photos on Instagram, follow trends on Twitter, grow their networks on LinkedIn, and explore communities on Reddit". Apparently, the information society stay connected wherever they go. Statistical evaluation of the internet users revealed that two-thirds of the Internet users in the world are active members or users of social networking websites (SNW) (Nielsen Company, 2009). In a similar instance, systematic tracking of social media usage by Perrin (Perrin, 2015), revealed that social networking usage has shot up in the past decade. According to the report (Perrin, 2015), 65% of adult in America are active members of social networking websites. In essence, social networking segment of the internet is becoming more popular and undoubtedly, the most active segment of online platform (Nielsen Company, 2009). . Flensburg and Kurti (Flensburg & Kurti, 2006), observed in their research study that networking has undoubtedly become the norm for establishing and managing relationships with the wider world (friends, families and relatives, colleagues, vendors, outsourced service providers, customers, clients, team members, political party, religion organizations, etc.). Notwithstanding the observation about the unprecedented development in ICT accompanied by social revolution, there still exists a lack of understanding of the trends of dynamics of ICT in socio-cultural and/or institutional setting (Kling R. , 1999). Implicit in this observation is the lack of understanding of the relevance of social aspect of computerization as well as the service features that determine the service quality of social networking websites (Anderson, Tora, Sally, & Bridger,

1995). Quoting Rob Kling (Kling R. , 1999) when talking about lack of understanding of service features, “a systems designer with a socio-technical orientation does not simply consider these elements” (People, hardware, software, techniques, support resources and the structure of the information) “while working in a "design studio" far away from the people who will use a specific system. Effectively designing socio-technical systems also requires upon a set of "discovery processes" to help the designers understand which features and tradeoffs will most appeal to the people who are most likely to use the system”. It is thus imperative to research into the understanding of service features that determine the service quality of social networking websites.

1.2 Problem Statement

Millions of users worldwide spend lot and lots of time browsing the Internet. Nevertheless, the social networking websites group feels the impact of the phenomena stream of data that keeps the website users connected more than any other group of websites on the internet. For instance in 2009, Nielsen Company observed that social networking websites is fast becoming the worldwide consumer fact because two out of every three Internet users worldwide are visitors of a social network (Nielsen Company, 2009).

According to Bennett (Bennett, 2013), people share thousands of pictures/images per minutes, exchange several thousands of tweets, uploads hours of videos and post thousands of pieces of content to their profile on social networking websites. Because of this unprecedented high usage of social networking websites, the way people behave socialize (the way people use social networking websites, the content and information they share, what they perceive, and how they socialize) have changed dramatically (Abida & Rahat, 2013). This characteristic behavioral change has also gone as far as reshaping or regrouping social networking websites and can invariably determine the success of any social networking website. For instance, a very high percentage of female users of social networking websites use Pinterest for their social networking activities whilst a high percentage of male users skews towards Google+ (Bennett, 2013). A very high percentage of Facebook users are young adults between the age of 18 and 35 while about 61 percent of LinkedIn members use LinkedIn primarily for their professional networking activities. People in varying percentages use other social networking websites such as Badoo, Tagged, Hi5, Orkut, Myspace, Bebo, etc. for variety of socialization and networking activities.

All social networking websites are built on the same concept of traditional socio-cultural cum institutional setting. All of them use variety of content management system (CMS) built on similar engineering design concept. All these websites have adaptable and variety of specialized user interface (UI) features, profile account management (PAM), website applications (WA), graphic/layout designs (GLD), and other content materials for their users. Without mincing words, one can confidently assert that social networking websites have almost everything in common (same technology, purpose, and approach). In spite of the observations made above all social networking websites appeal differently to their users worldwide. One then begins to wonder what differentiates these social networking websites from one another, such that they appeal differently to their users and thus more successful and more influential than one another. This situation thus calls for an in-depth probe into service factors that can imprint the image of a named social networking website on the mind of its users and thus propel such social networking website into stardom. This research work refers to such service factors that attract new users and keep them spell bound to the site success factors. (Abida & Rahat, 2013), argued that the best and easiest way to convince users to join any social networking website is by providing features that will facilitate qualitative services to the users and at the same time, appeal to the social and or specific needs of the users. Implicit in this argument is that the quality of services delivered by social networking websites should be such that can guaranty the satisfaction of the users and thus elicit positive commitment of users to the growth and development and hence, the success of the networking website (Anderson & Sullivan, 1993; Jones & Sasser, 1995).

1.3 Research questions

In virtually all occupations, the effects of service quality on the success of a business outfit cannot be overemphasized. When an organization qualitatively delivers its services, such service delivery eventually translates into success (growth and development as well as increased revenue base) in that the service quality has the ability to retain current customers (users) and attracts new one. The opposite is also true when service delivery is poorly. In essence, provision of quality service and hence, a good user experience is undoubtedly the best strategy for increasing the numerical strength and hence the revenue base of any social networking website as a business outfit. This then leads us to the main question that this project work seeks to answer; what are the service factors that determine the success of social networking websites?

Service quality creates customers satisfaction with several concomitant benefits that may include harmonious relationship between the users and the management of the websites. Internet marketing analysts, scholars and practitioners have often argued that customers' satisfaction is a variable that has great impact on users' retention and, hence, users' loyalty and commitment to the success, profitability and competitiveness of the site (Anderson & Sullivan, 1993). The more satisfied, contented, and comfortable users feel with the service quality of any social networking website, the more likely such users will be committed to improving the social capital and numerical base of the website. To this end, this project examined and analyze factors influencing the success of social networking sites using case study of a social networking website (Facebook) seek to examine the following specific questions:

- What are the service features that determine the service quality of social networking websites and hence impinge upon the networking activities of the users?
- What sort of relationship (positive/negative) exists between service quality of a website and the frequency of use of the website by the users?

1.4 Scope and Objectives of this Project

Virtually all the research studies reviewed in this course of this study did not adequately address the issues that reflect quality features of social networking websites from the perspectives of social networking websites users. The contextual scope of this project is thus the evaluation of the determinants of quality service of social networking websites that impinge upon users' socialization behavioral characteristics and eventually translate into success (growth and developments) of social networking sites. That is, the project will focus more on the assessment of quality service features that can influence the choice of users in the use of a particular social networking website, and how these quality service features can hold users spellbound to use such social networking website. In this context, this project work will focus more on the following specific objectives.

Specific objectives of the study include the following:

- Identify significant success factors for social networking websites (SNW) □ Identify various uses of SNW.
- Make useful recommendations to SNW management for a successful e-commerce outfit

- Contribute to the wealth of information and knowledge available on the concept of social informatics.

1.5 Limitations of this Research work

The most noticeable limitation of this research work is finance. Carrying out online survey requires fund that is not easily and readily available.

1.6 Outline of this Research work

For ease of flow of information contained in this research work, the report was structured as below. Chapter 1 of this report contains the introduction to the research work. The introduction features the background issues to the report, problem definitions, and the objectives of the study. Chapter 2 focused on the related works, highlighting the conceptual and the theoretical framework of the study. In chapter three, the study specified the method used for the synthesis, analysis and evaluation of data collected from relevant sources. The last chapter, (chapter four) is devote for the findings and the results of the analysis. This is the followed by discussions of major finding on chapter five. The last chapter contains the conclusion of the research work as well as the future work. The bibliography was placed immediately after the last chapter. The bibliography is formatted using APS style formatting and arranged in alphabetical order. Appendix is the last section of the report and contains some technical details relevant to the understanding of the whole report.

2. RELATED WORK

2.1 Definition of Social Informatics (SI)

Social Informatics (SI) is almost as old as the history of computerization processes itself (Vehovar, 2008). However, full-blown research work and scholarly discourse on the concept of social informatics (SI) did not receive the blessings of scholars, academicians, and practitioners until late 1990s and early 2000s (Williams & Edge, 1996), when Rob Kling of University of Indiana published his basic work on the concept of SI (Kling R. , 1999). Notwithstanding the relative newness of this concept in informatics, review of relevant literatures, scholarly journals and research reports (Boyd & Ellison, 2007) revealed that research in social informatics has gained considerable recognition in most European countries, America, South Africa and within North America (Williams & Edge, 1996).

By definition, Social Informatics (SI) is the study of the social aspects of computerization (Kling R. , 2000; Singh & Raja, 2010). Other researchers such as (Kling & Sawyer, 2005) and (Sawyer & Tyworth, 2006) defined SI in socio cultural or institutional setting. Both definitions emanated from the use of deterministic approach (Singleton & McAllister, 1988) to measure the social impact of ICT mostly on the organization and not on the information society (contextual environment) itself. ICT in this continuum seems to be the progeny of human social interference (Williams & Edge, 1996). However, recent development issues (privacy, confidentiality, professional practices, etc.) in information society vis-à-vis social change in the contextual environment are fast becoming relevant components of earlier definitions of SI (McIver & Rachell, 2002). In essence, one can define SI more succinctly, as the study of the use of information communication technology (ICT) and social change in cultural and/or institutional setting; with special focus on the effect of ICT on organizational and social relations; and the influence of social interactions on the design and use of ICT (McIver & Rachell, 2002). Considerable research efforts in this contextual framework of social informatics generated useful results and views that are applicable to various forms of ICT.

2.2 Electronic Information Space (EIS)

The unprecedented development in the use of information and communication technologies (ICT) over the past few years has engendered a dramatic transformation of our society from an industrial society to an information society (UNESCO, 1996). The transformation has thus led to the

emergence of a new phenomenon known as electronic information space (EIS). This information space captured the entire ICT environment by whirlwind through the introduction of the World Wide Web. The World Wide Web (WWW) commonly referred to as the web consists of a system of interlinked hypertext markup language used to accessed remote documents via the Internet. With a web browser, one can view web pages (often referred to as website) that may contain text, images, videos, and other multimedia, and navigate between them via hyperlinks. Electronic information space (EIS) includes electronic conferencing systems, voice over internet protocol (VOIP), e-book, post office protocol (POP), e-banking, simple mail transfer protocol (SMTP), ejournals, e-commerce, and electronic social networking. These and all other examples of EIS are usually displayed on the web (electronic gateway) as web pages or simply as websites.

2.3 Website typology

There are varieties of websites ranging from simple personal/ family web blog to a very complex content management websites. With the current trend in ICT, website development and usage is so much dynamically vast such that professionals and users alike have to classify the various sites based on what such websites do or aim to do. Other classification of websites is based on the tasks that users or visitors can use the websites to accomplish. However, the classification may not be conventional but it helps users to group the sites they visit under a specific name or type. Whether one classifies websites based on what the site does or based on the tasks that users or visitors use the websites to accomplish, it is still possible to classify a particular website under several types or group names.

2.3.1 Common Types of Websites

Review of various publications and online journal relevant to website listing and classifications shows the following type of websites as most common or popular among the users.

2.3.1.1 *Blog (or web log)*

Sites generally used to post online diaries which may include discussion forums (e.g., blogger, WordPress, Naijin, Xanga, etc.). Sometimes, an individual or a small group of individuals such as a family or club could run a blog. In this case, the blog may contain information or any content that the blogger wishes to include or share.

2.3.2 *Adult / Mature Content Websites*

Sites with profane or vulgar content generally considered inappropriate for minors. This type of site includes sites that offer erotic content, sexually explicit imagery designed for sexual arousal and/or ads for sexual services.

2.3.2.1 *Phish Websites*

Websites in this category tactfully mimic legitimate sites or legal entity in an electronic communication environ in an attempt to gather sensitive information. By so doing, such websites fraudulently acquire sensitive information, such as passwords, credit card details and other credentials needed to predate on unsuspecting prey.

2.3.2.2 *Affiliate Websites*

Affiliate website is an enabled portal that helps translate syndicated content from other content providers and thus make it visible and usable by users for an agreed fee. The relationship of this type of website to the content providers is often in three tiers.

- 1) Affiliate Agencies (e.g. Commission Junction popularly known as CJ)
- 2) Advertisers (e.g. Bidvertizer, Adhits)
- 3) Consumers (e.g. MSN, Google, Yahoo, etc.)

2.3.2.3 *Information Websites*

Websites in this group contain relevant or useful contents to guide visitors or keep them informed on various subjects. Example in this group includes free online dictionary, lexicon, encyclopedia, and weather information websites. Most governmental institutions, educational institutions, NGO, and INGO websites are classified under this group. Also included in this group is the wikki websites (Wikipedia and Wikisionary). Wikki website allows users to edit its content collaboratively

2.3.2.4 *Corporate Websites*

Websites of corporate and multinational organizations fall under this category. Websites in this category are mostly used to provide background information about the business, products and/or service, and the practice policies of such organization.

2.3.2.5 *eShop/eCormerce Websites*

This group consists of websites that facilitate buying and selling of product and/or service over the electronic systems through the interaction of the Internet and other computer networks.

Amazon.com is a notable example of this group of websites. Electronic commerce is generally considered the sales aspect of e-business. It also consists of the exchange of data to facilitate the financing and payment aspects of business transactions.

2.3.2.6 *Community Websites*

Websites under this category are commonly referred to as social networking sites. Websites under this category allow users or members with similar interests communicate with each other over the electronic systems. Notable examples of websites in this group include Facebook (FB), Google+, Tagged, MySpace, Pinterest, Badoo, hi5, LinkedIn, and Twitter.

2.4 The Case Study

This research work used Facebook (FB) as a case study. In February 2004, a team of five Harvard university students led by Mark Zuckerberg launched a community website known as Facebook. Presently, the website, Facebook (FB) is one of the most popular online social networking services. This social networking site adopted its name from the name of the book usually given to students at the beginning of each academic year in some American university. This book often contains the profile of each student to help students get to know one another.

At the very beginning of the website, the membership was limited to students of the Harvard University. Having achieved tremendous success with the introduction of the site to the students of Harvard University, the management team of the website partially removed the membership limitations to accommodate students from other colleges in Boston, Ivy League and Stanford University. The success experienced in the partial removal of membership limitations to the website prompted the management team to expand the website and began to accept membership from students of other universities. Soon afterwards, the management team opened the membership of the site to high school students and eventually to anyone who is at least thirteen years old.

In order to ease membership database maintenance and management, users must register before using the site. In other words, it is mandatory for user to register as a member before using the site.

Registering as a member on the website involves creating a personal profile (full name, email address, age, and other relevant bio-data. After successful registration, the user then becomes a member and can start enjoying socialization services/features provided by the website (adding

other users as friends, exchanging messages, and receiving automatic notifications when friends update their profile, etc.). Furthermore, members may join common-interest groups often organized by workplace, school or college, or other characteristics. Members can also categorize their friends into groups as they please.

As of September 2012, FB has registered over one billion active members in its database and it continues to grow on daily basis. Regrettably, FB management team did not equip the website with bio-data verification facilities. Out of the active registered membership of FB, about 7.5 million were children under the minimum required age of 13 years, and 5 million members were children under the age of 10 years (Consumerreports.org, 2011). The report added, “Those kids’ Facebook accounts were largely unsupervised by their parents, exposing the children to malware or serious threats such as predators or bullies”.

Though not primarily designed for business, the rapid growth and development (success) of FB was adjudged strong enough to attract funding from investors just barely a year after launch. In May 2005, Accel partners invested \$12.7 million in Facebook, and Jim Breyer added \$1 million from his personal purse to the lump sum (CNBC, 2012). In a worldwide study conducted by Complete Pulse in January 2009, FB ranked the most widely used social networking website (Kazeniak, 2009). On February 1, 2012, FB filed for an initial public offering began selling stock to the public and trading on the NASDAQ on May 18, 2012. As at the end of 2012 financial year, FB raked in US\$ 5.1 Billion net income.

2.5 Evaluating Social Networking Website from Business’ and Users’ perspective

When evaluating the success of social networking website, it is pertinent to view it from two main perspectives (Business and users perspectives). Social networking site is a service-oriented business outfit (Wilson, 2009; Strufe, nd). On the other hand, social networking sites render services to users from far and near (Liu & Arnett, 2000; Wilson, 2009; Strufe, nd). Strufe explained further that Social networking websites contain a wealth of information for the use of the users. The overall quality of information provision services to the user, according to (Swan & Combs, 1976) and, (Zeithaml & Bitner, 2003), is a critical evaluation of the collective effect of all service performances that reflects customers’ perception of specific dimensions of the service. More succinctly, service quality is the customers’ perception of the delivery of a specific service, which leads to the satisfaction of the customer (Zeithaml & Bitner, 2003). Service quality affects users’

satisfaction by giving the estimates of the real value of such service and consequent decision of the costumer to remain committed to the service provider.

2.6 An Overview of Social Networking Websites

Social networking websites are essentially web-based software with a dynamic and interactive visual platform where people of similar interest communicate with each other over electronic system (Rybas & Gajjala, 2007). Social networking websites development based its concept on traditional or real life socio-cultural/institutional setting; allowing for interpersonal social interaction with family members, acquaintances, and even complete strangers. The role of social networking websites in teenage social life is immense; those who open accounts in social network systems establish and maintain friendships, hook up with dates, meet new friends, find jobs, and exchange recommendations and news (Boyd D. , 2007). The systems share a few key characteristics: profiles, friends, and comments. In traditional social setting, people use their community/municipal hall for diverse social activities such as meeting information sharing, awareness creation, and learning, and so on. Social networking websites was built on a similar concept of multipurpose usage of a community/municipal hall. Social networking websites allow members to share information, hold conference/meeting, and to engage in creative activities such as learning. Social networking websites even allow members to create awareness on a particular subject (such as politics) and thereby encourage participation or adoption (Kaiser, 2014). For instance (Lutz, 2009), President Barack Obama engaged the services of most of the social networking websites for his election campaign for the Presidency of United States in order to convey his message to the nation, and to solicit donations. Other usage of social networking websites includes photos and videos sharing, bookmarking chatting, private messages, voice message; etc. After creating approved membership profile account, members can then use their profile account in various ways to stay connected with family members, networked friends, and acquaintances.

In addition to multipurpose usage, social networking websites continue to expand and upgrade the scope of the flexibility of their use as well as the services they provide for the users. This group of websites regularly adds user interface (UI) features often based on users' demand to improve or increase the service quality of the websites (Boyd D. , 2007). Some of these social networking websites like Facebook, MySpace and Tagged even went as far as adding specialized features that

allow users to personalize their profile account pages at will. Largely, social networking websites were able to differentiate themselves and make better appeal to their users. With these innovative ideas, social networking websites started proliferating and expanding in global coverage and acceptance in an unprecedented pace. This group of websites now ranked the fourth largest group of websites worldwide (Abida & Rahat, 2013), and still waxing stronger and stronger. LunarStorm was widely embraced in Sweden, while Hyves was predominantly popular in the Netherlands and Belgium. Bebo took off from Britain, Grono in Poland and Eastern Europe while Hi5 gain it acceptance and popularity in Europe, South Africa, and South America (Boyd & Ellison, 2007), (Kaiser, 2014). In their expansion bid, some social networking websites rigorously pursue broad and exponential growth while some others have selection criteria and thus, they are limited in growth and geographical coverage by their target audience. For instance, socially oriented and organized websites such as Facebook, Tagged, Pinterest, Google+, hi5, etc. solicit broad audiences and are open to users from various disciplines. This situation is different with professional social networking websites such as LinkedIn, Visible Path, and Xing that focus mainly on practitioners, business minded people and professionals from all occupations. On the contrary, social networking websites such as aSmallWorld and BeautifulPeople are strictly selective. For instance, aSmallWorld (a private community of internationally minded people) is more or less a social networking website for the elite. This social networking website admits members only and strictly by invitation. BeautifulPeople is a social networking website that admits members only by voting while BlackPlanet targets the black community. Other social networking websites like 101cChristianSocialNetworks, MyChurch and YourChristianSpace (Boyd & Ellison, 2007); FaithFreaks, ChristianAdvice, BibleStudySpace, MuslimGroups, SalamWorld, MuslimPlace, Muslimati, Muslimup, etc. seek membership only from the religion community.

Currently, there are no reliable data regarding the population of users of social networking websites. All major literatures on the subject give different statistical data regarding the actual figure of users. Nevertheless, all the literatures point to one salient fact that social networking websites are growing in popularity worldwide (ComScore, 2006); (ComScore, 2011); (Kaiser, 2014) This growth prompted various organizations, multinational corporations and other going concerns and to invest time, talent and large sum of money in creating or purchasing social networking websites and hence promoting and advertising these websites. Interestingly enough, social networking websites still fall short of the acceptance of some companies and government

parastatals. Some companies rule against social networking websites and thus prohibit their employees from accessing such websites. Not that alone, the U.S. military banned soldiers from accessing MySpace (Sipress & Diaz, 2007) and the Canadian government prohibits employees from accessing Facebook (Benzie, 2007). China's notorious Great Firewall (popularly known as the Golden Shield) is known for blocking some popular social networking websites. Facebook, YouTube, and Twitter are all major victims of the Golden Shield (Fox, 2011).

2.6.1 User Interface (UI) Features

User interface (UI) is a sort of service platform that connects the intentions of the user with the functions of the application that provides spontaneous solution to the requested of the user. User interface (UI) thus provides the means by which users of any social networking website interacts with the website in order to access various functions and services of such website. UI can be command or menu driven. Command-driven interface requires the user to enter commands (e.g. search interface). With menu-driven interface, user can select command options from various menus items that are available on the website. User interface feature is about the most important feature of any networking website because it (UI) determines the ease with which user can access all of the functions of the website and hence enjoy the services the website provides. Any social networking websites that is ill or poorly equipped with UI will be of little or no value to the users. It is thus imperative that Management of any social networking website need to equip their website with functionally usable and attractive UI features that can impinge upon users' satisfaction and appreciation of the website.

2.6.1.1 Important Social Networking Websites User Interface Features

User interface features are very important elements of good and user-friendly social networking websites. Any social networking websites that is ill or poorly equipped with UI will be of little or no value to the users. Social networking websites have varieties of UI features in common but it is necessary that social networking websites should utilize UI features that are more adaptive, allow personalization, and offer more flexibility of use. The purpose of this section is to explore the characteristics of those features that are crucial for increasing the number of users of any social networking websites.

2.6.1.1.1 Functional Search Feature

User interface feature that searches websites offers the users a convenient way to find content of interest. For example, user can locate content by searching for specific words or phrases, name, location, specific items like video, profile, comments, and a host of other contents of interest at the click of a menu item.

Users can locate content by searching for specific words or phrases, without needing to understand or navigate through the structure of the Web site. This can be a quicker or easier way to find content, particularly on large sites. The filtering functionality of search feature helps users to quickly find the content of interest, and get rid of other irrelevant contents. Sometimes, search feature could be so specialized such that it is able to spell-check and equipped to allow variety of terminologies and acronyms. Search feature is undoubtedly imperative for social networking websites because of the wealth of available information they provide.

2.6.1.1.2 Call-To-Action-Buttons

Call-To-Action-Buttons is a UI feature that solicits an action from the user. This feature often appears on a webpage as a clickable button that prompts the user to a specific action when clicked (e.g. "Pay now!", "Download now", "upgrade", "Buy it now" or "Try it", etc.) or lead to another web page for additional information and/or information (e.g. "Read more..."). A prominent and functionally usable-call to-action feature can increase conversions and signups by a hundred percent or even more (and sometimes much more).

2.6.1.1.3 Simple and Usable Form and Input

Web form is also one of the most crucial UI features of social networking websites. Social networking websites use forms and inputs to facilitate ease-of-use of the website by the user. Social networking websites employ forms and inputs to do almost everything right from the first visit of the user to the website (e.g. sign up, login, reacting to comments, sending posts, sharing materials or performing some other tasks). Imperatively, this UI feature must be functionally usable and effectively efficient because of its extreme importance in providing quality service to the user of the website.

2.6.1.1.4 User-Centric User Interface

This user interface feature allows user to be more personal in the use of the website. Social networking websites live and thrive based on the actions and reactions of their users. It is thus of a necessity to provide users of social networking websites with UI feature that allows users of social networking websites to focus more on their personal interests. Implicit in the use of this UI is that social networking websites are able to put their users in the middle of the main action and/or function of the websites. This UI feature functions well by suggesting new friends, interests, events, interest groups etc., to users and thereby intensify the engagement of the user in the use of the website. This UI interface can also vary the visibility of user's profile according to the discretion of the user. Social networking websites like MySpace and tagged allow users to choose whether they want their profile to be public or visible only to friends in their network. Facebook users can even decide to deny permission to friends in their network. Furthermore, this UI feature allows users of social networking websites like Facebook, MySpace and Tagged to personalize their profile account pages according to their taste and interest. This UI interface facilitates most formidable structural variations of profile personalization, profile visibility, and profile accessibility and thus serves as one of the most indispensable tools that social networking websites use to differentiate themselves from one another.

2.7 Service Quality of Social Networking Websites

As at present, there seems to be no acceptable definition of service quality with respect to social networking websites. Researchers at various times and from various background and field of study have work extensively on the methodology of evaluating or measuring service quality of social networking websites. Service quality from business perspective is defined as a critical evaluation of the collective effect of all service performances that reflects customers' perception of specific dimensions of the service (Zeithaml & Bitner, 2003; Wilson, 2009). More succinctly, service quality is the customers' perception of the delivery of a specific service, which leads to the satisfaction of the customer (Zeithaml & Bitner, 2003). Service quality affects users' satisfaction by giving the estimates of the real value of such service (Kanapathy, 2013). Researchers like (Liu & Arnett, 2000); (Zhang & von Dran, 2001); and (Shahin, Gharibpoor, Teymouri, & Iraj, 2013) worked extensively on measuring service quality of website from the users' perspective. However, it is quite evident from their conclusions that there still exists confusion in coining out concrete definition for service quality of websites (Wilson, 2009); (Aladwani & Palvia, 2002); (Abida & Rahat, 2013) observed that the existence of a variety of websites might have led to the confusion

in an attempt to understand the meaning of service quality of websites. Thus, every social networking websites have different areas of emphasis and capabilities (Ellahi & Manarvi, 2010). For instance, Facebook has a socially organized platform; MySpace put more emphasis on music while Tagged is a combination of music, videos, and socialization (Boyd N. , 2009). Based on service quality websites, social networking websites can be classified into three namely recreational social communication (Hyves and Hi5), social networking (LinkedIn), and social navigation (Lytras & de Pablos, 2009). Similarly, Hoffman (Hoffman, Novak, & Chatterjee, 1995) worked on six different websites and consequently classified them into content, shopping mall. Incentive site, online storefront, Internet presence, and search agent. Suffice to say that determinants of service quality vary from one website to the other and depending on the level, type, and scope of services the website renders to the public. For instance, security/privacy serves as the most important factor for websites that has to do with physical delivery of services/products (Saraph, Benson, & Shroeder, 1989).

Provision of quality service and hence, a good user experience is undoubtedly the best strategy for increasing the numerical strength and hence the revenue base of any social networking website (Zhang, von Dran, & Small, 2000). Service quality is such a potent tool in the creation of users' satisfaction, which can in turn provide several benefits. These benefits may include harmonious relationship between the users and the management of the websites, forming a good basis for the creation of users' loyalty and commitment (Liu & Arnett, 2000). The more satisfied, contented, and comfortable users feel with the quality of service of any social networking website, the more likely such users will be committed to improving the social capital and numerical base of the website.

2.8 Research Framework

The first step in the approach of this study is to set up a strategic plan for the development of methods for the evaluation and classification of observable factors that influence the success of social networking sites.

The conceptual framework that supports this research project emerged from the synthesis of
information

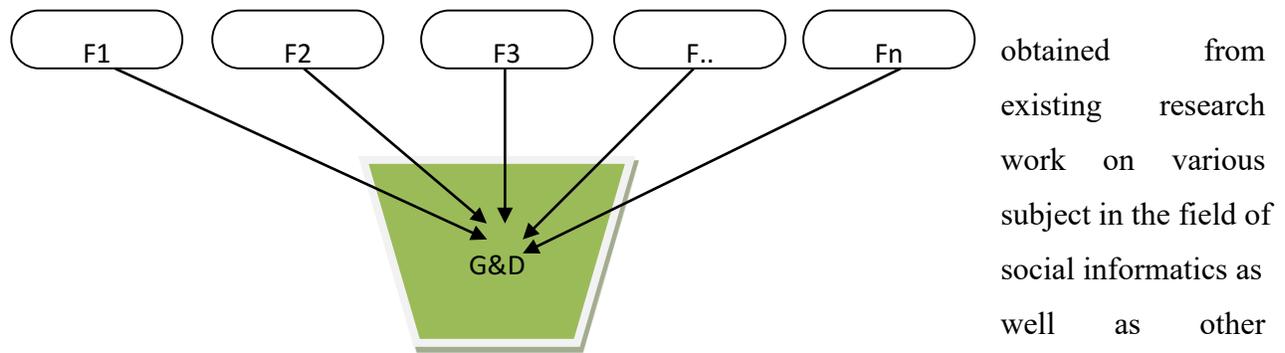


Figure 1: Hypothetical framework

relevant literature. This framework relates the performance (quality of service) of SNWs to the frequency of usage of the SNWs by the users. Implicit in this framework is that the frequency of visits of users to the SNW that meet their performance expectation is usually higher than that for the other sites. Thus, a hypothetical relationship between the observed quality factors and the success (growth and development) of social networking site is proposed as shown in the diagram below. “Fn” represents the number of identified quality factors (research parameters) while G&D is the success level engendered by the synergy of the quality factors (research parameters). This study therefore defined service quality as the performance attributes of social networking sites (SNW) that meet users’ expectation from the usage of the site. This study also defined success (growth and development) of SNW as the frequency of usage of SNW for the performance of variety of socialization tasks.

2.9 Research Parameters and Their Operations

Growth and development of (success) of any social website is often the interaction of multiple elements (service factors) within the website system, which produce an effect different from or greater than the sum of their individual effects. This then leads to the concept of website matrix. In real life situation, users always react more positively to individual elements (service factors) of the website matrix and not necessarily to the synergy between those elements and thus, service quality measurement should focus more on the various elements (service factors) of the site (Boyd D. , 2007).

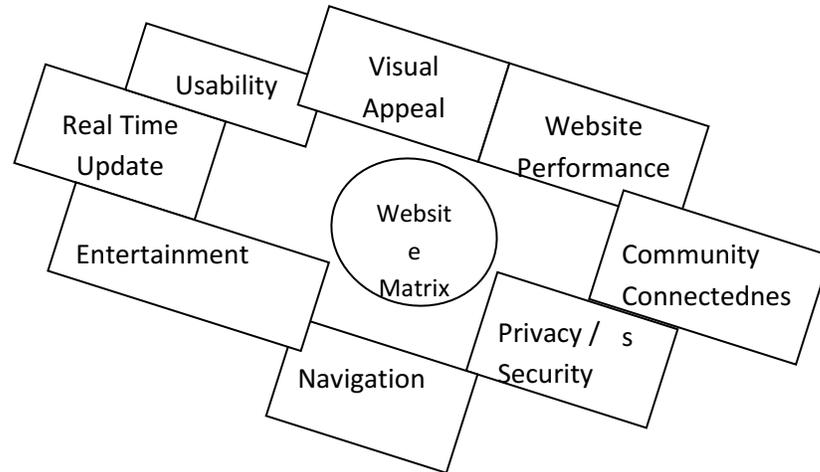


Figure 2: Website system matrix

2.9.1 Parameter Identification

Going by the a priori theoretical expectations of quality features of any social networking website, quality factors of the social networking websites will be of paramount importance to the users. From the review of related works, this study identified some quality factors (research parameters) listed hereunder.

- Performance expectation (technical efficiency of the site)
- Usability (effort expectation often referred to as user friendliness of the site)
- Real-time update
- Privacy and security concerns of the users of the website
- Graphical layout and artistic appearance of the website (Visual appeal)
- Community connectedness (socialization, communication, peer influence, information sharing)
- Website liveliness (how lively or entertaining the site is)

2.9.2 Operationalization of the Research Parameters

All the research parameters listed above and any observed features in the course of this project work will be tested to determine their effect/influence on the perception of the users' about the quality of social networking websites.

2.9.2.1 Performance expectation (technical efficiency of the site)

Website performance describes how efficient and accessible a website is. By definition, website performance is a measure of response time of the website (elapse time between the issue of a command request and the return of the processed information) (Olsina, Lafuente, & Rossi, 2001).

Website performance includes quick accessibility of web pages, dynamic search functions, interactive menu, etc., all of which combined to make the site easy to use. This then makes users see the site as coherent, sequential, compact and logical and thus feel confident to use the website (Koo, Wati, Park, & Lim, 2011). Many researchers has confirmed strong relationship between performance expectation of the users and the frequency of the website by the users (Khaola & Mabilikoane, 2015). According to these researchers, performance expectation plays a very significant role in determining the disposition of the user to use (visit) the website (Jones & Sasser, 1995). From the ongoing explanation, this research hypothesized that:

1. H₀: There is no significant relationship between performance expectation (efficiency of the site) and the frequency of usage of the site. The apriori expectations here is that users expect some level of efficiency from the use of the site (keeping the site running 24/7, not crashing or freezing, fast in task execution, etc.).

2.9.2.2 Usability (effort expectation or user friendliness of the site)

Website usability describes the ease with which the user can explore the website and use the site (Koo, Wati, Park, & Lim, 2011) to perform specified tasks. The salient goals of website usability revolve round the presentation of information and choices in a clear and concise manner void of ambiguity (Boyd & Ellison, 2007). Usability often referred to as user-friendliness of the website is one of the major constructs of Technology Acceptance Model (TAM). Usability is one of the common features that can succinctly reflect users' satisfaction (Ellahi, Rahat, & Bokhari, 2013) when evaluating website quality. The overall effect of usability of social networking websites includes the creation of good-will (feeling) about the organization behind the website, and consequent enlisting of the commitment of the users to the growth and development (success) of the site (Abida & Rahat, 2013). In order to test the validity of this statement above, the study thus hypothesized that:

2. H₀: There is no significant relationship between usability (effort expectation or user friendliness of the website) and the frequency of usage of the site. The idea postulated here is that users expect social networking websites to be user-friendly (ease of navigation, making posts, uploading and downloading, editing, etc.)

2.9.2.3 Real-time update

Real-time update of events is a concept that depicts the instantaneous accessibility of information as soon as the user publishes the information. It is a feature that enables SNW users to experience real-time communication with one another on the social networking platform. Real-time social networking websites have become a mainstay in modern-day social settings with the widespread adoption of status updates (Ampofo, 2011). For instance, instant messaging systems (IMS) allow the ease of instant and simultaneous communication and interaction within the social networking platform. IMS enables users to communicate text messages, voice messages, video messages as well as pictures and file sharing. Most social networking platforms have now integrated this IMS feature into their websites to hold users spellbound to the website. He argued further that real-time social networking websites are by no means, the product of online social and cultural interactions (Ampofo, 2011). Suffice to say that real-time social networking websites is a product arising from the behavior of website users in terms of their frequency of use. This study then hypothesized that:

3. H₀: There is no significant relationship between real-time updates and the frequency of usage of the site.

2.9.2.4 Privacy and security concerns of the users of the website

Privacy policy of the social networking websites in respect of the confidentiality of personal profile information is very crucial to users of social networking websites (Boyd N. , 2009). . Basic requirement for becoming a user of any social networking website is to create a personal profile account. Creating such profile account often requires the disclosure of very sensitive information like date of birth (DOB). Name, confirmed email address, place, and/or city of abode. This requirement often creates serious security concerns from users' perspectives (Barbara, 2012). Privacy feature assures users of the safety and confidentiality of their personal profile information, which is a basic requirement for becoming a user of any social networking website (Zhang, von Dran, & Small, 2000). When properly put in place, strong privacy/ security culture will undoubtedly enhance users' commitment to the overall growth and development of the website (Barbara, 2012). In other words, users that enlist commitment to the website will no doubt be more frequent in the use of the website. This study therefore intends to test this assertion by setting a hypothesis that:

4. H₀: There is no significant relationship between privacy/security concerns of the users and the frequency of usage of the site.

2.9.2.5 Graphical layout and artistic appearance of the website (Visual appeal)

Visual appeal of a website stipulates the way the website developer presents the appearance of the website to the users. It describes the visual appearance of the website, which may include design and graphical layout, aesthetically pleasing colour combination, language support, readability, navigation structure, etc. More importantly is the home page of the site, which features the website navigation. Website navigation relates to the process of moving from one page of a website to another page with the aid of menus (Olsina, Lafuente, & Rossi, 2001). A quality website has well designed navigation menus to make movement within pages of the website easy for the users. It is thus imperative for social networking website to have well-designed and functional navigation menus to attract users and then enlist their commitment to use the website for their social networking activities. Social networking websites that has both functional and aesthetic value/appeal (Boyd & Ellison, 2007) always attracts users and encourages them to continue browsing and using the website more frequently (Hoffman, Novak, & Chatterjee, 1995). This research thus hypothesized that:

5. H₀: There is no significant relationship between the layout and artistic appearance of the website and the frequency of usage of the site

2.9.2.6 Community connectedness (socialization, communication, peer influence, information sharing)

Socialization is the franca-lingua for all social networking websites, and thus, networking services rendered by social networking websites enable users to specify their connectedness to other users (Morris, Teevan, & Panovich, nd). These networking services include facilities that allow for interpersonal social interaction with family members, acquaintances, new friends, and even complete strangers. Social network systems connect people from all occupations and help them stay in touch with one another (Rybas & Gajjala, 2007). Social networking websites also allow members to share information, hold conference/meeting, and to engage in creative activities such as learning. Social networking websites even allow members to create awareness on a particular subject (such as politics) and thereby encourage participation or adoption. With increasing popularity and multipurpose usage of social networking websites, many researchers (Wilson, 2009; Aladwani & Palvia, 2002) asserted that the survival of social networking website is deeply rooted

in community interconnectedness and their socialization activities. It thus imperative to test this assertion by hypothesizing that:

6. H₀: There is no significant relationship between community connectedness (socialization) and the frequency of usage of the site.

2.9.2.7 Website liveliness (how lively or entertaining the site is)

This is a service factor that projects the feelings of the users as being sociable, cheerful, happy and responsible. This factor according to (Consumerreports.org, 2011), often makes users positively disposed to the use of any social networking site. It also has the appeal of enlisting the commitment of the users to visit the site regularly (Kim & Chen, 2015). The hypothesis set for this parameter is such that:

7. H₀: There is no significant relationship between website liveliness (how lively or entertaining the site is) and the frequency of usage of the site.

3. METHODOLOGY

3.1 Identifying the Determinants

Having specified the research domain, the study proceeded to identify all relevant quality factors and group them on concrete term. This research work looks at the success determinants from two different perspectives (users and business perspectives) using case study approach. The case study for this study is Facebook (FB)

3.2 Data collection and sources of data

The information used by this study was sourced from various sources described below. The data collection methods were also explained below.

3.2.1 Determining the Sample Size

The population size of the case study is extremely large and it is thus necessary to select a sample size large enough to represent the population. Therefore, the study adopted a statistical method (calculation in the appendix) to arrive at a fair representative sample of the population. Going by the calculation, the sample size for the survey was 385. The project actually increased the number of questionnaire sent out by 10% to adjust for those questionnaires that might get lost in transit. This study used simple random sampling technique to select respondents for the survey with the use of online survey tool by Limewire. The study used the survey services provided by Limewire to create, host and pre-test the questionnaire. After pretesting, modified questionnaires were sent out randomly to respondents.

3.2.2 The Case Study

At the first level, population sample for this project is purposive. The project make use of a case study purposely selected based on some selection criteria. The selection criteria set by this project include availability of relevant information about the site; popularity in terms of geographical coverage of the site; numerical strength of the users of the site as well as the revenue base of the site ownership. You can read more about these selection criteria below (see appendix I).

3.2.3 Selection Criteria

Below is the detailed explanation on the criteria used for the selection of the case study.

3.2.3.2 Availability of relevant information about the website

There exists ample information on Face Book than all other social websites combined. Information on the geographical coverage, membership strength, revenue base and many other useful information on the success of Face Book

3.2.3.3 Popularity in terms of geographical coverage and Membership strength (numerical strength or number of users) of the website

Facebook is available in multiple languages thus enabling users to connect with friends or people across geographical, political or economic borders. Facebook displays a high number of user accounts or strong user engagement. Facebook was the first social network to surpass 1 billion monthly active users.

Going by the information gathered from Silversurfers.com (silversurfers.com, 2016) Facebook is fast becoming the most appealing social media for the Older people. Silversurfers found that over 47% of people from 50 years and above are using Facebook (Doughty, 2015).

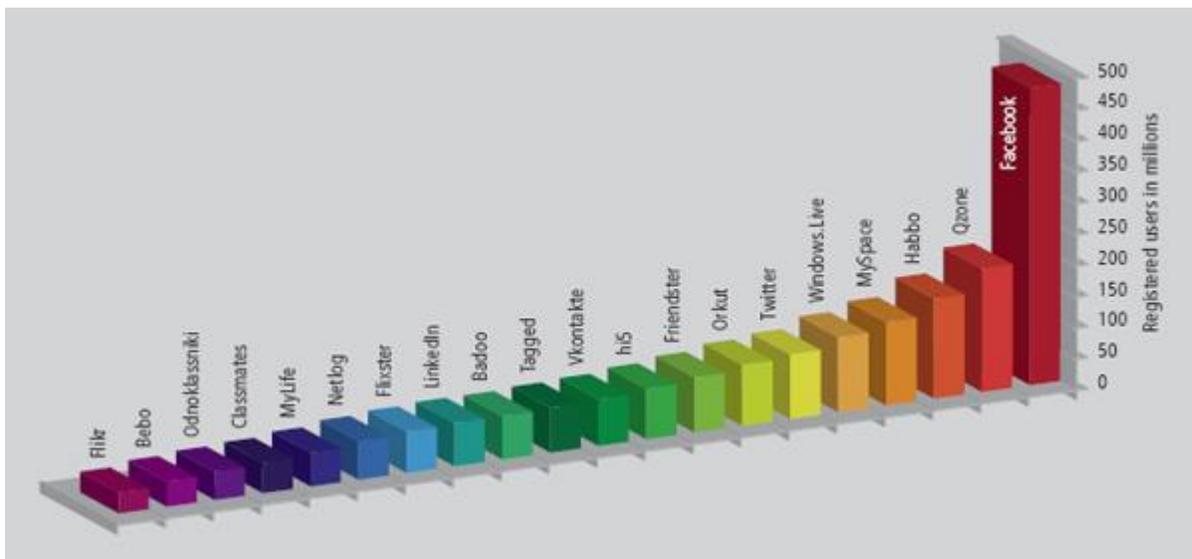


Figure 3: Registered users of social media

Source: (ITU News, 2009)

Table 1: Selection criteria of the case study

SNW	Information	Geographical coverage	Membership	Revenue base	Subscription type
Facebook	Readily available wealth of information	Global	792,999,000	1.46	Free
Twitter			167,903,000	8.6	
LinkedIn			94,823,000	1.51	
Google+			66,756,000		
MySpace			61,037,000		

3.2.3.4 The revenue base of the website ownership

Users of Facebook come in a wide range of income brackets. The most interesting stat on Facebook, however, is the fact that 69 percent of Internet users who have an income of \$75,000 or more are on Facebook. This is an attractive statistic for any business looking to grow as individuals in this bracket often have the most disposable income to spend on new goods and services.

3.2.4 The interviewees

This study interviewed two experts in the field of ICT and media communications. Included, as interviewee is an employee of Shootle Mediatone Limited in the UK and having a subsidiary company (Shootle Mediatone Europe BV) in the Netherlands. The second interviewee is a seasoned website developer and internet-marketing analyst and currently an employee of Makwel Solutions BV. Names of the individuals not disclosed to maintain anonymity.

Questionnaire was prepared for the interviewee. The questionnaire was unstructured to reflect the views and ideas experts in the field of social media. The study designed interview in such a way that will examine and analyze the characteristic features of social networking websites (SNWs) and proffer logical answers to the questions regarding factors influencing success of SNWs.

3.2.5 Questionnaire design

This study employed structured questionnaire whose design was based on the theoretical and conceptual framework described above. More specifically, the study structured the questionnaire along the theoretical basis of the unified theory of the acceptance of use of technology (UTAUT)

using Likert Scale Rating (LSR). Researchers have underscored Likert Scale Rating (LSR) as one of the best rating scales for measuring attitudinal or behavioral characteristic.

3.2.4.1 Questionnaire structure

This study designed and structured the questionnaire used for the survey with questions covering the following aspect of SNW.

- Performance expectancy: This features questions on the efficiency of the site in performing the task the user is engaged in.
- Effort expectancy: This features questions on how user-friendly is the site to the users.
- Usage frequency: This features the frequency of visit of users to the site
- Privacy: How users feel concerning their privacy on social networking sites.
- Other areas of interest to the survey include social influence, facilitating conditions, status updates (short messages), instant messaging, entertainment, open culture, expression, constant contact, playfulness, and mobile apps.

3.2.6 Hypotheses Testing

After successful identification of factors influencing success of SNW, the study went further to evaluate the theoretical relationships between these factors and the frequency of usage (success) of the SNW. To evaluate this theoretical relationship, the study then set some hypotheses to test for the significance of those influential factors (see details in section 2.9) using two groups of users. All the hypotheses were set in the form enumerated below (see details of hypotheses in section 2.9.2):

$H_0: \mu_1 - \mu_2 = 0$ (there is no significant relationship between the factor and the frequency of usage of the site).

$H_1: \mu_1 - \mu_2 \neq 0$ (the alternative hypothesis)

- μ_1 = mean of group 1 (the high or frequent users of FB)
- μ_2 = mean of group 2 (the low or infrequent users of FB)

The study therefore applied statistical test to estimate the P-value of the difference ($\mu_1 - \mu_2$) of the mean of the two groups. By conventional criteria, when $P > 0.05$, then the difference ($\mu_1 - \mu_2$) of the mean of the two groups is not statistically significant and thus, the null hypothesis will be accepted.

Conversely, when $P < 0.05$, the difference ($\mu_1 - \mu_2$) of the mean of the two groups is considered to be statistically significant and thus, the null hypothesis will be rejected in favour of the alternative hypothesis.

For hypothesis testing, it is paramount to categorize the respondents into two user groups. The study thus categorized all respondents into two groups based on their score on Likert Scale Rating (LSR) thus:

- The high or frequent users with scores of $1 \leq \text{LSR} \leq 3$
- The low or infrequent user with scores of $\text{LSR} \geq 4$

4. RESULTS

4.1 Introduction

This chapter highlights the result of the survey and interviews carried out by this study. The aim of the survey was to explain and answer the questions posed by this research work. The results obtained from the analysis of the information collected using the questionnaires was enumerated first. The study collated and analyzed the data obtained from the survey using simple statistical analysis such as percentages, frequency distribution, etc., and then displayed the results in tables and charts. The study went further to test the hypotheses that were set in respect of the a priori expectations of the website users when using the site. The results of the test are presented in this chapter in a manner understandable to readers.

This chapter also highlights excerpts from the interview conducted in the course of this study.

4.2 Distribution of Respondents

Four hundred and twenty five (425) questionnaires were distributed using the survey services of Limewire This survey received responses from 411 respondents from the globe at the set time for the completion of the survey. The results of the analysis of the information obtain through the survey is presented as follows.

Table I: Percentage distribution of respondents based on gender, job status, age group and geographical location

Gender	Percentage respondent (%)			
Male	41			
Female	59			

Job status (% response)		Age group (% response)		Geographical coverage (% response)	
Students	29	18 - 27	26	Europe	22
Self employed	13	38 - 37	31	South America	18
Professional	16	48 - 57	19	North America	19
Undisclosed	25	58 - 67	13	Africa	27
Employee	17	68 - above	11	Asia	14

Table II: Distribution of users based on their frequency of visit to FB

Parameter	Scores	Frequency of visit of users	
		actual number of respondents	% respondents
more than once per day	1	53	12.90
at least once per day more than once per week	2	251	61.07
at least once per week more than once per month	3	49	11.92
at least once per month rarely	4	37	09.00
	5	4	00.97
	6	8	01.95
	7	9	02.19
	Total	411	100.00

Table III: Responses based on membership finance and sources of information about FB

	Yes	No
Would you continue to maintain you FB account if you were to pay membership fee; no matter how small?	11	89
Would you continue to maintain you FB account if you were being intermittently interrupted with adds	93	7

Sources of information	Percentage response (%)
Through friend/relative	79
In the news (Radio/TV)	7
Search engine	11
Accidentally surfing the internet	1 2
Other source	

Table IV: Frequency of engagement on variety of activities on FB

		Frequency of engagement in activities (% response)				
Activities	Respondents	More often = 1	Often = 2	Sometimes = 3	Rarely = 4	Never = 5
Photo sharing	Actual	175	103	112	12	9
	% of total	42.58	25.06	27.25	2.92	2.19
Watching videos	Actual	157	121	97	23	13
	% of total	38.20	29.44	23.60	5.60	3.16
Video sharing	Actual	127	149	95	29	11
	% of total	30.90	36.25	23.11	7.06	2.68
Sharing links	Actual	93	121	152	15	30
	% of total	22.63	29.44	36.98	3.65	7.30
Visit links from others	Actual	73	103	167	41	27
	% of total	17.76	25.06	40.63	9.98	6.57
Making post	Actual	191	105	75	35	5
	% of total	46.47	25.55	18.25	8.52	1.22
Reading news	Actual	89	91	167	57	7
	% of total	21.65	22.14	40.63	13.87	1.70
Instant messaging	Actual	203	122	69	13	4
	% of total	49.39	29.68	16.79	3.16	0.97
Reading messages	Actual	203	101	92	15	
	% of total	49.39	24.57	22.38	3.65	0.00
Sending messages	Actual	223	87	67	31	3
	% of total	54.26	21.17	16.30	7.54	0.73
Making comments	Actual	219	111	53	9	19
	% of total	53.28	27.01	12.90	2.19	4.62
Reading post from contact	Actual	185	103	112	12	9
	% of total	45.01	25.06	24.82	2.92	2.19

Table V: Distribution of respondent based on feature that make users committed to the use of FB

Features	Total Respondents	Level of agreement with the use of the feature				
		Strongly agree = 1	Agree = 2	Undecided = 3	Disagree = 4	Strongly disagree = 5
Message trending	Actual	235	121	41	10	4
	% of total	57.18	29.44	9.98	2.43	0.97
Being in constant touch with friends	Actual	263	120	21	5	2
	% of total	63.99	29.20	5.11	1.22	0.49
Mobile phone FB App	Actual	279	113	11	5	3
	% of total	67.88	27.49	2.68	1.22	0.73
Most contacts are business-related	Actual	191	105	75	35	5
	% of total	46.47	25.55	18.25	8.52	1.22
Most contacts known personally	Actual	169	105	75	35	27
	% of total	41.12	25.55	18.25	8.52	6.57
Chat with my friends	Actual	253	121	23	7	7
	% of total	61.56	29.44	5.60	1.70	1.70
Useful for job/study	Actual	141	101	92	15	62
	% of total	34.31	24.57	22.38	3.65	15.09
Possibility of being followed	Actual	223	87	67	31	3
	% of total	54.26	21.17	16.30	7.54	0.73

Table VI: Distribution of respondents based on users' expectation and the frequency of usage

Features	Total Respondents	Level of agreement with the use of the feature				
		Strongly agree = 1	Agree = 2	Undecided = 3	Disagree = 4	Strongly disagree = 5
Social connectedness	Actual	219	111	33	29	19
	% of total	53.28	27.01	8.03	7.06	4.62
Using FB without technical failure	Actual	261	122	11	13	4
	% of total	63.50	29.68	2.68	3.16	0.97
FB is user friendly	Actual	93	121	152	15	30
	% of total	22.63	29.44	36.98	3.65	7.30
Real time events update	Actual	243	123	17	11	17
	% of total	59.12	29.93	4.14	2.68	4.14

Playing games with friends	Actual	73	103	167	41	27
	% of total	17.76	25.06	40.63	9.98	6.57
Graphical layout and appearance	Actual	241	137	19	7	7
	% of total	58.64	33.33	4.62	1.70	1.70
Peer/social influence	Actual	93	121	101	15	81
	% of total	22.63	29.44	24.57	3.65	19.71

Table VII: worrisome issues on FB

Issues	Total Respondents	Level of agreement of the worrisome issues of FB				
		Strongly agree = 1	Agree = 2	Undecided = 3	Disagree = 4	Strongly disagree = 5
Worried about privacy	Actual	203	122	69	13	4
	% of total	49.39	29.68	16.79	3.16	0.97
Sharing ideas openly	Actual	157	121	97	23	13
	% of total	38.20	29.44	23.60	5.60	3.16

4.3 Hypotheses testing

Below are the hypotheses set by this study and the result of the test performed by this study.

4.3.1 Hypothesis 1: Efficiency of the website (using FB without technical failure)

$H_0: \mu_1 - \mu_2 = 0$. The study hypothesized that there is no significant relationship between efficiency of the website (using FB without technical failure) and the frequency of usage of the site. The apriori expectations here is that users expect some level of efficiency from the use of the site (keeping the site running 24/7, not crashing or freezing, fast in task execution, 24hrs customers' support service, etc.).

$H_1: \mu_1 - \mu_2 \neq 0$ is the alternative hypothesis. This means that there is significant relationship between performance expectation (efficiency of the site) and the frequency of usage of the site.

Table VIII: Result table for Hypothesis 1 (efficiency of the website)

	Scores of users (≤ 3)	Scores of users (≥ 4)
Number of observations(N)	394	17
Mean	1.365482	4.235294
Population Variance	0.287743	0.179931
Sample variance	0.288475	0.191176
Population Standard deviation	0.536416	0.424183

Sample standard deviation	0.537098	0.437237
Coefficient of variation	0.39334	0.103237
Mean deviation	0.484218	0
Two-tailed P value	0.0001	
Degree of Freedom	409	
SEM	0.132	
$\mu_1 - \mu_2 = -1.86981200 \neq 0$ at 95% confidence interval of the difference		

The two-tailed $P = 0.0001 < 0.05$. μ_1

$-\mu_2 = -1.86981200 < 0$.

Thus, the difference ($\mu_1 - \mu_2$) of the mean of the two groups is statistically significant.

Therefore, reject $H_0: \mu_1 - \mu_2 = 0$; and accept $\mu_1 - \mu_2 = -1.86981200 < 0$.

Thus, the relationship between performance expectation (efficiency of the site) and the frequency of usage of the site is statistically significant. Suffice to say users will visit the site more frequently when the site meets the performance expectations of the users.

4.3.2 Hypothesis 2: Effort expectation (user friendliness of the site)

$H_0: \mu_1 - \mu_2 = 0$. The study hypothesized that there is no significant relationship between effort expectation (user friendliness) and the frequency of usage of the site. The idea postulated here is that users expect social networking websites to be user-friendly (ease of navigation, making posts, uploading and downloading, editing, etc.).

$H_1: \mu_1 - \mu_2 \neq 0$ is the alternative hypothesis. This means that there is significant relationship between effort expectation (user friendliness) and the frequency of usage of the site.

Table IX: Result table for Hypothesis 2 (user friendliness)

	Scores of users (≤ 3)	Scores of users (≥ 4)
Number of observations(N)	386	45
Mean	2.086310	4.666667
Population Variance	0.632432	0.222222
Sample variance	0.634319	0.227273
Population Standard deviation	0.795256	0.471405
Sample standard deviation	0.796442	0.476731
Coefficient of variation	0.381747	0.102157
Mean deviation	0.663513	0

Two-tailed P value	0.0001
Degree of Freedom	409
SEM	0.121
$\mu_1 - \mu_2 = -1.58035700 \neq 0$ at 95% confidence interval of the difference	

The two-tailed $P = 0.0001 < 0.05$. μ_1

$-\mu_2 = -1.58035700 < 0$.

Thus, the difference ($\mu_1 - \mu_2$) of the mean of the two groups is statistically significant.

Therefore, reject $H_0: \mu_1 - \mu_2 = 0$; and accept $\mu_1 - \mu_2 = -1.58035700 < 0$.

Thus, the relationship between effort expectation (user friendliness) and the frequency of usage of the site is statistically significant. That is, users will be inclined to visit the site more frequently if they can accomplish their socialization tasks with little or no effort. Users expect social networking websites to be user-friendly (ease of navigation, making posts, uploading and downloading, editing, etc.) so that they can achieve maximum satisfaction while performing socialization activities.

4.3.3 Hypothesis 3: Real-time update of events on the websites

$H_0: \mu_1 - \mu_2 = 0$. The study hypothesized that there is no significant relationship between real-time updates and the frequency of usage of the site.

$H_1: \mu_1 - \mu_2 \neq 0$ is the alternative hypothesis.

Table X: Result table for Hypothesis 3 (real-time update)

Real time update:	Scores of users (≤ 3)	Scores of users (≥ 4)
Number of observations(N)	383	28
Mean	1.409922	4.607143
Population Variance	0.330659	0.23852
Sample variance	0.331524	0.247354
Population Standard deviation	0.575029	0.488386
Sample standard deviation	0.575782	0.497347
Coefficient of variation	0.408378	0.107951
Mean deviation	0.520162	0
Two-tailed P value	0.0001	
Degree of Freedom	409	
SEM	0.112	

$\mu_1 - \mu_2 = -3.19722100 \neq 0$ at 95% confidence interval of the difference

The two-tailed $P = 0.0001 < 0.05$. $\mu_1 - \mu_2 = -3.19722100 < 0$.

Thus, the difference ($\mu_1 - \mu_2$) of the mean of the two groups is statistically significant.

Therefore, reject $H_0: \mu_1 - \mu_2 = 0$; and accept $\mu_1 - \mu_2 = -3.19722100 < 0$.

Thus, the relationship between real-time update and the frequency of usage of the site is statistically significant. Users expect dynamic events update. Users do not have to wait for some time before they see their membership account been updated. Thus, they can perform instant messaging, read post, make comments, post and share photos, share links, and get instant result of their action. According to this statistical result, this feature is significant enough to enlist the commitments and loyalty of users to the site.

4.3.4 Hypothesis 4: Privacy/security concerns of the website users

$H_0: \mu_1 - \mu_2 = 0$. The study hypothesized that there is no significant relationship between privacy/security concerns of the users and the frequency of usage of the site.

$H_1: \mu_1 - \mu_2 \neq 0$ is the alternative hypothesis.

Table XI: Result table for Hypothesis 4 (Privacy/security concern)

	Scores of users (≤ 3)	Scores of users (≥ 4)
Number of observations(N)	394	17
Mean	1.659898	4.235294
Population Variance	0.574686	0.179931
Sample variance	0.576149	0.191176
Population Standard deviation	0.758081	0.424183
Sample standard deviation	0.759045	0.437237
Coefficient of variation	0.457284	0.103237
Mean deviation	0.679997	0

Two-tailed P value	0.0001
Degree of Freedom	409
SEM	0.185
$\mu_1 - \mu_2 = -2.57539600 \neq 0$ at 95% confidence interval of the difference	

The two-tailed $P = 0.0001 < 0.05$. μ_1

$-\mu_2 = -2.57539600 < 0$.

Thus, the difference $(\mu_1 - \mu_2)$ of the mean of the two groups is statistically significant.

Therefore, reject $H_0: \mu_1 - \mu_2 = 0$; and accept $\mu_1 - \mu_2 = -2.57539600 < 0$.

Thus, the relationship between privacy/security concerns of the users and the frequency of usage of the site is statistically significant. Users are very much concern about their privacy and will only be ready to use any social website if the policy of the site regarding confidentiality of personal details tallies with the expectations of the users.

4.3.5 Hypothesis 5: Layout and navigability of the website

$H_0: \mu_1 - \mu_2 = 0$. The study hypothesized that there is no significant relationship between the graphic layout and appearance of the website and the frequency of usage of the site.

$H_1: \mu_1 - \mu_2 \neq 0$ is the alternative hypothesis.

Table XII: Result table for Hypothesis 5 (Layout and navigability)

	Scores of users (≤ 3)	Scores of users (≥ 4)
Number of observations(N)	397	14
Mean	1.467172	4.5
Population Variance	0.572155	0.25
Sample variance	0.573603	0.269231
Population Standard deviation	0.756409	0.5
Sample standard deviation	0.757366	0.518875
Coefficient of variation	0.516208	0.115305
Mean deviation	0.563909	0.5
Two-tailed P value	0.0001	
Degree of Freedom	409	
SEM	0.204	
$\mu_1 - \mu_2 = -3.03282800 \neq 0$ at 95% confidence interval of the difference.		

The two-tailed $P = 0.0001 < 0.05$.

$$\mu_1 - \mu_2 = -3.03282800 < 0.$$

Thus, the difference ($\mu_1 - \mu_2$) of the mean of the two groups is statistically significant.

Therefore, reject $H_0: \mu_1 - \mu_2 = 0$; and accept $\mu_1 - \mu_2 = -3.03282800 < 0$.

Thus, the relationship between the layout and artistic appearance of the website and the frequency of usage of the site is statistically significant. This means that users appreciate website presentation and its uniqueness. Users are therefore more inclined to visiting sites that have good graphical layout and appealing colour blend.

4.3.6 Hypothesis 6: Social connectedness (following personal social network)

$H_0: \mu_1 - \mu_2 = 0$. The study hypothesized that there is no significant relationship between community connectedness (socialization) and the frequency of usage of the site.

$H_1: \mu_1 - \mu_2 \neq 0$ is the alternative hypothesis.

Table XIII: Result table for Hypothesis 6 (Social connectedness)

Social connectedness:	Scores of users (≤ 3)	Scores of users (≥ 4)
Number of observations(N)	363	48
Mean	1.487603	4.395833
Population Variance	0.431665	0.239149
Sample variance	0.432857	0.244238
Population Standard deviation	0.657012	0.489029
Sample standard deviation	0.657919	0.494204
Coefficient of variation	0.442268	0.112426
Mean deviation	0.588348	0.478299
Two-tailed P value	0.0001	
Degree of Freedom	409	
SEM	0.098	
$\mu_1 - \mu_2 = -2.90823000 \neq 0$ at 95% confidence interval of the difference.		

The two-tailed $P = 0.0001 < 0.05$.

$$\mu_1 - \mu_2 = -2.90823000 < 0.$$

Thus, the difference ($\mu_1 - \mu_2$) of the mean of the two groups is statistically significant.

Therefore, reject $H_0: \mu_1 - \mu_2 = 0$; and accept $\mu_1 - \mu_2 -2.90823000 < 0$.

Thus, the relationship between community connectedness (socialization) and the frequency of usage of the site is statistically significant.

4.3.7 Hypothesis 7: Liveliness (how lively or entertaining the site is) of the website

$H_0: \mu_1 - \mu_2 = 0$. The study hypothesized that there is no significant relationship between liveliness (how lively or entertaining the site is) and the frequency of usage of the site.

$H_1: \mu_1 - \mu_2 \neq 0$ is the alternative hypothesis.

Table XIV: Result table for Hypothesis 7 (Liveliness of the website)

Liveliness:	Scores of users (≤ 3)	Scores of users (≥ 4)
Number of observations(N)	343	68
Mean	2.27405	4.397059
Population Variance	0.624604	0.239403
Sample variance	0.62643	0.242976
Population Standard deviation	0.790319	0.489288
Sample standard deviation	0.791473	0.492926
Coefficient of variation	0.348045	0.112104
Mean deviation	0.706899	0.478806
Two-tailed P value	0.0001	
Degree of Freedom	409	
SEM	0.099	
$\mu_1 - \mu_2 = -2.12300900 \neq 0$ at 95% confidence interval of the difference		

The two-tailed $P = 0.0001 < 0.05$. μ_1

$- \mu_2 = -2.12300900 < 0$.

Thus, the difference ($\mu_1 - \mu_2$) of the mean of the two groups is statistically significant.

Therefore, reject $H_0: \mu_1 - \mu_2 = 0$; and accept $\mu_1 - \mu_2 = -2.12300900 < 0$.

Thus, the relationship between liveliness (how lively or entertaining the site is) and the frequency of usage of the site is statistically significant.

4.4 Result of the interview

The interview pointed out that the likely factors that might be responsible for the success of any social networking website are as follows. Nevertheless, the factors are by no means limited to those listed.

4.4.1 Provision for the registration of organized groups (business organizations, associations, corporations)

Social media is likely to attract more users when it allows for the registration of organized groups. Businesses of all shapes and sizes can use corporate registration on media sites to gain access to a much wider audience than would be possible outside the world of social media.

4.4.2 Privacy and security of personal data

Privacy concerns with social networking services is a subset of data privacy. Security and privacy issues on social media is as a result of the astronomical amounts of information being processed by these sites on daily basis. In a similar vein, the advent of the Web 2.0 engendered social profiling which is more or less a growing concern for internet privacy. Users are therefore, much concerned about the security of their personal information.

Based on the excerpts from the interview, social networking sites will thrive well once they can guarantee privacy of personal data entrusted to them.

4.4.3 Multipurpose usefulness (job search, study, communication)

Most users often resort to social media for job search, advert placement and other form of business interactions and information. Suffice to say that any social media which allow users to search for jobs or place advert for businesses will undoubtedly attract more users. Other points raised include efficiency of the site (user friendliness and technical stability). Social connectedness (social and business connectedness in terms of ideas sharing, peer influence) as well as the graphical layout of the website.

5. ANALYSIS AND DISCUSSION

5.1 Parameter Identification

The study was able to establish the conceptual determinants of website performance and projected it on growth and development (success) of the website. The study successfully identified seven quality factors (performance indicators) that are critical for the success of any social networking websites. These determinants include the followings.

- 1) Efficiency of the site (not having technical problem)
- 2) Effort expectation (user friendliness of the site)
- 3) Real-time update of events on the websites
- 4) Privacy/security concerns of the website users
- 5) Layout and navigability of the website
- 6) Social connectedness (following community/personal social network)
- 7) Liveliness (entertainment/games playing, etc.) of the website

5.2 Hypothesis Testing

Having identified these determinants, the study went further to analyze and evaluate the interrelationships between the quality (efficient performance) of social networking website and the frequency of usage (success) of the website. The study went further to statistically test significant relationship between the identified determinants and the success of the website. All of the results were significantly positive following apriori expectation. Table XV below presents the summary of the statistical evaluation of the relationship of all the influential factors (performance indicators) to the frequency of usage (success) of the website). The study observed that all the quality service variables tested have positive relationship to the frequency of usage of the website. The P-value of each variable, which stands at 0.001, is considerably lower than the conventional P-value (0.05). Conventional criteria stipulates that when $P_{cal} < P_{tab}$, the H_0 will be rejected in favour of H_1 .

Table XV: summary of the results of the hypothesis tests

Hypothesis	Quality service features (variables)	Two-tailed P-value	SEM	$\mu_1 - \mu_2$	Decision	
1	Efficiency of the site (not having Effort expectation (user friendliness of	0.001	0.132	-1.86981200	Accept technical problem)	$H_1: \mu_1 - \mu_2 \neq 0$

2	the site)	0.001	0.121	-1.58035700	Accept H ₁ : $\mu_1 - \mu_2 \neq 0$
3	Real-time update of events on the websites	0.001	0.112	-3.19722100	Accept H ₁ : $\mu_1 - \mu_2 \neq 0$
4	Privacy/security concerns of the website users	0.001	0.185	-2.57539600	Accept H ₁ : $\mu_1 - \mu_2 \neq 0$
5	Layout and navigability of the website	0.001	0.204	-3.03282800	Accept H ₁ : $\mu_1 - \mu_2 \neq 0$
6	Social connectedness (following community/personal social network)	0.001	0.098	-2.90823000	Accept H ₁ : $\mu_1 - \mu_2 \neq 0$
7	Liveliness (entertaining/game playing, etc.) of the website	0.001	0.099	-2.12300900	Accept H ₁ : $\mu_1 - \mu_2 \neq 0$

P-value significant at 95% confidence interval of the difference of the mean

5.3 Interview Discussion

According to information obtained from the interviewees, registration of business organizations as well the membership of VIPs on FB contributed tremendously to the popularity and the success of the social networking giant. With this, potential users begin to see the site as being reliable. In essence, the site enjoys indirect recommendation and free publicity from the membership of these VIPs. For instance, President Barack Obama in 2008 engaged the services of FB for his election campaign for the Presidency of United States in order to convey his message to the nation, and to solicit donations. This alone pulled millions of users to register for membership of the site. Presently, Organizing for Action (OA) still maintains and runs FB membership account for President Obama as well as FB membership account for the Whitehouse.

Another point made by the interviewees is in the area of personal privacy and security of personal details. According to them, privacy is still an issue of concern to many members of FB. Nevertheless, members still trust the site to some extent more than they do other networking sites. Furthermore, members also device means of securing their privacy by giving fictitious details or by registering as organized body. FB even has provision for changing of registered names up to a couple of times or so.

Social medial is likely to attracts more users when it allows for the registration of organized groups. Businesses of all shapes and sizes can use corporate registration on medial sites to gain access to a

much wider audience than would be possible outside the world of social media. Privacy concern is one of the major point discussed.

Privacy concerns with social networking services is a subset of data privacy. Security and privacy issues on social media is as a result of the astronomical amounts of information being processed by these sites on daily basis. In a similar vein, the advent of the Web 2.0 engendered social profiling which is more or less a growing concern for internet privacy. Users are therefore, much concerned about the security of their personal information. As discussed, social networking sites will thrive well once they can guarantee privacy of personal data entrusted to them.

Most users often resort to social media for job search, advert placement and other form of business interactions and information. Suffice to say that any social media which allow users to search for jobs or place advert for businesses will undoubtedly attract more users. Other factors that contributed to the success of FB include efficiency of the site (user friendliness and technical stability), social connectedness (social and business connectedness in terms of ideas sharing, peer influence) as well as the graphical layout of the website.

6. CONCLUSION AND FUTURE WORK

6.1 Conclusion

In conclusion, the study was able to answer the questions posed by this research work.

6.1.1 First Research Question

What are the service features that determine the service quality of social networking websites and hence impinge upon the networking activities of the users?

Social networking segment of the World Wide Web (Internet) is fast becoming most popular and most active segment of the online platform (Nielsen Company, 2009). Day in day out, social networking websites are increasing numerically and are striving to attract users from all walks of life. This thus engenders keen competition among most popular social networking websites (Liu & Arnett, 2000). One then begins to wonder what differentiates these websites from one another; some SNW are very successful in terms of the number of frequent users they have while others are struggling to have stable users. Based on the foregoing, this study then carefully identified and analyzed observed factors to determine which of these factors are influential to the success of SNW. The study then came out with seven influential factors of website quality that impinge upon the socialization characteristics of SNW users. In earlier research work (Park & Gretzel, 2007); (Abida & Rahat, 2013) six influential factors that attract users to join and use specific SNW were identified and evaluated. This study went further to add one other noteworthy feature of SNW to those already estimated to have positive relationship with the frequency of usage of SNW. These service features are listed below:

- 1) Efficiency of the site (not having technical problem)
- 2) Effort expectation (user friendliness of the site)
- 3) Real-time update of events on the websites
- 4) Privacy/security concerns of the website users
- 5) Layout and navigability of the website
- 6) Social connectedness (following community/personal social network)
- 7) Liveliness (entertainment/games playing, etc.) of the website

This study noted that ability to communicate in real-time with members in personal social network is crucial to the frequency of usage of SNW. Integration of IMs (instant messaging system) into

FB attracted more users at an unprecedented rate because users see the integration as a means for better connection. One do not need to write messages and wait until eternity for the response that may never come. In addition to this, the study viewed navigability as an integral part of website layout. Though website appearance is not statistically significant according to Abida and Rahat (Abida & Rahat, 2013), graphical layout of the website has a positive effect on navigability and hence on the frequency of usage of the websites. The result of this suggests that all the seven features identified by this study are very crucial to the success of all social networking websites (SNW) and thus, have very significant policy implications for the management and running of SNW

6.1.2 Second Research Question

What sort of relationship (positive/negative) exists between service quality of a website and the frequency of use of the website by the users?

Based on the findings of this research work, all the parameter tested has positive relationship with the frequency of use of the website by the users.

Hypothesis	Quality service features (variables)	Two-tailed P-value	SEM	$\mu_1 - \mu_2$	Decision
1	Efficiency of the site (not having technical problem)	0.001	0.132	-1.86981200	Accept $H_1: \mu_1 - \mu_2 \neq 0$
2	Effort expectation (user friendliness of the site)	0.001	0.121	-1.58035700	Accept $H_1: \mu_1 - \mu_2 \neq 0$
3	Real-time update of events on the websites	0.001	0.112	-3.19722100	Accept $H_1: \mu_1 - \mu_2 \neq 0$
4	Privacy/security concerns of the website users	0.001	0.185	-2.57539600	Accept $H_1: \mu_1 - \mu_2 \neq 0$
5	Layout and navigability of the website	0.001	0.204	-3.03282800	Accept $H_1: \mu_1 - \mu_2 \neq 0$
6	Social connectedness (following community/personal social network)	0.001	0.098	-2.90823000	Accept $H_1: \mu_1 - \mu_2 \neq 0$
7	Liveliness (entertaining/game playing, etc.) of the website	0.001	0.099	-2.12300900	Accept $H_1: \mu_1 - \mu_2 \neq 0$
P-value significant at 95% confidence in mean					

The table above is the summary of the statistical evaluation of the relationship of all the identified parameters (performance indicators) to the frequency of usage (success) of the website). All the quality service parameters tested were positively related to the frequency of usage of the website. The P-value of each variable, which stands at 0.001, is considerably lower than the conventional P-value (0.05). Conventional criteria stipulates that when $P\text{-cal} < P\text{-tab}$, the H_0 will be rejected in favour of H_1 . Furthermore, for each of the tested parameters, $H_1: \mu_1 - \mu_2 \neq 0$. In due course, we reject the null hypothesis and accept the alternative.

6.2 Future Work

Since the discovery of the concept of social informatics, researchers in various filed of discipline has invested ample amount of time, effort and resources into research work and this concept. Topics range from definition, practice, sociology, to gender issues and privacy policy. The domain of social informatics has expanded even further towards economic, organizational, and technical issues by the conceptualizations of information societies and ICT policies (Berleur, Nurminen, & Impagliazzo, 2006). In addition to this, research work in social informatics has gone a long way addressing various aspects of social networking websites. For instance, research study on social informatics has addressed various aspects of social networking websites, which include:

- gender issues in social networking websites (Carstensen, 2009),
- racial and ethnic issues (Gajjala, 2004);
- quality evaluation issues (Abida & Rahat, 2013);
- privacy issues (Barbara, 2012) (Zhang, von Dran, & Small, 2000)
- politics, (Kim & Chen, 2015),

Nevertheless, one area that seems to be a bit clumsy as at now is the study that adequately deals with the effects of social revolution on the information society. According to Keith (Keith, 2015), researcher are “yet to reach a consensus on the effects of social media. For instance, Turkle (Turkle, 2015) argued that the emergence of technology (social network sites) has negative interference on normal conversations in subtle ways, and in the process, information society tend to miss the opportunities for deeper human interaction. On the contrary, George and Odgers (George & Odgers, 2014) expressed their concern that the negative impacts of social revolution have been exaggerated. According to George and Odgers (George & Odgers, 2014), social revolution has little or no adverse effect on the information society other than cyberbullying and sleep disruption.

Based on the forgoing, I intend to further my research study on the effects of social revolution on the information society. In intend to focus mainly on the effects (positive and negative) of social revolution (visual/cyber interaction) on information community (personal/communal interaction).

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APPENDIX

Appendix III: Determining the Sample Size

The population size of the case study is extremely large. It is thus necessary to select a sample size large enough to represent the population. The project thus makes use of this formulae

$$z_{\sigma/2} \times \sqrt{\frac{\rho(1-\rho)}{n}} \leq m$$

Where

$z_{\sigma/2}$ = population standard deviation; ρ = population estimate; n = Sample size;

m = Margin of error.

Making n the subject of the above relation invariably gives: $n \geq \left(\frac{z_{\sigma/2}}{m} \right)^2 \times \rho(1-\rho)$

For the purpose of this project, the margin of error m is taken to be 0.05 at 95% confidence level. The population estimate ρ is unknown. So, conservative population estimate is assumed to be 0.5 in which case $\rho(1-\rho)$ assumes its greatest value.

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LIST OF ABBREVIATIONS

CIS	Computerized information systems
CMS	Content management system
DOB	Date of birth
EIS	Electronic information space
FB	Facebook
G&D	Growth and development
GLD	Graphical/layout Design
ICT	Information communication technology
IMS	Instant messaging system
INGO	International non-governmental organization
LSR	Likert Scale Rating
NGO	Non-governmental organization
OA	Organizing for action
PAM	Profile account management
POP	Post office protocol
SI	Social informatics
SMTP	Simple mail transfer protocol
SNS	Social networking site

SNWs	Social networking websites
STN	Social technical networks
TAM	Technology Acceptance Model
UI	User interface
UTAUT	Unified theory of the acceptance of use of technology
VOIP	Voice over internet protocol
WA	Website application
WWW	World Wide Web