



NEAR EAST UNIVERSITY

GRADUATE SCHOOL OF SOCIAL SCIENCES

INNOVATION AND KNOWLEDGE MANAGEMENT PROGRAM

**IMPLEMENTATION OF ENTERPRISE SOCIAL NETWORK IN A TERTIARY
INSTITUTION (STUDENTS' PERSPECTIVE)**

KOLAWOLE OMOLE

MASTERS THESIS

NICOSIA
YEAR 2020

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MASTERS THESIS

THESIS SUPERVISOR

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NICOSIA
YEAR 2020

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DECLARATION

I....., hereby declare that this dissertation entitled
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DEDICATION

I dedicate this thesis work to my parents, Deeacon & Mrs Amos Omole.

ACKNOWLEDGEMENTS

First, I will love to appreciate the Almighty God for the strength and grace to do this work and to finish it. I saw the help of God throughout.

Special appreciation goes to my thesis supervisor who is also my favorite Lecturer through the master's program, the ever efficient Prof. Dr. Mustafa Sagsan. The support and assistance shown towards this work was helpful. God bless you sir.

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Abstract

IMPLEMENTATION OF ENTERPRISE SOCIAL NETWORK IN A TERTIARY INSTITUTION (STUDENTS' PERSPECTIVE)

This research was carried out to evaluate the impact that the implementation of Enterprise Social Network in Tertiary Institution Education community will have on the students when it comes to Academic Performance, Collaboration, Social Acceptance and Improved Management. The research was carried out based on Students perspective. Respondents are students from four main universities in North Cyprus and data was collected using an online questionnaire that was sent directly to students. A sample size of 231 respondents was used for the research.

Correlation analysis was used to find the strength of relationship between the dependent variable and the independent variables. It was deduced that there was a positive relationship between the ESN platform and all the four independent variables. A simple linear regression analysis was then used to find out if there is a causal relationship between the dependent variable and each of the independent variables. It was found out that each of the first three independent variables have a significant causal relationship with the implementation of ESN. Initially, improved management does not have a significant causal relationship with ESN however but when mediated with student collaboration; an established positive effect was reported.

The findings of this study revealed that the implementation of an Enterprise Social Network platform within a University community will have a great positive effect on Students performance, Students Collaboration, and Social Acceptance.

Keyword: Enterprise Social Networks, Academic Performance, Collaboration, Communication, Social Acceptance.

Öz

ÜÇÜNCÜ BİR KURUM'DA KURUMSAL SOSYAL AĞIN UYGULANMASI (ÖĞRENCİLERİN PERSPEKTİFİ)

Bu araştırmada, Üçüncül Enstitü Eğitimi topluluğunda Kurumsal Sosyal Ağ uygulamasının, akademik performans, işbirliği, sosyal kabul ve iyileştirilmiş yönetim söz konusu olduğunda öğrenciler üzerindeki etkisini değerlendirmek için araştırılmıştır. Araştırma öğrenci perspektifi dikkate alınarak yapılmıştır. Katılımcılar, Kuzey Kıbrıs'taki dört ana üniversiteden öğrencilerdir ve veriler doğrudan öğrencilere gönderilen çevrimiçi bir anket kullanılarak toplanmıştır. Araştırma için 231 katılımcıdan oluşan bir örneklem kullanıldı.

Bağımlı değişken ve bağımsız değişkenler arasındaki ilişkinin etkisini bulmak için korelasyon analizi kullanılmıştır. ESN platformu ile dört bağımsız değişken arasında pozitif bir ilişki olduğu sonucuna varıldı. Daha sonra, bağımlı değişken ile bağımsız değişkenlerin her biri arasında nedensel bir ilişki olup olmadığını bulmak için doğrusal regresyon analizi kullanıldı. İlk üç bağımsız değişkenin her birinin ESN uygulamasıyla anlamlı bir nedensel ilişkiye sahip olduğu sonucu çıkmıştır. Başlangıçta, iyileştirilmiş yönetim ESN ile önemli bir nedensel ilişkiye sahip değildir, ancak öğrenci işbirliği ile aracılık edildiğinde pozitif yönde bir etki sonucu çıkmıştır.

Bu çalışmanın bulguları, bir Üniversite topluluğu içinde, Kurumsal Sosyal Ağ platformunun uygulanmasının Öğrenci performansı, Öğrenci İşbirliği ve Sosyal Kabul üzerinde büyük bir olumlu etkisi olacağını ortaya koydu.

Kelime: Kurumsal Sosyal Ağ, Akademik performans, İşbirliği, İletişim, Sosyal kabul

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Introduction

For some years now, Enterprise social Network (ESN) has been a popular term when it comes to knowledge sharing and/or project management in organizations. An ESN study done by Margolis Company (2016) reported a rapid adoption of the tool in organizations between 2006 and 2016. They also reported that the adoption of ESN has enhanced innovation and collaboration in the workplace. The market of Enterprise Social Network has gone up rapidly as predicted by International Data Cooperation (idc.com) some years back majorly because it has proven very useful in maintaining a more connected workplace. The higher Education institution can also benefit from such advantages; we can create a more connected community in the colleges and universities and this will be huge advantage to every member of the community especially the students. What this will look like in the tertiary institution is that the platform is open to every member the community from students to lecturer and to other staff of the community; this will mean that top management can also be on the platform and use it when necessary. This work seeks to find out if such theory can be proven based on what students think about such a platform.

Chapter 1

1.1 Background Overview of the study

The need for Education and proper learning in the society cannot be over emphasized. Education is the bedrock of innovation and the driver of civilization. Any country that will develop will have to educate her citizens to not just acquire knowledge but also to learn how to use it. There are different levels of Education from Primary to Secondary and to tertiary Education. The focus of this study is on Tertiary or higher Education. Tertiary institution is the home of knowledge. It is a place where knowledge is impacted and where leaders are made. The purpose of the higher education has remain the same over the century and it is supposed to be a place where individuals build competence about a specific skill and be able to use such competence to solve societal problems. The core product or solution offered in tertiary institution is Knowledge. Lecturers, Researchers, Counselors, Laboratory assistants and every other person in the institution have one goal and this is to impact knowledge to the student and prepare them for Life. The whole systems of the tertiary institution thrive on the right dissemination of information.

Technological advancement has affected every aspect of the human life. The popularity of smart phones and internet has truly changed the way things are done. Tremendous change has happened in the way organizations manage and engage their numerous employees in a creative manner. A lot of organizations are not just represented on social media but they also have their own organizational social platform which is often called Enterprise social network. This social platform is not just to connect them but also to aid collaboration and ease of knowledge sharing in those companies. The implementation of such a platform has proven to be very useful to organization when implemented correctly. This model too can work for tertiary institution. A platform like this can be created to connect the community of a tertiary institution together also. There are lots of benefits that this will bring to every member of the community. The

diversity individuals have increased in institutions. We now have institutions that house students from different cultural or religious background. A lot of ladies are now also interested in education more than it used to be some years past. We have full time students whose primary goal is to go to school and just focus on that and we have some other set of people who are working and are interested in studying at the same time. The traditional system of formal education such as having a particular time when we meet in class in a particular place for a particular amount of time may not be able to serve effectively the vast majority of individuals who are willing and interested in having formal education in this present day; they may not be able to learn enough at those times. Therefore a need is required to see how students can learn not just from their lecturers as it is with a traditional class setting but also from each other and other individuals outside their classes. Social Networking platform has changed the way people connect with other people since its invention. Implementing such a network for an academic community will have huge benefits for students, Lecturers and the school system. This work will focus on the benefits it will bring to students in the tertiary institution. Education has gone beyond the four walls of the classroom; it is no more news that people learn a lot through social interactions. Social media has taken social interaction online. It makes social interaction possible anytime and anywhere. There are already existing systems that are being used to disseminate information in the university system such as email and some basic intranet connections but these systems are more limited to 'one-to-one' or 'one-to-many' means of communication. Social platform in addition to the above benefits also allows for 'Many-to-many' communication simultaneously.

1.2 Statement of the Problem:

Traditional method of coming to class and listening to a lecturer is no more adequate to deliver as much education needed to meet the rapid change and advancement that we have today. People have not been able to collaborate as they should in a tertiary Education student community. The power of ICT embedded in the use of social media platform has not been adequately exploited by the Tertiary Education Community and they need to look into implementing it.

1.3 Objective of the Study

The objective of this study is to investigate the advantages that the implementation of an internal social media platform which can be called Enterprise Social Network will have for a better university experience. The study will specifically look at how students can benefit from the implementation of such platform and how it will affect the following aspects of their academic life;

- Academic Performance
- Social Acceptance
- Students Collaboration
- Students' Management.

1.4 Research questions

- Does ESN have a significant influence on students' academic performance?
- Does ESN have any significant effect on Student Social Acceptance in an Academic Environment?
- Does ESN have a significant influence on Student Collaboration?
- Does ESN have any significant effect on Students Management?

1.5 Scope of the Study

The scope of the study is illustrated below:

1.5.1 Subject Scope

The subject scope of this study is to look at how the implementations of Enterprise social network in a tertiary institution e.g. University will positively affect the overall university life of every member of the university community. This study is viewing ESN implementation as a Knowledge/Information sharing tool. The study will explore the definition of and the history of Social Media and Enterprise Social Network and probe to

see what benefit its implementation will have in a university community based on Students perspective. The study will seek to see how people are used to using Social media and what effect will a university based social media(called ESN in this research work) have on the students in the university community.

1.5.2 Geographic Scope:

This study will be carried out with students from four Universities in North Cyprus. North Cyprus is where the researcher resides during the period of the Research work and hence the reason he is using students who are schooling here. The Universities whose students will be questioned are Near East University, Cyprus International University, European University of Lefke and Eastern Mediteranean University. These Universities are chosen because they have the majority of the students in North Cyprus and so the population will be a good fit for the research.

1.6 Study Hypothesis

H1: Implementation of ESN has a positive effect on Student performance

H2: Implementation of ESN has a positive effect on Student collaboration in an Academic Community

H3: Implementation of ESN has a positive effect Student Social Acceptance

H4: Implementation of ESN has a positive effect on Students Management.

Chapter 2 Literature Review

2.1 Knowledge

The concept of knowledge may be hard to understand in isolation. It will be best way to understand when we consider how it relates with data and information. Some literatures in the past have tried to define the difference between data, information, and knowledge. Davenport and Prusak, (1998) wrote that; Data may be described as a set of discrete or objective facts about a particular event. It is an important raw material needed to generate Information but data alone cannot be used as a basis of action; while information collects the data and turns into a message and gives associated interpretations in form of audible or written communication. When data is processed into information, it becomes meaningful and valuable to the recipient (Davis & Olson, 1984). But Knowledge is a more complex concept; Bergeron (2003) says Knowledge is when information is well organized, well synthesized or succinctly summarized to enable comprehension and understanding of a particular concept or process. Karlsen and Gottschalk (2004) also defined knowledge as the combination of experience, interpretation, reflection and creativity of information to give it a wholesome meaning. Since Knowledge is when information is personalized and attached to interpretation and concept (Alavi & Leidner, 2001), we can then say that knowledge is more comprehensive and definitely more valuable compared to information even though we derive knowledge from data and information. Knowledge is attached to its owner or users and manifests as it is used. We can see what people know by the way they do their jobs and by the way they make decisions.

Knowledge can be categorized in different ways: Leach, Wall & Jackson, (2003) wrote about declarative knowledge and procedural knowledge. They described 'Declarative knowledge' as one that is factual information which is also called the 'knowing that' type of knowledge while they described 'Procedural knowledge' as the 'knowing how' form of knowledge which is often concerned with the process or processes of underlying actions. The category of knowledge most used in the literatures is that described by Nonaka & Takeuchi, (1995) as Tacit and Explicit forms of Knowledge. Tacit form

defined as that form of knowledge which is difficult to verbalize or codified because it is hidden in the subconscious of the knower, it is hard to express tacit knowledge in a formalized form, while the Explicit knowledge was described as that form of knowledge which can be easily explained or reported, it can be expressed in a formalized form and so it can be codified (Bergeron 2003; Dalkir, 2013).

2.1.1 Knowledge Management and Knowledge Sharing

Knowledge management has been explored in different literatures over the years many of those literatures have done a good job in the definition of the concept. One of such definitions which has also gain a good number of citations over the years and is of particular interest to this work is that Knowledge Management is the deliberate plans of getting the appropriate knowledge to the right individuals when it is exactly needed and helping people use such knowledge to take necessary actions for the overall improvement of organizational performance (O'Dell and Grayson, 1998). For this to happen effectively there has to be a systematic process that allows for the creating, evaluating, auditing, sharing and storing of information and knowledge (King, 2005). Sagsan, (2006) described what he called the Life Cycle of Knowledge management in six distinct processes which are:

- 1. Knowledge Creation:** this is the first stage of knowledge management and it requires knowledge creators to enter what Sagsan (2006) called Knowledge Kitchen to produce knowledge which can be shared and audited. Any of the two categories of Knowledge such as Tacit and Explicit (Nonaka & Takeuchi, 1995) can be created. In an organization for example, the key player such as the departmental head can play an important role in Knowledge creation. Nonaka & Takeuchi, (1995) also described the famous SECI model which described the Knowledge creation processes. The figure below described the SECI model showing the four modes of knowledge conversion as it is often created in an organization:

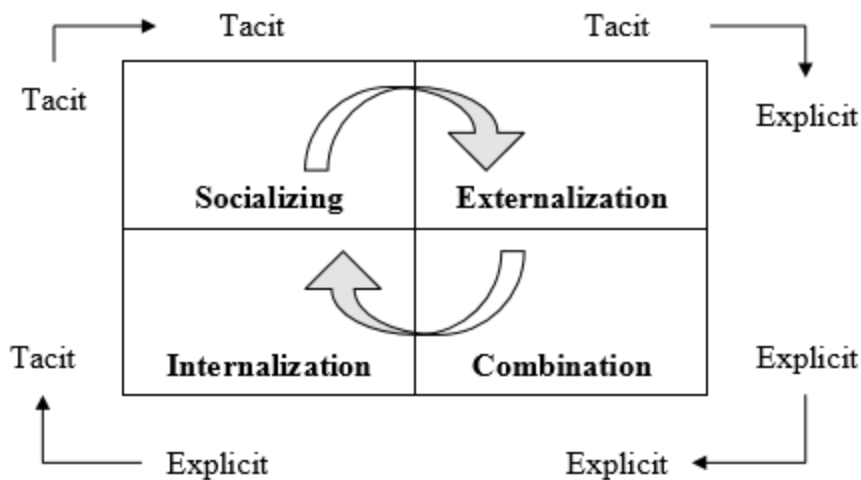


Figure 2. 1 SECI model (Nonaka & Takeuchi, 1995)

The Socialization mode is more or less like the easiest form of exchanging knowledge, it involve creation of knowledge through social interactions because conversation enhances tacit to tacit knowledge sharing process that leads to shared understanding (Dalkir, 2013). In Externalization, tacit is converted to explicit knowledge and it is written down or recorded so that it becomes more tangible and easier to share with others (Dalkir, 2013). Combination helps to derive explicit knowledge from former or previously existing explicit knowledge. An existing information or knowledge can be integrated to other ones to create a new knowledge. Lastly, in Internalization, explicit knowledge is converted to tacit knowledge by integrating individual or shared experiences into mental models by individuals. This can be done by observation and on-the-job-learning. (Chou et al., 2005). Social platforms such as Enterprise Social Networks allows for tagging, bookmarking, liking, and following by adding as friend and/or by subscribing while it provide its primary function of enhancing social interaction and information sharing (Richter & Riemer, 2013), this means that all the four cycle of the SECI model can also be achieved to a good degree by a well implemented Social Networks.

2. Knowledge Sharing: The focus of this research work is this aspect of Knowledge management. The sharing of created knowledge with other members of a particular community or organization. There are several ways in which

knowledge can be shared especially Social and technical communication tools (Sagsan, 2006). A good social communication infrastructure should allow for written, oral and non-verbal communication opportunities (Sagsan, 2006) while the technical infrastructure is referring to a system that leverages the power of information and communication technology. He also mentioned channels such as formal and informal social communication platforms as a means for knowledge sharing. This kind of platform called Enterprise Social Network has been extensively discussed in the later part of this session. Other modes in which knowledge are shared according to Sagsan (2006) are community of practice, rumors, teamwork, organizational learning and so on. It is also good to note that even when a good platform for knowledge sharing is created that incorporated the power of social and technical infrastructure, it is much more important that the people are encouraged to engage and use such platforms so that it can fulfill the reason for which it was created.

3. **Knowledge Structuring:** This means sorting and organizing information and knowledge in a way that it can easily be retrieved again when it is needed. Structuring involve inventory, mapping and retrieving of knowledge when it is needed and on time (Sagsan, 2006). Some good Social platforms also have a way of structuring and storing information in a way that it can be retrieved when needed.
4. **Knowledge Using:** The goal of Knowledge management is that we be able to use appropriate knowledge for the benefit of the organization. Knowledge is a major factor of production and an important factor for competitive advantage. The usage of knowledge can be in form of new directives or instructions, organizational routines and self-contained tasks (Alavi and Leidner, 2001).
5. **Knowledge Auditing:** This is the last of the Life cycle of Knowledge management and it is the measuring of the knowledge created to know which can be used for different processes. Intellectual capital in form of information, knowledge and skills can be measured.

The Knowledge management Life cycle model as described above can be summarized in the figure below according to Sagsan (2006)

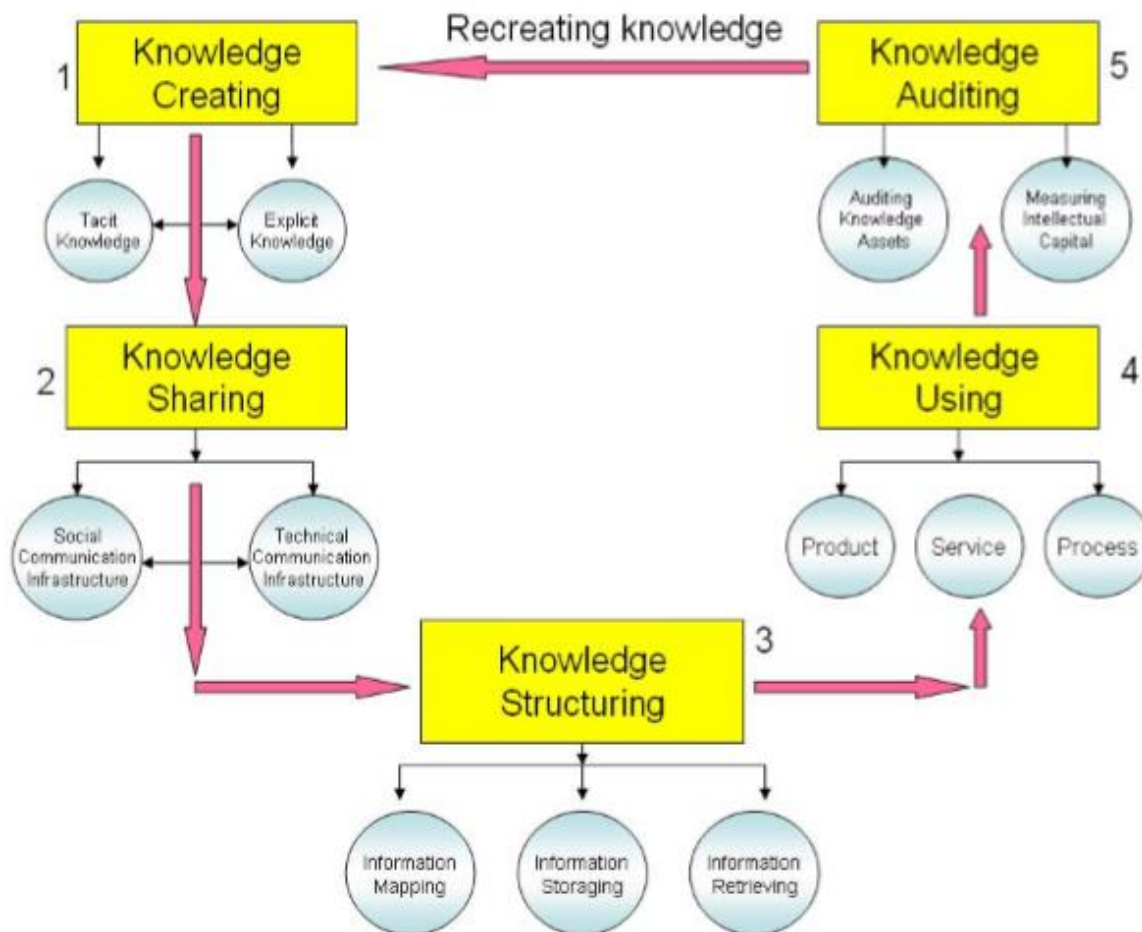


Figure 2. 2 Knowledge Management Cycle (Sagsan, 2006)

2.1.2 Knowledge Management in Education

Po-Ying Chu, Li-Chieh Chen and Wan-Li Wei (2007) in their study titled "A study on the effect of using a knowledge management system in design education" focused on the benefit of peer learning. A Design Knowledge Management System (DKMS) has been built to facilitate peer-to-peer learning among students. This system provides a web-based Social platform for students to share and enhance their knowledge. An experiment was conducted where students from three universities were asked to

perform tasks in DKMS, which were assessed by the faculty. Results were analyzed using mean and standard deviation. The finding shows a high level of learning and satisfaction among students who have been qualified by DKMS. There work is a good pointer that Knowledge sharing through a well-designed and managed social platform can be a huge boost to learning.

Leiponen (2006) described knowledge sharing as a factor that is both important and urgent but which has not been given enough attention. A.F. McCarthy (2006), In his study entitled “Knowledge Management Evaluation of the strategies and processes used in higher education” stated that teaching and Learning can sure be improved in Higher institutions using Knowledge management. He also wrote that, Knowledge Management development can be of great help to people in the Research Area of an Institution. He finally recommended that all educational institution should take Knowledge management initiatives and there should be knowledge transfer system to all departments. To get the best grab of knowledge, institutions require a knowledge sharing network that can help meet the demands of fast changing knowledge. The knowledge sharing network is embedded with the ability to help faculty members and students share and capture knowledge among them. (Rajalakshmi & Wahidabanu, 2011)

2.2 Higher Education Institution

The goal of higher education system has been the same over the centuries from when the Puritans started Harvard University till the present moment and the goal is to develop and raise individuals who will learn and improve the condition of the society (Dewey 1916). Higher institution is the home of Knowledge. It is also advocated that higher institution like university and polytechnics help students to socialize and learn general life skills that make them responsible and productive to their society and therefore help in making the world a better place (Haigh & Clifford, 2011). It is even expected in today’s world that a graduate of a specific higher educational institution has

developed a specific competence in a particular field and is able to use such competence to solve societal problems, such student is also expected to learn disposition to work. Menges & Austin, (2001) listed skills such as communication skills, problem solving skills, social skill, critical thinking skills and so on as skills that should be learnt in a higher institution. Baum & Payea, (2013) believe that individuals that have completed a degree program in a higher institution must have acquire a lot of personal and social benefit which may include but not limited to better cognitive skills and ability to focus or concentrate on tasks that are job related. Also attached to the benefit of an higher education system are economic benefits which are numerous for individuals and the society at large. Individuals who go through higher education institutions are more likely to raise children with better IQ who can also in the long run become an asset to the society. Studies made it clear that the quality of life of an individual can be greatly enhanced by higher education.

This paper is not so much of what the benefit of higher education systems are because there are several articles that has dealt extensively with that over time but it is more on how Social Networking platform such as Enterprise Social Network can help achieve better, the goal of the educational institutions. Making sure there is high standard and quality education and related services is the main engine that drives excellence, competitiveness, importance and popularity of any higher education institution. Knowledge management in higher education or tertiary institutions involves the creation, improvement, sharing, maintenance and security of knowledge. Higher Institutions are referred to as the place where the generation and dissemination of knowledge happens, this make them have the potential and the ability to establish their own quality and working knowledge management system. Kidwell (2000) said that the benefits of using the KM method in higher education can be grouped into five main categories, such as assistance in research processes, curriculum development processes, student and alumni maintenance, organizational services and planning.

2.2.1 ICT and Education

Information Communication Technology since its invention has influenced the totality of human Life. It has changed the way things are done and how we get things done. All sectors have been influenced by the development of ICT and educational sector is not left out. With the advent of ICT, the way we learn has been transformed and it can even be more enhanced if we embrace fully the power of the technology. ICT has not only impact what students are learning, it has also impact when and how they are learning.

2.3 Social Networks

In the work of Boyd and Ellison (2008), which has been cited more than 13,000 times according to Google scholar, social media or in other words social network has been defined as an online platform which enables users to create profiles and allows visibility of relationship between them. Some other definitions have also been published over the years which also give us a good insight on the Information Technology birthed term called Social media. A lot of work has been done to know what the effects of Social media is on Individuals and Organizations and we have seen that the technology has not just change the way businesses are but has also impacted the way we live generally. This is because communication is a necessity in life and what Social media has come to refine is how communication is done. Some other definition of Social media as related below will buttress this point. Social media can be defined as applications that are online-based used for the purpose of sharing information, enabling or enhancing relationships, group creation, conversation building and profiles enhancement (Kietzmann et al., 2011). It has also been referred to as the subset of information technology which enhances networking as well as interaction (Kapoor et al., 2017).

Kaplan & Haenlein, (2010) introduced what they called the taxonomy of “social media” and they split the field into 6 individual categories which includes Blogs (a website updated regularly by an individual or groups of individual for the purpose of information

and conversation), Social Networking Sites (online hangout platforms), Project Collaboration(a platform where teams and or team leaders plan, coordinate and monitor projects together), Content Communities (platforms where users can share multimedia contents such as pictures and videos), Virtual Social Worlds (platforms built on users creativity and collaboration where users are able to interact in a Simulated world) and Virtual Game Worlds(a platform that allow for 3D gaming for individuals and groups). As the development, use and adoption of Social media advances, the trend of creating new definition and updating the old ones will continue as it is with many important terms in Academics (Kapoor et al., 2017).

2.3.1 Brief History of Social Media

The real history of Social media according to our definition above started in the 1970s after the internet emerged to become a center stage tool but people like to link it to when information technology started to gain popularity in the 18th or 19th century with a Starting point at how telegraph was used to transmit and receive message in 1792 (Ritholz, 2010). The internet has its origin in the 1960s and 1970s but become more established and common in the 1980s and 1990s when people start having personal computers and this was what set the stage for Social media. The blogging history can be traced back to the 1990s and it was blogging which ushered in the era of Social media. The fact that people can go to the internet and write about what they are feeling or thinking and get people to like or comment on what they wrote began to interest people about the internet (Terrell, et al., 2019).

Some of the earliest social networking sites were created in the 1990s and some of them are Six degree, MoveOn, Black Planet and so on and they were online sites where people can connect and interact (Edosomwan *et al.*, 2011). More blogging sites like Epinion and Blogger were created and later in that decade, Napster was created which was a platform that allowed peer-to-peer sharing of files. Users of Napster could share music files without using the normal distribution methods and it was later flagged as violating the law (Ritholz, 2010).

The 2000s was a great time for social media as many people are beginning to know and love it. A lot of individuals were beginning to have interest in it and this brought about the rise of new social networking sites. The interaction of individuals who shared common interests was enhanced through the social media. Then, we saw the rise of LunarStorm, Six degree, CySpace and so on. In the early 2000s, we saw the rise of Fotolog, Sky blog and Friendster which competed with Six degree in 2002. It was able to compete with Six degrees because it share the same functionality of user being able to save their contacts in Personal networks. Users were also able to post videos and pictures. Friendster users grew from 3million in the first three months to about 100 million in 2011 when it was rebranded as a gaming community (Terrell, et al., 2019). Some of the popular social media platforms that we know today also started between early and mid-2000s. Platforms like LinkedIn which started in 2002 as a platform that focuses on professional networking and it has over 575 million users today.

Another was MySpace which started in August 2003 and become the largest social media site in the world in a short time. MySpace became so big that News Corp, a UK based company bought it and in 2006, it became a top visited site even over Google. As Facebook expanded beyond the initial audience of the university, MySpace usage began to dwindle as people started preferring Facebook over it and Facebook became a more visited website in 2008 over MySpace.

Facebook got started in February 2004 by Mark Zuckerberg and his friends as a community social application in Harvard which eventually become open to anyone above age 13 in 2006 (Boyd, 2007). In 2010, Facebook become the most visited website in the world. Facebook has majority of the functionalities as described in the Honeycomb framework described earlier in this work. Facebook went public in 2012 and it presently has over 2.3billion active users which is about 30 percent of the world population.

Twitter was created in 2006 and it is a slightly different platform to Facebook because posts are limited to 140 characters until 2017 when it was doubled for majority of the languages. Twitter presently has over 335 million monthly users (Terrell, et al., 2019).

Instagram started in October 2010 and distinguished itself by focusing on photos and videos as major content to be posted. Instagram grew very fast and presently has over 1 billion active users. It was purchased by Facebook in 2012 for 1 billion dollars both in cash and stock (Terrell, et al., 2019).

YouTube started in 2005 and has become the number one online video sharing community. With YouTube, people have the opportunity to share content to entertain or educate others. The community grew so rapidly that in 2006, they announced that they had over 65,000 videos being uploaded daily and over 100million daily views (YouTube, 2005).

Snapchat was created in September 2011 by Evan Spiegel and two others. It allows people to filter photos and share stories that will stay for 24hours before disappearing. The platform is more popular among young people and it presently has over 186 million active users.

In general, even though the time history of social media according to the definition of being an online platform that enhance communication and sharing of information is short, its effect on the human lives has been phenomenal. There are presently over 2.62 billion users of Social media all over the World and the number has been estimated to reach 3 billion in 2021 (Terrell, et al., 2019).

2.3.2 Social Media Functionalities

According to Kietzmann et al., 2011, different functions of different social media have been meshed together in a framework called the Honeycomb of Social media and the functionality has been put into a figure as described below. The functions as described by Kietzmann et al., 2011 does not all have to be in a particular social media platform because social media platforms are different from each other depending on the intent of the creator and the audience it serves. For example, both Facebook and LinkedIn are both social media platforms but the latter is for professional development whiles the

former for general social purposes. The framework is able to put into account the functionalities of social media across different social platforms.

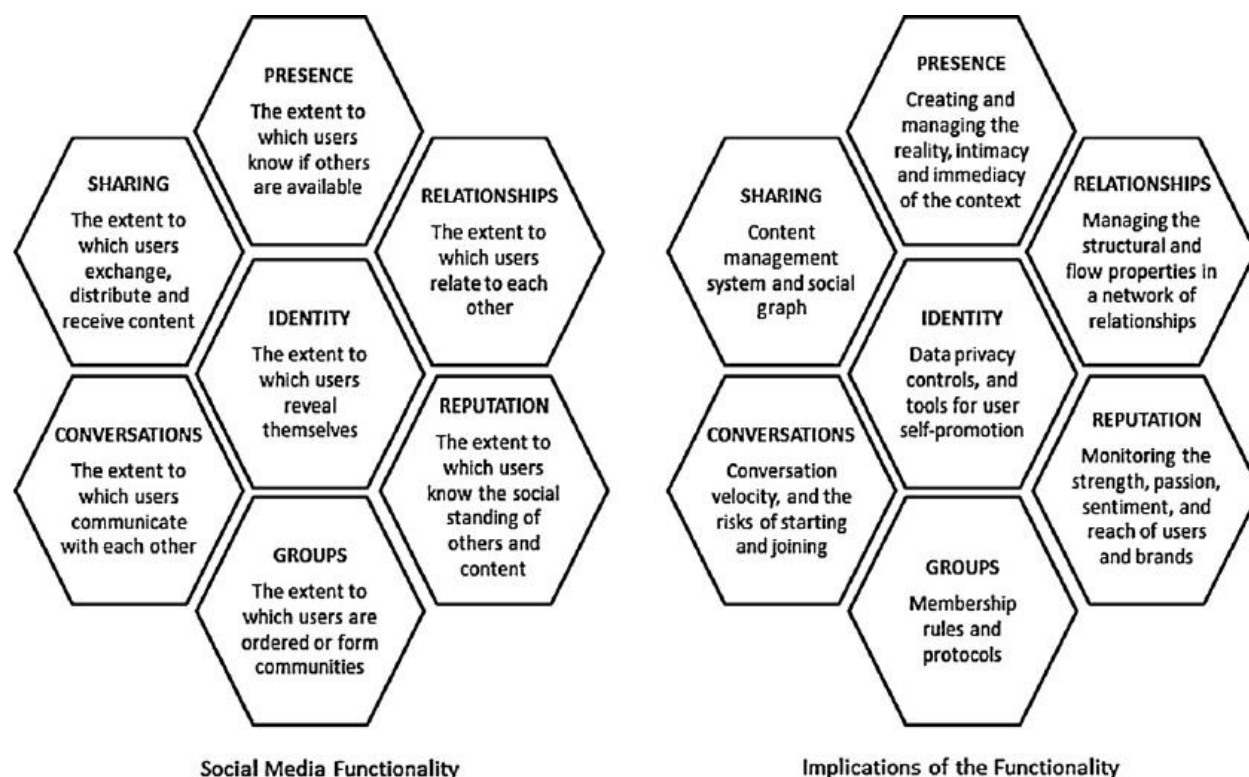


Figure 2. 3 Functional Building blocks of Social Media (Kietzmann et al., 2011)

Each of the seven functional frameworks as described allows us to examine a particular user experience of social media and help explore the implication for the organization:

- a. **Identity:** This is the main core of social media. We all find it easier to chat and relate with people we know that it is with a Stranger. This refers to the extent to which the social media user reveal information as relating to Identity. The information such as name, gender, location, age and even profession and other personality information. Consciously or unconsciously, Social media users usually present their identity by giving some subjective information by what they Like or dislike and writing what they think or feel on social media feeds. Some people identity can be as distinct as presenting a lot of information about themselves and some can be so vague. The bottom line here is that as long

Identity is provided which is what happens on social media, Privacy must be maintained. I see this as a good way for organizations to also engage and know their community members more.

- b. Presence:** This refers to how much a member of the social community can know about when the other member is online and available to be engaged or when he is not online. It can also tell the present Location of the member. Some of this information can be seen as Check-in, available or hidden on social media. You can know friends around and can even choose to meet offline. Its implication is that one can manage reality and intimacy.
- c. Sharing:** This refers to how much content users can share or receive. As the term Social refers to exchange of information between individuals, the Sharing functionality will refer to how much can be shared and how many can see what has been shared. The Object people share on social media is what breeds connection between them. It is what helps other users to know they can relate with or who they can ignore. Objects that can be shared on social media are different for different platforms and some platforms allow for varieties which are Pictures, Videos, texts, links, location and so on.
- d. Conversation:** This refers to the extent by which users can communicate with each other. The majority of social media platforms are actually designed to facilitate and enhance conversation between users. Conversation gets started as a result of the content shared most of the time. People are able to see like-minded individuals or others with common interests which they can work with. Some other people see social media as a way of making their voices heard about different subjects such as politics, business, humanity and other subjects (Beirut, 2009). The implication of Conversation is that a topic can be discussed or important information can be shared and people's opinion can be known.
- e. Group:** This refers to how much of smaller groups or sub groups can be formed in the Social media platform. The kinds and number of groups that can be formed on a social network increases as the platform becomes more social. Groups can be created to manage relationship and also to execute projects. Group functions of social media make collaboration effective.

- f. **Reputation:** This allows to measure trust—levels and influential status of users on a platform. Some social media like tweeter and Facebook measures followers and Facebook also measure the number of friends. A scoring or a ranking system helps to know those who are more influential than the others on a social media site. YouTube has number of subscribed individuals and number of views, LinkedIn has number of posts and number of endorsement. The implication is that we can know who to listen to about particular topic and who is a verified influencer.
- g. **Relationship:** This refers to the extent to which users are related to other users. Is there a form of association that exists between users that can be a basis for conversation or shared connections? Social media platform can make a user see others who are working in the same industry with them or who finished from the same school with them. One can connect with people from the same geographical origin and so on. The strength of relationship can be Strong or weak and this determine how long and how much the relationship can go or achieve (Krackhardt, 1992; Hansen, 1999).

2.3.3 The Effect of Social Media in Education

According to Siddiqui & Singh, 2016, Social media has a lot of effect on several aspects of the human lives, both positive and negative effects. They were able to elaborate the positive and negative effects on the Social media on Education, Business, Society and a young individual. This work will focus on its effect on education. A survey of previous research says about 90% of college students are engaging at least a social networks (Siddiqui & Singh, 2016). This is an interesting statistics and it is a good pointer to the fact that young people find pleasure in being able to connect with other people. Technology has been helpful in the production of communication devices like Phones, tabs and pads which are small and handy. We are able to carry such devices around and all we have to do is connect to the internet to be able to access Social media platforms (Waqas et al., 2012). This readily available opportunity to connect with friends

and family on the go has improved the engagement of young people on social media and students are not left out. This has made it very easy for people to connect anytime and anywhere on those devices. According to Siddiqui & Singh, (2016), students should be thought how to use social media platforms effectively instead of discouraging them. They wrote about how social media can transform education in an innovative way. Social media has enhanced the quality of collaboration and communication amongst students.

Because Social media platform is one that provides a medium for interaction by groups of individuals, it makes sharing information to other people easy, for example, lecture Notes, Assignments and Lecture or exam time-table can be sent across to a group. According to Statistic, the engagement of young people on social networks such as Facebook, LinkedIn and Twitter are progressively on the rise. The majority of those young individuals are students in a Tertiary institution. (Ikhu-Omoregbe, et al., 2012). The fact that young people love and use social media will make investing in social network for a tertiary institution to enhance learning and foster collaboration a good investment.

2.4 Enterprise Social Network

2.4.1 Definition

Enterprise Social Network (ESN) of an organization is an online platform that enables workers in that organization to communicate messages with one another. **It is an** online-based social networks or social relations among people who share the same personal, career or business activities and/or interests. It is the primary component of Enterprise 2.0 using what is referred to as Social Software. It can also include external networking service which engages external individuals and generate visibility for an Enterprise. An individual can communicate with another individual, a group of individuals e.g. a member of a department or everybody in an organization using the social Network (Leonardi et al., 2013). In contrast to the physical platforms for

organizational interaction such as conference rooms, classrooms or offices, the social network is digital which makes it transform the way communication operates in an organization; it allow social interaction at any time and from any place. Industrial analyst predicted that the use of social networks in organization has a lot of positive effect on the way organizations that adopt them function and that it will transform a lot in the way such organizations operate in the coming decades (Leonardi, Huysman, and Steinfield 2013).

2.4.2 Enterprise Social Networks vs. Social Networks

Social networks as used by organizations are in two ways. They use it externally to maintain a good communication with potential or present customers, vendors and general public. They do this by having a corporate page on general social media platforms like Facebook, Twitter and any other commonly used social platforms of their interest. On the page, they post important information such as updates and promotions of their products or services so as to consistently engage and enhance the public awareness. Most companies or organizations that use social media to initiate and maintain effective communicate with external parties have a working and effective strategy that allow them pass almost same information simultaneously across various platforms (Piskorski, 2011). The other way in which an organisation can use a social network is internally. This is not often implemented in organisations and institutions and it has proven to be very useful in organisations that have implemented them. Here, Social Networks are created internally to enhance organisational communication, collaboration and participation of the different worker or stakeholders of the organisation. Majority of the internal social media platforms are designed to function like the popular social media sites especially Facebook. Examples of such internal social media platforms are Yammer, Slack and many others. While the common and general social media networks like Instagram, Twitter or Facebook are open, free and general systems, enterprise social networking platforms are organisationally designed, customized and bounded counterparts of these social technologies that are internally implemented within the organisation and, which means that it cannot be reached by external others (Turban Bolloju, and Liang 2011).

A lot of scholars have worked on the use of social media externally to enhance business growth through marketing and public relations while only some have explored the power it can serve if it is used internally as a collaborating and communicating tool. A lot of the research about Enterprise Social Network and its application can be found more in Business and communication focused Literature. Some of the scholars who researched on the advantage of using Enterprise Social Network (ESN) have encouraged organizations to implement the technology. In the work of Cardon and Marshal (2015), where they surveyed business professional on how collaboration and communication can be affected by social media, they discovered that the traditional methods of communication like use of email was still often used but they also discovered that people anticipated the use of the social networks in the near future as they assume that there will be growth of the technology and it will catch more the interest of the business owner as it is happening today. The article recommended that organization should adopt the ESN as a tool for communication. Knowledge sharing is enhanced through an effective and prompt communication channels which ESN can provide. Kwahk and Park (2015) looked into the how network sharing affects knowledge-sharing activities and the performance of employees on the in an enterprise social media enabled environments, their study confirms a positive influence of process of knowledge-sharing activities on job performance in such environment. What this mean is that, knowledge sharing becomes easier where effective Enterprise Social Network is implemented and this improve to performance massively. According to Anders(2016) in his study of the early adopters of Team Communication Platforms (TCPs), which are the underlying platforms on which ESN is built on, discovered that the Knowledge sharing and collaborative workflows are supported and enhanced with such platform in place.

All the features, functionality and peculiarities of social networks are replicated in ESN for social collaboration and internal communication in an Organization (Richter & Riemer, 2013). An ESN makes interaction and information sharing easier among employees or members of the institutional community (Aoun & Vatanasakdakul, 2012) and this enhances value creation because people can now create groups of specific purposes, they can post important updates and even conduct surveys easily as they

can connect members of the enterprise easily through their profiles and notifications (Li, 2012). We can then deduce that ESN allows for the establishment of social relationships and interactive communication and further puts emphasis on user generated content (Riemer, Scifleet, & Reddig, 2012) which will be an effective huge boost to Knowledge sharing.

2.4.3 Enterprise Social Network vs. Traditional Intranet

It is also important to mention that there is a difference between Intranet and Enterprise Social Networks. Intranets are the main central hub of official content; they are for spreading officially organized information to employees or members of an Organization in a streamlined manner. On the other hand an ESN platform is mainly for enabling of human relationships and communication flow in the workplace, it is built to aid communication and to connect employees (Richter & Riemer, 2013). The usage and flow of ESN is not rigid and streamlined like it is with intranet. In intranet, the information shared is glance visible for an individual and it varies depending on the level of personal and work relationships and interests to content and groups. Whereas, ESN is the stream of ideas, thoughts and opinions either as information or to start a conversations that is characterized by dynamic interactions and this is done in real time (Young, 2015). Even though the boundary of difference between the two concepts may be hard to define because of the way intranet has been fine-tuned and made better by adding a collaborative layer to it (Tredinnick, 2006), it is still very clear that the intranet is primarily based on the “Push” approach (Neal, 2015), where official information and content are pushed to the employees of organizations but ESN is characterized by a “Pull” approach, where all employees or members of the organization have a chance and a right to contribute with ideas and give information that can be useful to other members of the organization (DiMicco et al., 2008). Another major difference is the cost of adoption and implement of Intranet and it's configuration complexities but the ESN platforms are mainly lightweight SaaS technologies based in the cloud, that allows for a quicker implementation and makes them far less costly for both implementation and maintenance (Decsey, 2012; Saldanha & Krishnan, 2012; Zinck, 2012).

Therefore, we can say that ESN platforms leverage on information visibility and communicative actions. ESN also help to expand the reach of people, networks and information, which will simultaneously lead to an effective knowledge sharing that will enhance efficiency of information management and social learning. We must also say that the success of ESN to enhance social collaboration and knowledge sharing will be dependent not only on the implementation of the concept but also mainly on employee's adoption and involvement in the daily usage (Riemer et al., 2009)

2.4.4 Enterprise Social Network Use Case

The functionalities of ESN are closely the same with the functionalities of social media as defined earlier but after observing the implementation of ESN in some organization, Riemer and Richter (2012) came up with what they called the S.O.C.I.A.L. framework of the use case of Enterprise Social Network after comparing its usage in different organizations. They were able to organize the benefits of ESN into six categories in the framework and each of the categories was further expounded into two subcategories as illustrated by the figure below;

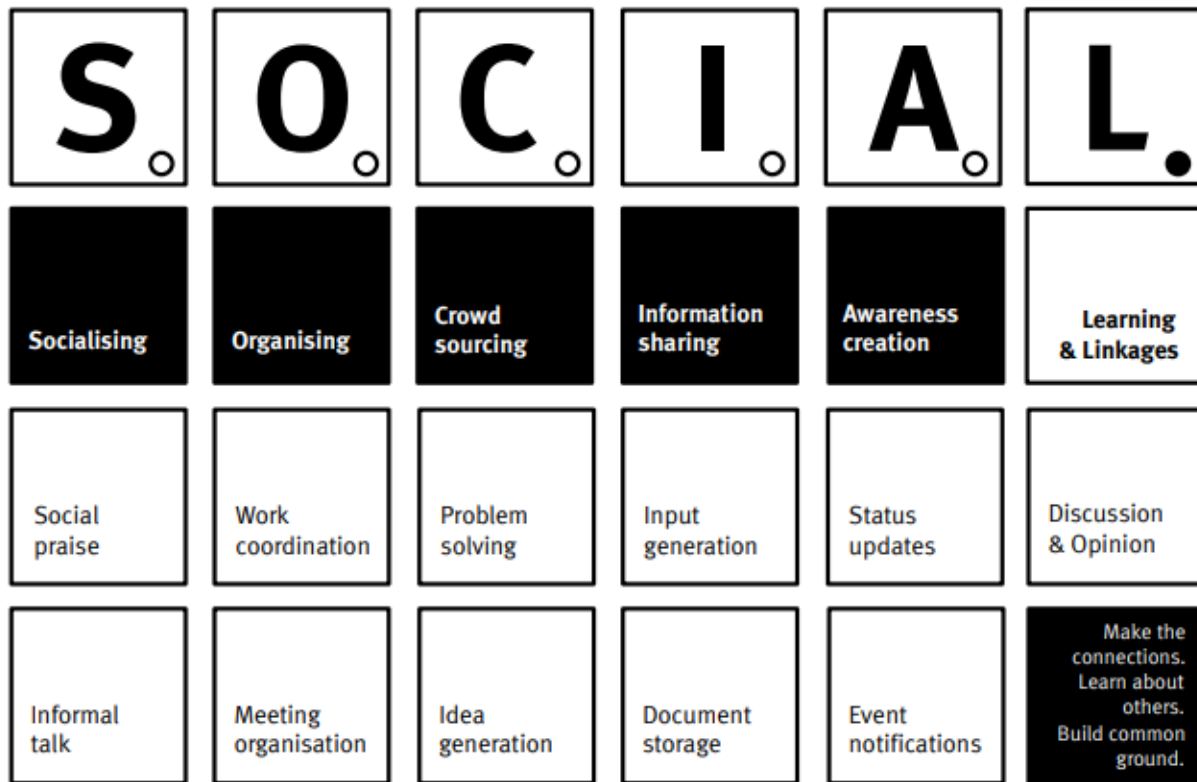


Figure 2. 4 The S.O.C.I.A.L Framework of ESN use cases (Riemer and Richter, 2012)

The term S.O.C.I.A.L was derived as an acronym to the six categories of use cases and the account suggested that ESN provide a place for:

1. **Socializing:** which refers to a platform where connection with others is made possible. Every organization can only thrive on how connected and how much its members can work together to achieve the common goal of the organization. ESN provides a place where people can connect to one another and able to work as a social group. Socializing with others and having a place to interact on informal level plays a great role in connection and collaboration and this is what the socializing category of the use case of ESN is all about. (Riemer and Richter, 2012)
2. **Organizing:** this refers to how ESN can help in the organization of tasks. Decisions about a particular project can be made and coordination to achieving

such project can be made possible through the engagement of ESN. This can be maximized by the creation of small group to engage the exact people that are involved in such project or decision making. This use case is a totally different one from the socializing category and this makes ESN very useful from many sides. (Riemer and Richter, 2012)

3. **Crowdsourcing:** Crowdsourcing category will refer to the possibility of being able to request for input from a variety of users of the platform. People can state what they about a particular topic and this can aid in Idea generation and faster way to solve problems (Riemer and Richter, 2012). One major example is when RedRobin used Yummer, one of the two networks of Yammer that they adopted, to execute a project called “Blueprint Project”. The project was designed to allow employees provide ideas on how the company can cut expenses without any decline in the quality of their products or services. It was a competition to give the idea that is most effective a thank you gift of \$1000. Thousands of ideas were pitched and the gift was won by a manager who suggested that RedRobin should start using reusable cups for the children beverages instead of disposable ones. This saved the company millions of dollars (Laudon & Laudon, 2018). Crowdsourcing can be to source for ideas or resources for a particular cause.
4. **Information Sharing:** This is probably the most common of the benefits of ESN as seen from different sources. Links to other information can be shared in form of URL and other data can be shared and stored on the platform for anyone to use at that instance and can also so be referred in the future time. ESN provide a space in the cloud where can be saved and can be retrieved later if not deleted (Riemer and Richter, 2012).
5. **Awareness Creation:** One of the beautiful things which ESN can do as well as Social media is that one can update statuses which can serve as awareness to others about a particular activity or event. Notifications about very important matters can come up and this help as a reminder of what is important. A meeting can be pinned for people to see as they open the ESN platform. Reminder of monthly or yearly reoccurring activities can easily be seen with the notifications.

- 6. Learning and Linkages:** This is made possible as opportunity is made to create small groups that can bring together people of common interests where Knowledge is shared and trainings are done and so an employee can learn from the knowledge of another employees. With this kind of opportunity to learn from each other in an informal manner, a shared background is established which makes common grounds and/or mutual knowledge possible and this is what fosters peace and better relationship among members of the organization and this will be to benefit of the organization (Riemer and Richter, 2012).

It is easy to then argue that ESN is not ultimate needed because there are some technologies that can perform some of the function illustrated in the framework above for example, email can be used and has been used to communicate information and some data repository system allows for data sharing as described as one of the benefits of ESN above. However, the uniqueness of ESN is that it can combine all these benefits in a single platform and this makes the information and knowledge stored or shared on ESN available to any rightful member of the platform at any time it is needed (Treem & Leonardi, 2012).

2.4.5 Evolution of Enterprise Social Network(ESN)

ESN became popular in the work place with the emergence of Web 2.0, Enterprise 2.0 and the influence of digital native in the work environment (Terrar, 2015). The two main forces or factors upon which digital transformation thrived on in the work environment are Enterprise 2.0 and the influence of the digital natives (Saldanha & Krishnan, 2012).

2.4.5.1 Web 2.0

The term web 2.0 is the term which brought about the development of online services that includes information sharing and Collaboration. It the main shift from the former static “read only” way of the using the internet to the more participatory and interactive webpages and platforms online. The web 2.0 is seen as the second version of the internet which began after the dot com bubble burst in 2001 (Kreitzberg, 2009). In the web 1.0 era, people are limited to viewing content passively, they are not able to

interact with the content they viewed. But in the web 2.0, content are user-generated, there is ease of use and compatibility with other devices, system or products for users is possible; this is otherwise called interoperability. The term has been around since 1999 but was made popular by Tim O'Reilly in the media web 2.0 conference which featured a series of brainstorming and discussions about World Wide Web in the late 2004 (Levy, 2009; Wikipedia on Web 2.0, n.d). Web 1.0 was more about commerce while WEB 2.0 is more about people (Singel, 2005). There are some central principles around web 2.0 that made it so useful and better when it comes to day to day operations and content development. These principles have been described in different papers (O'Reilly 2005) and Levy, 2009 emphasized some the principles which have connection with Knowledge Management, and they are alighted below:

As a Platform: First, he stated that WEB should be seen as a platform, and not the main application. If it is seen as a platform, it them will be designed to serve the main core for which it was created. He have example of how telephone is built for conversation. Telephone is good but the more important is the Conversation that needs to be achieved through it use. So also with the web, the purpose it is coming to serve should be the core of its existence. Companies like Amazon and Ebay understood this concept and succeeded in implementing their web as a platform. Netscape created something that look like a platform but dominated in terms of content and standards and this forfeited this point of making the web as a platform (O'Reilly 2005)

Service development: According to (Levy, 2009), this derived its essence from the point of creating WEB as a platform or channel. She believes web should be more about creating services and not just applications. A service can be created and connected to other services.

Active User Participation: Users use to just be end users both in the Web arena and KM world. The creators create and users use but the narratives have been modified in the Web 2.0 new world, Users are now active participants and they can now give added value to the content. Solobak (2007) during the KM conference in Chicago described the different levels of users as passive users, minimal active users and collaborative

active users. A few implications of the above principles includes that the service can improve more and more as people get to use it because as they participate, the architecture of the platform can be enhanced; Collective intelligence can be enhanced; Content becomes the core of the platforms also.

De Hertogh, Viaene, & Dedene, 2011 also described others services that characterized Web 2.0 as platform that allows for usability and recombination of data, content creation and content modification enhancement, design and update flexibility and simple interface.

The table below shows the eight core patterns that characterize Web 2.0 as described by Musser and O'Reilly, (2007) and it described the change implication it effected in internet applications:

Principle	Description
Harnessing Collective intelligence	Internet applications should harness the collective intelligence of all internet users. In principle, it demands the creation of an architecture of participation, where simple and user-friendly operation support user-generated content, which in turn leverage the network effect, where the software gets better the more user contributions taking place.
Data is the next "intel inside"	One of the key aspects of differentiation in the era of Web 2.0 is collected data, where it demands for the use of unique and hard-to-replicate data sources.
Innovation in assembly	The creation of platforms to foster innovation in assembly, where rearrangements of data and services are creating new opportunities and markets.
Rich User experiences	Going beyond traditional web-page metaphors in order to deliver rich user experiences combined with the best of desktop and online applications.
Software above the level of a Single device	The creation of software enabling the visualization on multiple devices connected through the Internet, building on the growing pervasiveness of online experience.
Perpetual Beta	Moving away from old software development models and adoption in terms of online and continuously updated, software as a service (SaaS) models.
Leveraging the long tail	By enabling a broad reach and low-cost economics by the Internet, Web 2.0 leverages the capture of niche markets profitably.
Lightweight Models and Cost-effective Scalability	In order to establish products and businesses in a short time and cost-effectively, the usage of lightweight business- and software development models are required.

Table 2. 1 Eight core patterns of Web 2.0 (Musser & O'Reilly, 2007)

We can then summarize that Web 2.0 technologies allows a large number of users to do more than just consume information, but to also be able to generate content and interact with other active users. Users now become active information supplier like other users and not just passive consumers and this bring about stronger communication and collaboration (Lee & Lan, 2007).

2.4.5.2 Enterprise 2.0

Just as we have described web 2.0 as the advancement in the usability of the internet from simple one directional passive usage to a more social active participatory way, Enterprise 2.0 is the integration and implantation of this web 2.0 technology and tools into the organization culture of doing things to drive better value, communication and collaboration (Levy, 2009). The technology can be implemented as a form of individual standalone applications such as wikis and blogs but it can also be implemented as an entire social software suite that creates collaboration, communication and communities and content in one technology as it is achieved in ESN. Enterprise 2.0 technologies supports the introduction of collaboration, knowledge exchange, open conversational involvement, information creation/sharing, social networking development both internally and externally to the workplace (Corso, Martini, & Pesoli, 2008). Enterprise 2.0 has several aspect but Wikipedia and some individuals like Spanbauer, (2009) focus on knowledge management aspect of it. Several organizations have implemented WEB 2.0 applications and tools, some implemented it through specific business units (Spanbauer, 2006) and some excellently implemented it like IBM and Motorola who Scarff (2006) sees as perhaps the most outstanding of the organizations which implemented Enterprise 2.0 amongst many other organizations like Milestone Group, General Motors, Procter and Gamble etc. which have implemented it (Spanbauer, 2006; Hinchcliffe, 2007a).

The segments of Enterprise 2.0 as described by Lucy 2007 are described with the figure below:

Technology adoption Applications & tools	Knowledge Management	Marketing
	Technology Enhancement	Technology Enhancement
System infrastructure	Users: Organization	Suppliers, Users

Table 2. 2 Enterprise 2.0 (Lucy, 2007)

While some analyst believe there is a lot of hypes around the adoption and use of Enterprise 2.0 tools in the organization, Hoover says more than 50% of the organizations are using at least one of the Enterprise 2.0 tools which can be blogs, wikis, Social networks, podcasts and so on (Hoover, 2007).

2.4.5.3 Digital natives

Digital natives are individuals born and nurtured in the period of digital abundance and it has been noted that they are another major drivers for the changes that happened to how work and social communication and collaboration is done in organizations today (Palfrey & Gasser, 2013). There is a saying that everyone working in an organization are either of the digital natives and digital immigrant's generation.

The generation of the digital natives are considered to be ones born after 1980, and they have the natural disposition to using computers, Internet and videogames (Prensky, 2001), because they grow up in a period when information and communication technologies (ICT) have become a norm, a time where technology is like a primary need (Tapscott, 2009, p. 18) and this is what make them to have high reliance and connection to the ICT tools (Bennett et al., 2008). They always want to be online and be connected to people with their smartphone. Digital natives are therefore used to experimental learning which means that they love to learn by doing. They can

teach themselves how to use new technology making use of ICT as their main source of information (Oblinger & Oblinger, 2005).

Tapscott (2009) stated the main characteristics of the digital natives that differentiate them from the older generation by defining what he called the eight specific norms that described the changing attitudes and behaviors of the digital natives as influenced by this generation. The norms described are:

Freedom: He believes that digital natives love take freedom for granted, they love to be themselves and choose what they want. They also love to choose where and when they work.

Customization: They love to personalize and customize everything from Phone, to online space and so on. They will even love to work in a place where things are customized for them.

Scrutiny: They are inquisitive set of people. They love to distinguish between facts and fictions. They love to verify and this makes them to want to always be online.

Integrity: When the digital natives want to buy or work, they like to patronize companies which have integrity. They look for ratings on the subject they are seeking to buy. They care about honesty and commitment.

Collaboration: They collaborate and influence each other in the digital space like social media. They discuss and debate different matters and create common grounds.

Entertainment: They love and seek entertainment in different aspect of their lives. They want work and other things to be done with fun where they can deal with multiple activities simultaneously.

Speed: They have an unquenchable interest in speed and instant feedbacks. They live a very fast paced Life.

Innovation: They grew up in a culture of innovation characterized by ongoing creativity and change in the way things are done. They constantly look for innovative ways to collaborate and work.

The digital immigrants on the other hand are not born in the digital age, but they have adopted and learnt many of the new technologies that come with the digital age during their life (Prensky, 2001). Even though the emerging Web 2.0 technologies tools are not natural to them, they have taken the initiative to learn and adopt it in their adult lives (Vodanovich et al., 2010). It is believed that even though the digital immigrants may learn very well and become proficient in the use of technological tools, they will still be different to the way the digital natives make use of such technology (Vodanovich et al., 2010). For example, digital immigrants still prefer email as a main communication channel online while digital natives will choose instant messaging tools as their own preference. Digital natives are already used to networking with social tools, therefore it will be easier for them to adopt the use of ESN platform in organization and business context (Oblinger & Oblinger, 2005).

Even though several individuals has debated the term digital natives and some of them have tried to debunk the difference between the two generation as explained above, this work is not intending to take sides and it is also good to note that it has been proven by research there is a lot of difference in the way the younger generation process and deal with information as compared to older generation (Prensky, 2001) and this definitely have affects the way they get work done in the organization because of their heavy reliance on technology. This is worthy of note because the people that this work seek to explore are university students which are individuals that will be considered digital natives or younger generation.

2.4.6 Challenges attached to the Implementation of ESN

Even though there is increase in the implementation of ESN, it is glaring that there are lots of organisational challenges that is attached to the implementation of the platform in organisations. In 2015, a report from Harvard Business Review shows the use of the

social platforms and the limitation or challenges that is inhibiting it full embrace while suggesting a more buy-in into the idea (Li, 2015). ESN needs to be carefully designed to align with the organisational culture of the organisation that is being introduced to (Koch, Leidner, and Gonzalez 2013) because good technology is just one leg of the tripod stand of management information systems others being good management and effective organisational structure and culture.

As beautiful as the advantages of ESN implementation are to the organization or it may be to tertiary institutions, there are a few challenges attached to it implementation too. Two of the challenges that may be attached according to previous literatures are listed and explained below:

1. Smooth Adoption: Many organizations who has taken the leap to implement ESN did not have a smooth adoption because of a number of challenges that ranges from lack of commitment from managers, lack of good adoption leadership and lack of clear expectations (Schäffer & Thorradottir, 2015).
2. Need to Teach Users: (Henderson, Snyder, & Beale, 2013) in their work about how social network has been beneficial for collaborative learning proposed that when students are deliberately taught on how to use social media for educational purposes, students will derived huge benefit in the use of it. This will mean that implementation ESN will require the managements to educate students for the purpose for which it is implemented.

2.5 Research Model

The research model below is designed by the researcher to show the relationship between the independent and the dependent variables.

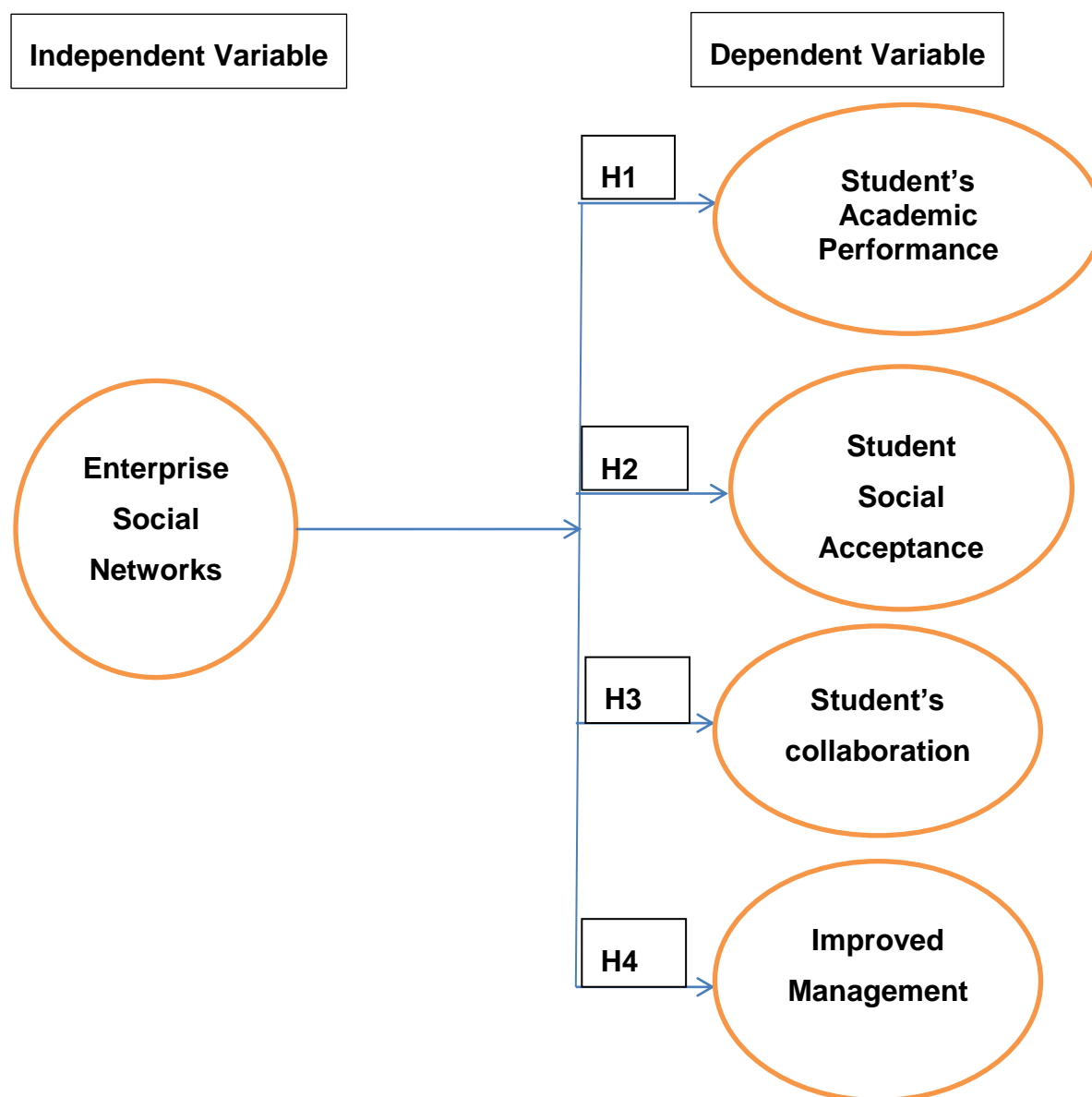


Figure 2. 5 Thesis Model designed by the researcher.

The Independent variable is the Enterprise social Network which I am proposing to be implemented in the tertiary Education community while the dependent variables are the benefit in which I assume the implementation on such a tool will bring on the most important stakeholder of such an institution which are the students. This will be proven or disproved by observing and documenting what the students of such an institution thinks, it is reported in chapter four. Below are a few correlations of the dependent variables with the independent variable from the literature:

Student Academic Performance (SAP): many researchers have looked into the effect that social media have on college student and not a few of them discovered that the social media has had a lot of negative effect on student performance especially when they use it too much and not have a control over how they use it. Yet, (Wang, Chen and Liang, 2011) still agree that as many as the challenges are, social media is still a very effective pathway for developing effective knowledge and social skills needed by student outside of physical classroom. Although, Englander, Terregrossa and Wang (2010) found a negative correlation between use of social media and academic performance, their point was on the distractive dimension of the social media and generally the internet. Having observed 128 students in a micro-economics course, they posit that student end up spending long hours on the internet and refusing to study and this has a negative effect on their GPA. (Kirschner & Karpinski, 2010) work on facebook and Academic performance concluded that the students who use facebook ended up having poorer results than the one who do not. All these may want to make us ignore the importance of a social network and the good it can do to the student especially when it is rightly harnessed. The fact that social media has become a general part of the human life means we should look at making the best use of it. (Al-Rahmi & Othman, 2013) posited that three characteristics of a social network that can really make it have a positive effect on the student academic performance are the opportunity to interact with peers, opportunity to interact with lecturers and engagement. When these three characteristics are explored within the community of a tertiary institution, there is huge possibility that the Academic performance of the student will be enhanced.

Students Collaboration(SC): A lot of articles have explored the transformation social media has on the education industry as a whole and many of them have talked about the enhancement of collaborative learning which eventually birth students interests in more research and also lead to better and effective transformation of students. (Henderson, Snyder, & Beale, 2013) posited that collaboration and interaction with students in other class can be enhanced by media and they encouraged that an explanation to student of why collaboration is important and telling them the social media can be of help will greatly impart best results. Eventhough (Heafner & Friedman, 2008) has also disappointingly remarked in his work that introducing a social media to a class face to face collaboration is high can leave the social media relatively redundant, I believe having the students see the benefits of the magic of being able to collaborate and still work together outside the class walls will improve this. Henderson, Snyder, & Beale (2013) reported in their work instances where social media has played a wonderful role in facilitating a collaborating engagement of teachers and students, students and other students in other location and even with external experts. Pifarre and Fisher (2011) posited that social media can enhance students collaboration in group tasks. The media can be used to provide feedback to other students and can be used to provide feedback to external audience too (Duncan-Howell & Lloyd, 2008). (Henderson, Snyder, & Beale, 2013) concluded that student enjoyed using social media as a part of their school work even though many research work has considered it not successful. I believe such interest of students can be explored by creating a social network within the system that is directed towards the positive side of things. Mbodila, Ndebele, & Muhandji, (2014) concluded in their work after exposing some students in a south African university to Facebook as a learning platform that collaboration can sure be enhanced using social media and they even recommended that universities should introduce the use of social media in learning and teaching.

Students Social Acceptance (SSA): Social Acceptance is fitting in. A desire to be accepted In a community and/or to be fully part of one. Social media has play a huge part in this, almost everyone now have a group or a tribe they belong to online and this influence what they post and online. Kings University Online (2019) published when

they were trying to explain the psychology of social media wrote that when we observe what people post or how they wrote, we can see that Abraham Maslow's hierarchy of need is reflected in the reasons why people post on social media. They wrote that users always want to post to feel some kind of social acceptance from a group. Everyone has the deep desire to feel belong: To belong to a group or a community and Social media has made that more possible. Having such a platform as ESN in the university will make students feel belonged to the community. Media specialist and academics, Matthew Pitman found that people get to sharpen their own identities when they involve in image oriented platform such as instagram (Kings University online 2019).

Improved Students Management: For the purpose of this study, Knowledge management here will focus on Knowledge sharing. It is important that important information or Knowledge go around to as many that need it as soon as possible. Performance swings to the high side when the information needed to get work done is handy especially through other workers around (Kwahk and Park 2015); this is exactly the same for student's management in such a big community like a University. A platform like ESN will make important information go viral and all through the university community as at when needed. This is the premise upon which the hypothesis was based.

Chapter 3 Research Methodology

3.1 Introduction

The chapter presents the research design, population of the study, sample size, data sources and data analysis procedure together with the model specification.

3.2 Research Design

The quantitative research design method was adopted in this study. The study sought to measure the perspective of students on the Implementation of Enterprise Social Network in the Tertiary Institution. The study will look at how the implementation of the Network can affect the:

- a. Students' Academic Performance"
- b. Students Collaboration,
- c. Students Social Acceptance
- d. Student management by the institution.

All these will be measured from the student perspective.

Therefore, the independent variable will be the Enterprise Social Network while the dependent variables will be the a. Students' Academic Performance, b. Students Collaboration, c. Students Social Acceptance and d. student's management by the institution.

Random sampling technique was the utilized in selecting the required number of subjects from the population.

3.3 Measures

All the responses were collected online and were accessed using 5-point Likert-type scale with anchors 1= strongly disagree; 2 = disagree; 3 = neutral; 4 = agree and 5 = strongly agree.

Questions used for the questionnaire for all the variables were adopted from multiple research authors which included Adu-Manu, Arthur, & Yeboah, (2013), Gupta & Bashir, (2018), Felix, Isaac & Eric, (2019) and Q14 of Schäffer & Thorradottir Thesis, (2015)

3.4 Population and Sample

The populations for this study are students studying in higher institution in North Cyprus. The sample for the study will consist respondents from the universities in the country such as Near East University, Cyprus International University and European University of Lefke. The target respondents for the questionnaire are Undergraduate and post graduate students of these Universities. There are about 81000 students in North Cyprus and the sample size was supposed to be 382 according to Sekaran and Bougie (2013) but we were able to get 231 respondents.

3.5 Data Collection

The data was collected quantitatively, Research questionnaire were sent out for respondent to fill and all data were received after the students filled it. Because of the Covid-19 situation, data collection was done through an online platform (Google form survey) to make the collection possible. Students were encouraged to fill the questionnaire and to send out to their friends to fill also.

3.6 Test of Significance

The research was done putting into consideration all the ethical rules guiding a research work.

3.7 Limitation of Study

The research data was limited to the respondents from some university in Northern Cyprus and the data was collected online. Doing this research with students from different geographical location and in different places around the world may help verify more the Conclusion of the research.

Chapter 4 RESULTS:

4.1 Descriptive Statistics:

For this research, we received 231 respondents from all the four universities. And the summary of respondent distribution is described below:

Gender Description: 113 respondents are man which is 48.9% and 118 of the respondents are female which account for 51.1% of the respondents. The pie chart below show the information in Figures:

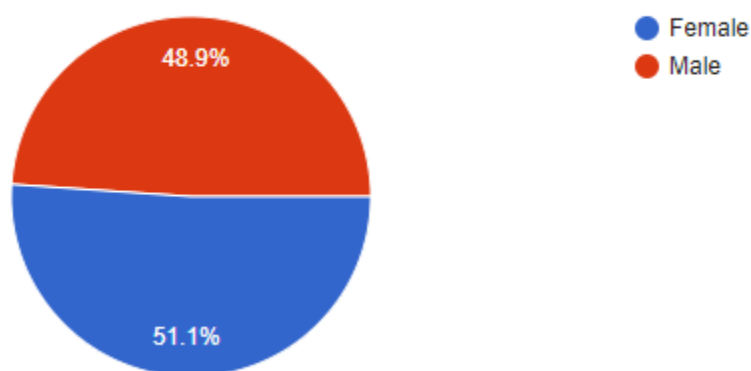


Figure 4. 1 Gender Distribution

Educational level: 121 of the respondents are undergraduates, 75 of them are Masters students and 35 of them are PhD students. Below is also this information in Pie Chart:

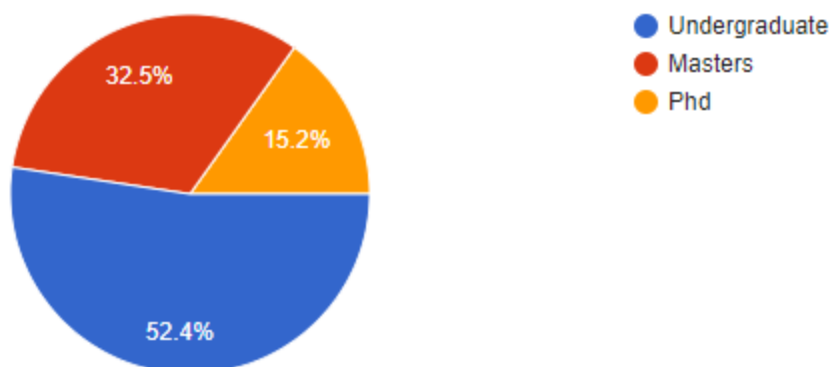


Figure 4. 2 Educational Level Distribution

Age Group: Two(2) of the respondents are below 15 years of age, Thirty(30) respondents are between the age of 15 and 20, Ninety-two(92) of them are between the age of 20 and 25, Ninety-seven(97) of the respondents are between the age of 26 to 35, six(6) of them are between the age of 36 to 45, three of them are between the age of 46 to 55 and one(1) of the respondents is above the age of 55. The information is represented in the figure below:

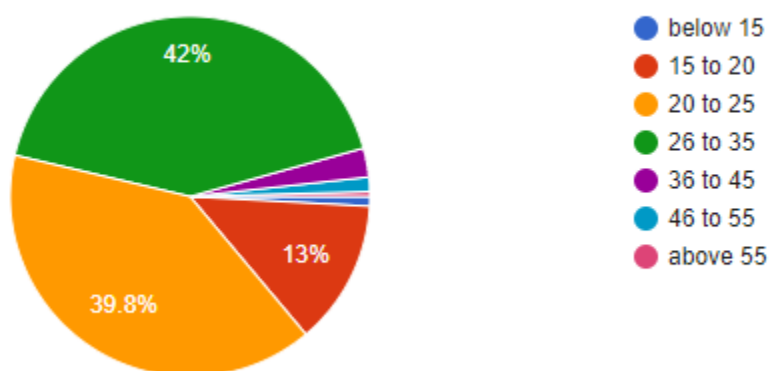


Figure 4. 3 Respondents Age Distribution

University: one hundred and three(103) of the respondents are students of Near East University(NEU). One hundred and seven(107) of them are students of Cyprus International University(CIU), Just five(5) of them are students of Eastern Mediterranean University(EMU) and the remaining Sixteen(16) are students of European University of Lefke (EUL). The figure below shows this information in a pie chart.

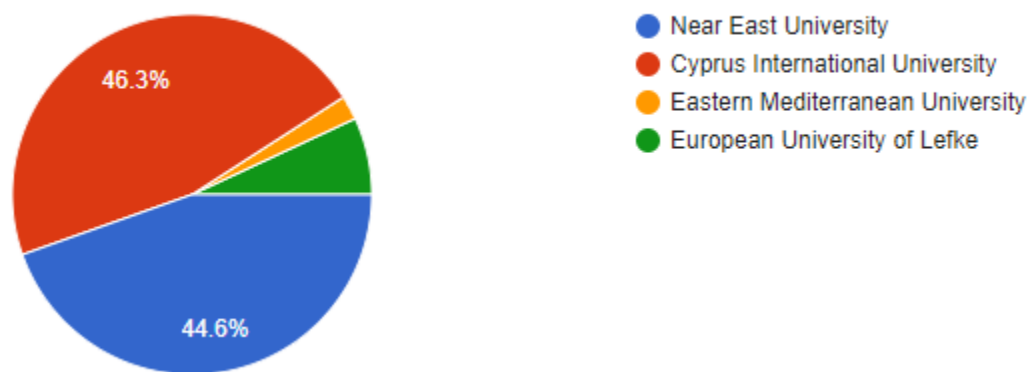


Figure 4. 4 Respondents Universities

What they use social media to do: One of the questions was to ask what the respondents really do on social media and one hundred and seven said they use it for entertainment, one hundred and ninety-eight said for information and education and eighty-two said they use it for business. They were allowed to tick more than one box in this session because we know social media can be used for quite a number of things. There is also an opportunity to choose others and type in what they use it for. The figure below shows the full details of what they chose.

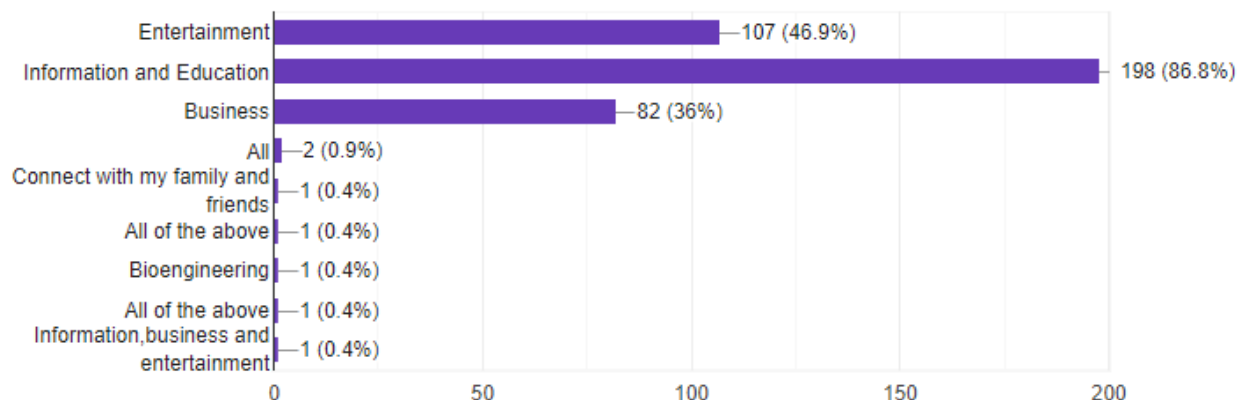


Figure 4. 5 Respondents Social Media Engagement

Another question was how often they engage other students in academic related activities using social media; One hundred and eight (108) responded that they use it often to engage other students on academic related activities and thirty eight said they use it very often for this same purpose, Eighty-one respondents said they rarely do that while four(4) of them said they never use social media in that manner. The information is also represented with the figure below:

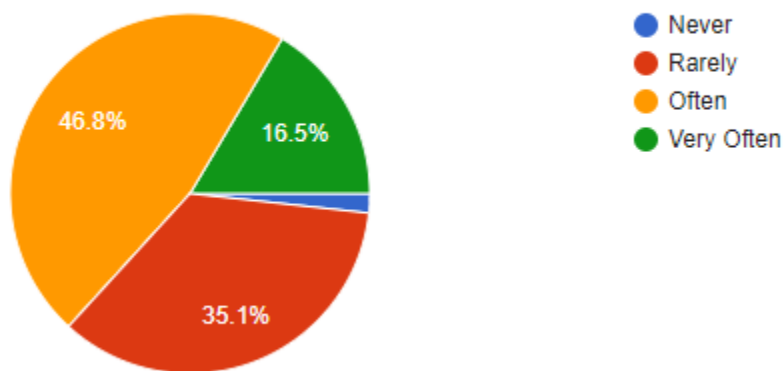


Figure 4. 6 Respondents Frequency of Engagement

One hundred and sixty five (165) respondents said they find it interesting to use social media to read academic related articles. Twenty of them said they do not find interesting

to use it to read academic articles and forty-six (46) of them said maybe. This is also represented in the figure below:

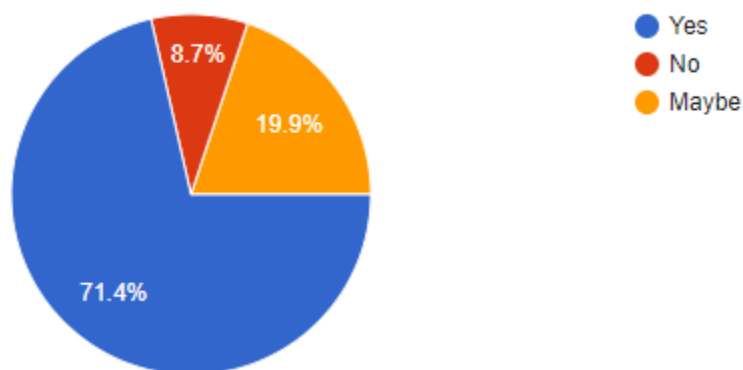


Figure 4. 7 Respondents Interest in Reading Academic Articles

In a day, sixteen(16) of the respondents confirmed that they use less than one(1) hour on social media, One hundred and nineteen (119) said they use between one(1) to five(5) hours on social media platforms. Fifty-six (56) of them said they use between five(5) and eight(8) hours on social media in a day and forty (40) of the respondents said they spend more than eight(8) hours. The figure below explains it better.

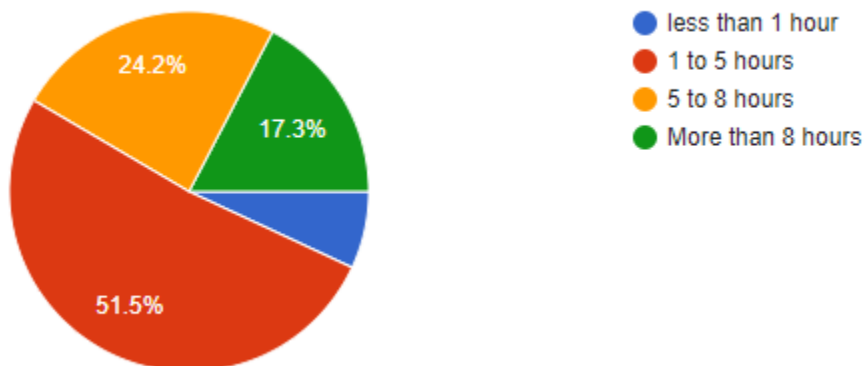


Figure 4. 8 Respondents Time on Social Media

The respondents were asked to tick the social media website that they find very interesting. Fifty-three of them ticked Facebook, One hundred and nine of them ticked Instagram, forty of them ticked Twitter, One hundred and forty two of them ticked Whatsapp. The others option was available and people typed in YouTube, LinkedIn and Telegram. Their responses are summarized by the figure below:

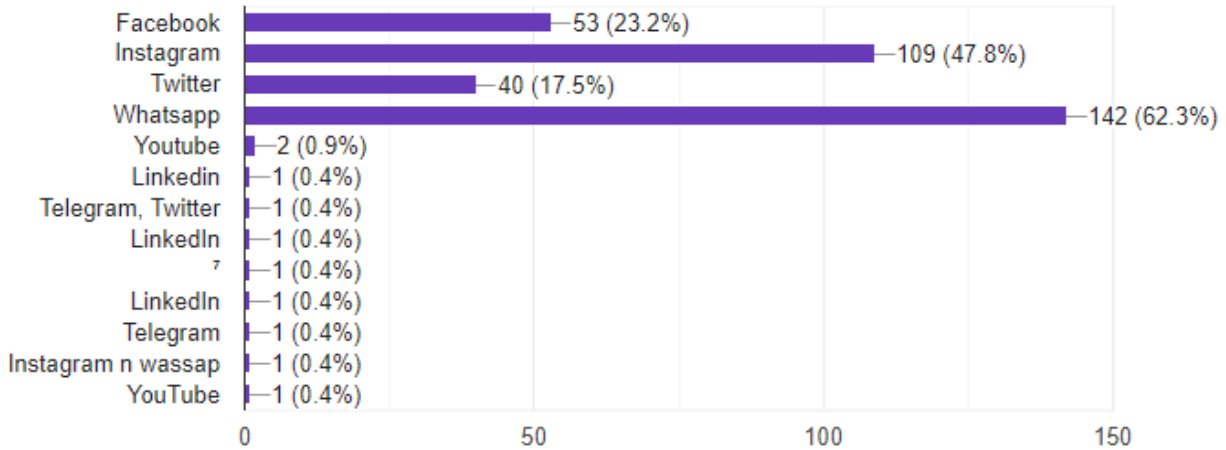


Figure 4. 9 Respondents Social media of Interest

4.2 Correlation Analysis

A correlation analysis was conducted between the dependent variable (ESN) and the independent variables namely student academic performance, student collaboration, student social acceptance and improved Student management.

		Correlations				
		ESN	Student_Acad	Student_Collab	Student_Acceptance	Improved_Management
ESN	Pearson Correlation	1	.618**	.234*	.272*	.065
	Sig. (2-tailed)		.000	.015	.011	.512
	N	136	101	107	86	104
Student_Acad	Pearson Correlation	.618**	1	.356**	.401**	.132
	Sig. (2-tailed)	.000		.000	.000	.174
	N	101	130	109	93	107
Student_Collab	Pearson Correlation	.234*	.356**	1	.404**	.309**
	Sig. (2-tailed)	.015	.000		.000	.001
	N	107	109	154	104	119
Student_Acceptance	Pearson Correlation	.272*	.401**	.404**	1	.134
	Sig. (2-tailed)	.011	.000	.000		.205
	N	86	93	104	121	91
Improved_Management	Pearson Correlation	.065	.132	.309**	.134	1
	Sig. (2-tailed)	.512	.174	.001	.205	
	N	104	107	119	91	167
*. Correlation is significant at the 0.05 level (2-tailed).						
**. Correlation is significant at the 0.01 level (2-tailed).						

Table 4. 1 Correlation Analysis Table

From the table:

It could be deduced that there is a positive relationship between ESN and student academic performance and the relationship is statistically significant($r=0.618$, $p<0.05$).

It could be deduced that there is a positive relationship between ESN and student collaboration and the relationship is statistically significant($r=0.234$, $p<0.05$).

It could be deduced that there is a positive relationship between ESN and student social acceptance and the relationship is statistically significant($r=0.272$, $p<0.05$).

It could be deduced that there is a positive relationship between ESN and improved student knowledge but the relationship is not statistically significant($r=0.065$, $p>0.05$).

4.3 REGRESSION MODEL ANALYSIS

Relationship between ESN and Student Academic Performance

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.618 ^a	.382	.375	.30513

a. Predictors: (Constant), ESN

Table 4. 2 Regression Model Summary (ESN vs Student Academic Performance)

The regression model revealed that the model explained 38.2% variation in Enterprise social network.

ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	5.686	1	5.686	61.074	.000 ^b
Residual	9.217	99	.093		
Total	14.904	100			

a. Dependent Variable: Student_Acad

b. Predictors: (Constant), ESN

Table 4. 3 ANOVA Model Fit (ESN vs Student Academic Performance)

The ANOVA table indicated that regression model is statistically significant ($p < 0.05$)

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.403	.282		4.970	.000
ESN	.612	.078	.618	7.815	.000

a. Dependent Variable: Student_Acad

Table 4. 4 Regression Coefficient Table (ESN vs Student Academic Performance)

The student academic variable is a statistical significant variable ($p < 0.05$) according to the table of co-efficient above. It indicates that one unit increase in Enterprise Social Network leads to 0.612 increase in Student academic performance.

Inference: It could then be inferred that the implementation of ESN have a positive effect on Student performance

Relationship between ESN and Student Collaboration

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.234 ^a	.055	.046	.33285

a. Predictors: (Constant), ESN

Table 4. 5 Regression Model Summary (ESN vs Student Collaboration)

The regression model revealed that the model explained 5.50 % variation in Enterprise social network.

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.675	1	.675	6.089	.015 ^b
	Residual	11.633	105	.111		
	Total	12.307	106			

a. Dependent Variable: Student_Collab

b. Predictors: (Constant), ESN

Table 4. 6 ANOVA Model Fit (ESN vs Student Collaboration)

The ANOVA table indicated that regression model is statistically significant ($p < 0.05$)

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.989	.311		9.618	.000
	ESN	.212	.086	.234	2.468	.015

a. Dependent Variable: Student_Collab

Table 4. 7 Regression Coefficient Table (ESN vs Student Collaboration)

The student collaboration variable is a statistical significant variable ($p < 0.05$) according to the table of co-efficient above. It indicates that one unit increase in Enterprise Social Network leads to 0.212 increase in Student Collaboration.

Inference: It could then be inferred that the implementation of ESN have a positive effect on Student Collaboration.

Relationship between ESN and Student Socials' Acceptance

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.272 ^a	.074	.063	.37454

a. Predictors: (Constant), ESN

Table 4. 8 Regression Model Summary (ESN vs Students' Social Acceptance)

The regression model revealed that the model explained 7.40 % variation in Enterprise social Network.

ANOVA ^a					
Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	.944	1	.944	6.730	.011 ^b
Residual	11.783	84	.140		
Total	12.727	85			

a. Dependent Variable: Student_Acceptance

b. Predictors: (Constant), ESN

Table 4. 9 ANOVA Model Fit (ESN vs Student Socials' Acceptance)

The ANOVA table indicated that regression model is statistically significant ($p < 0.05$)

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	2.566	.379		6.771	.000
ESN	.273	.105	.272	2.594	.011

a. Dependent Variable: Student_Acceptance

Table 4. 10 Regression Coefficient Table (ESN vs Student Social Acceptance)

The student collaboration variable is a statistical significant variable ($p < 0.05$) according to the table of co-efficient above. It indicates that one unit increase in Enterprise Social Network leads to 0.273 increase in Student Social Acceptance.

Inference: It could then be inferred that the implementation of ESN have a positive effect on Student Social Acceptance.

Relationship between ESN and Improved Student Management

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.065 ^a	.004	-.006	.41875

a. Predictors: (Constant), ESN

Table 4. 11 Regression Model Summary (ESN vs Improved Students' Management)

The regression model revealed that the model explained 0.4 % variation in Enterprise social network.

ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	.076	1	.076	.433	.512 ^b
Residual	17.886	102	.175		
Total	17.962	103			

a. Dependent Variable: Improved_Management

b. Predictors: (Constant), ESN

Table 4. 12 ANOVA Model Fit (ESN vs Improved Students' Management)

The ANOVA table indicated that regression model is not statistically significant ($p > 0.05$)

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	3.422	.395		8.655	.000
ESN	.072	.109	.065	.658	.512

a. Dependent Variable: Improved_Management

Table 4. 13 Regression Coefficient Table (ESN vs Improved Students' Management)

The improved student management variable is not statistical significant variable ($p > 0.05$) according to the table of co-efficient above

4.4 Mediation Analysis

A mediation analysis was further conducted to provide more insight between the relationships between Enterprise Social Network and improved management. The result show that that there is no direct relationship between ESN and Improved knowledge management ($p > 0.05$).

However, when student collaboration was introduced to mediate the relationship between Enterprise social network and improved knowledge management, it was that the relationship was statistically significant ($p < 0.05$).

Parameter estimates

Direct effects

					95% Confidence Interval	
					Lower	Upper
		Estimate	Std. Error	z-value	p	
Improved Students'_Management	→ ESN	-0.035	0.111	-0.317	0.751	-0.253 0.183

Note. Delta method standard errors, normal theory confidence intervals, ML estimator.

Table 4. 14 Mediation Analysis Table(Direct Effect)

Indirect effects

					95% Confidence Interval	
					Lower	Upper
		Estimate	Std. Error	z-value	p	
Students_Management	→ Student_Collab → ESN	0.092	0.047	1.936	0.053	0.001 0.185

Note. Delta method standard errors, normal theory confidence intervals, ML estimator.

Table 4. 15 Mediation Analysis Table(Indirect Effect)

Total effects

	Estimate	Std. Error	z-value	p	95% Confidence Interval	
					Lower	Upper
Improved_Management → ESN	0.057	0.108	0.523	0.601	-0.155	0.268

Note. Delta method standard errors, normal theory confidence intervals, ML estimator.

Table 4. 16 Mediation Analysis Table (Total Effect)

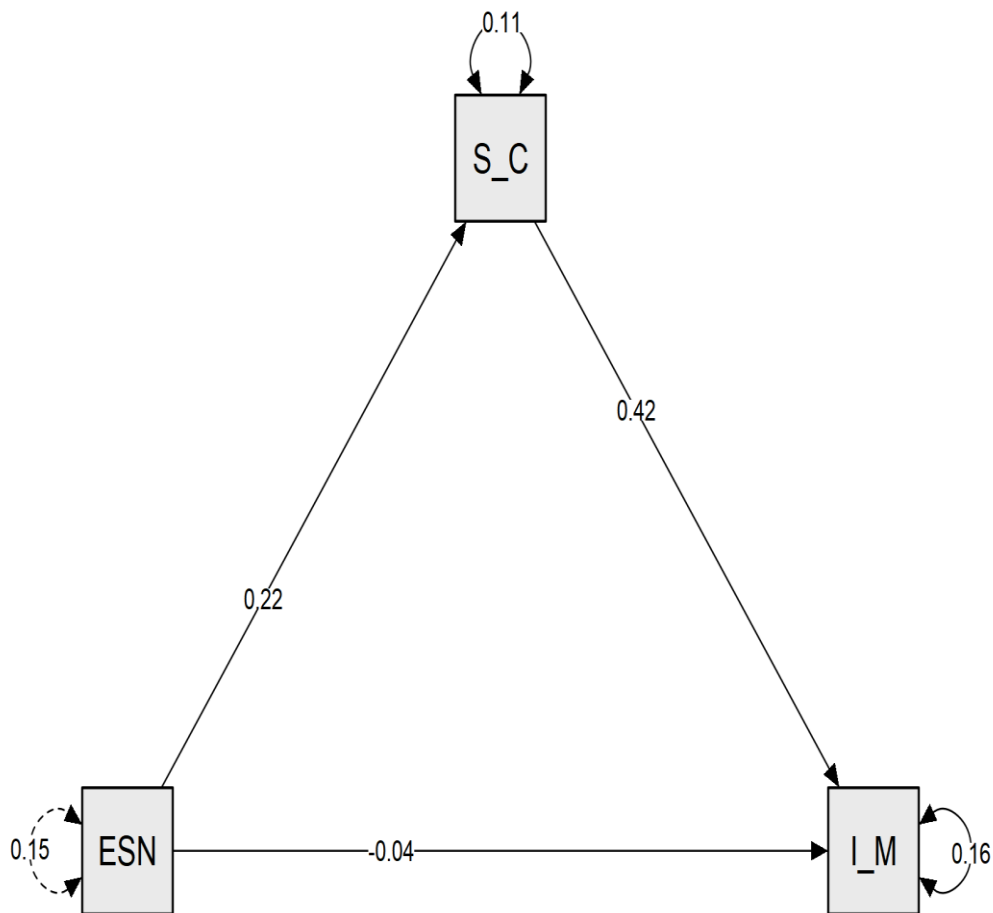
Path plot

Figure 4. 10 Mediation Path

The pattern show direct and indirect relation between improved students' management, student collaboration and Enterprise social network.

4.5 Chi Square Analysis

Association between Gender and the disposition to read academic related materials on social network sites?

Gender * interesting Crosstabulation						
			interesting			Total
			Maybe	No	Yes	
Gender	Female	Count	25	10	83	118
		% within Gender	21.2%	8.5%	70.3%	100.0%
	Male	Count	21	10	81	112
		% within Gender	18.8%	8.9%	72.3%	100.0%
Total		Count	46	20	164	230
		% within Gender	20.0%	8.7%	71.3%	100.0%

Table 4. 17 Cross Tabulation Table (Gender vs Academic Related Materials Interest)

Considering the cross-table analysis above, 83(70.30%) of the female respondents find it interested to read academic related materials on social network sites while 81(72.30%) of the male participants find it interesting. However, 10(8.50%) of the female do not find it interesting while also 10(8.9%) of the male participants expressed disinterest in read academic related materials on social network sites.

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.216 ^a	2	.898
Likelihood Ratio	.216	2	.898
N of Valid Cases	230		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 9.74.

Table 4. 18 Chi Square Test (Gender vs Academic Related Materials Interest)

The Pearson chi - square result indicated that there is no significant difference in the desire to reading academic materials on social network sites relative to gender of students ($\chi^2 = 0.216$, $p > 0.05$). Thus, it could be concluded that gender does not influence interest exhibited in reading academics materials on social network sites.

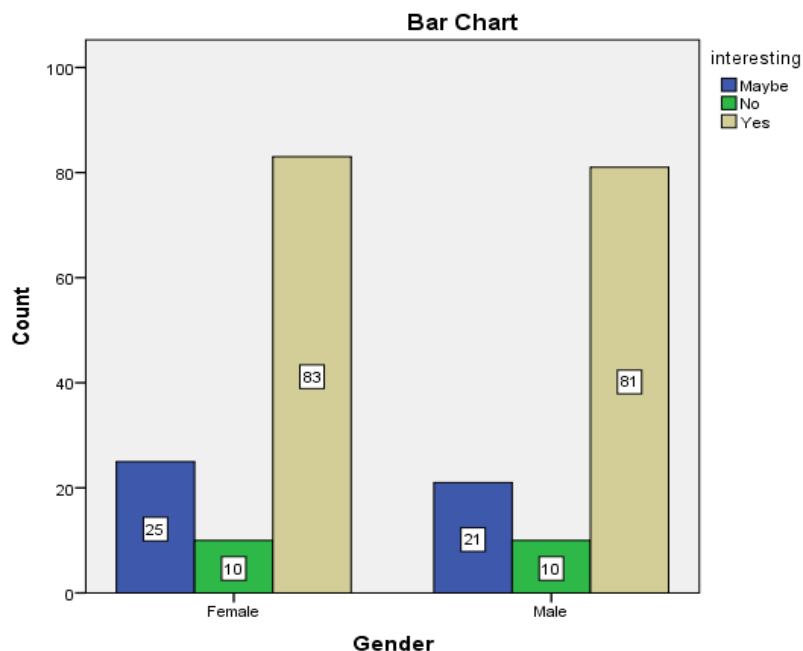


Figure 4. 11 Diagram showing gender association with interest in academic reading on social sites

Association between Education Level and the disposition to read academic related materials on social network sites?

Educational level * interesting Crosstabulation						
			interesting			Total
			Maybe	No	Yes	
Educational	Masters	Count	15	4	56	75
		% within Educational	20.0%	5.3%	74.7%	100.0%
	Phd	Count	8	6	21	35
		% within Educational	22.9%	17.1%	60.0%	100.0%
	Undergraduate	Count	23	10	87	120
		% within Educational	19.2%	8.3%	72.5%	100.0%
Total		Count	46	20	164	230
		% within Educational	20.0%	8.7%	71.3%	100.0%

Table 4. 19 Cross Tabulation Table (Educational Level vs Academic Related Materials Interest)

Considering the cross-table analysis above, 87(72.50%) of the undergraduate respondents find it interesting to read academic related materials on social network sites; 56(74.0%) of the Master's students find it interesting to read academic related materials on social network sites while 21(60.00%) of the PhD students find it interesting to read academic related materials on social network sites. However, 10(8.30%) of the undergraduate students do not have interest in this practice; 4(5.35%) of the Master's student do not have interest also while 6(7.1%) of the PhD students equally expressed their disinterest in this practice.

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.820 ^a	4	.306
Likelihood Ratio	4.366	4	.359
N of Valid Cases	230		

a. 1 cells (11.1%) have expected count less than 5. The minimum expected count is 3.04.

Table 4. 20 Chi Square Test (Educational Level vs Academic Related Materials Interest)

Since the assumption of the chi-square that no cell should have an expected count cell less than five (5) is violated, the Likelihood ratio test was used to examine the association between level of education relative to the interest in reading academic materials on social network sites. The Likelihood ratio test indicates that there is no association between education level and interest dispositions in reading academic materials on social networks since the p-value is greater than significant level of 0.05. Thus, it could be concluded that level of education does not influence interest exhibited in reading academic materials on social network sites.

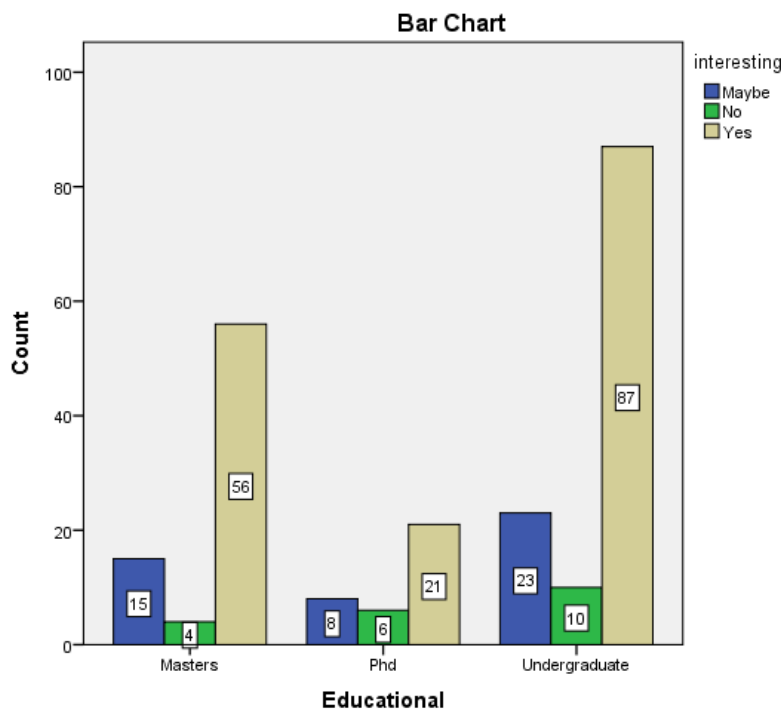


Figure 4. 12 Diagram showing educational level association with interest in academic reading on social sites.

Chapter 5 Findings and Conclusion

5.1 Introduction

This chapter is to describe the findings of this research which was to measure the perception of student about the implementation of enterprise Social Network as one of the tools to be used in the tertiary institution. The work was done by using questionnaire to collect data from the students about what they think the effect that the implementation of ESN will have on Students academic performance, the students' collaboration, students' social acceptance and better students' management.

5.2 Summary of Results:

The respondents for the research are 231 people. The data was collected through the online Google forms. The resulting data collected was analyzed to test the Model hypothesis.

H1: Implementation of ESN has a positive effect on Student Academic Performance

Using the correlation analysis, It could be deduced that there is a positive relationship between ESN implementation and student academic performance and the relationship is statistically significant($r=0.618$, $p<0.05$).

It is deduce that implementation of ESN will have a positive effect on students' academic performance. Students posit that when they have such a platform as ESN which in other words is like an in-house social media platform, they will be able to learn things outside the four wall of the classroom and this can help them perform better academically. They can be engaged in school work any time of the day that they want. The goal of this ESN is to enhance students experience in the university and so the design of the platform must be made to achieve that. This also go in line with what (Al-Rahmi & Othman) 2013 wrote about that three characteristics of a social network that

can really make it have a positive effect on the student academic performance are the opportunity to interact with peers, opportunity to interact with lecturers and engagement. The micro-group and micro-blogging opportunity can create myriads of opportunity for students to engage one another in small groups. The response of the students which fill the form confirmed this. The engagement characteristic makes the students to be able to engage one another and/or other students outside their class room. The students agree that the ability to take multi-digital tests to test one's knowledge of a particular topic or class will also make students prepare better.

H2: Implementation of ESN has a positive effect in Student collaboration in an Academic Community

Using the Correlation analysis, It could be deduced that there is a positive relationship between ESN implementation and student collaboration and the relationship is statistically significant($r=0.234$, $p<0.05$).

In line with many other research that has been done on measuring the effect of ESN or Social media on collaboration, this research work also confirmed that if a platform like Enterprise Social Network is implemented in the university community, the collaborative power of such community will increase. Pifarre and Fisher (2011) posited that social media can enhance student's collaboration in group tasks and this is true according to this research also. Students strongly agreed that a platform like this will help them to connect with other students in their university. They also think this kind of connection and collaboration can give birth to creative works amongst students. (Schäffer & Thorradottir) 2015 thesis project also comment on the collaboration that is birthed in organization because of a platform like Enterprise Social Network. Students also agree that their social influence can increase in the university community with the presence of such a platform as Enterprise Social Network just like it does in the organization where it is implemented. The opportunity to be able to ask other students who can be interested in a particular project and being able to receive people's feedback on whatever is being done is also a good one. This is also in line with Mbodila, Ndebele, & Muhandji, (2014) work that confirmed that a platform like ESN can enhance the

collaborative power of students after exposing some students in South Africa to Facebook as a learning platform.

H3: Implementation of ESN has a positive effect on Student Social Acceptance

Using the Correlation analysis, It could be deduced that there is a positive relationship between ESN and student social acceptance and the relationship is statistically significant($r=0.272$, $p<0.05$).

The respondents in this research agree that implementation of Enterprise Social Network will have a positive effect on Students Social Acceptance. Just like (Kings University online) 2019 commented in their article and research that people sharpen their own identity when they involve in image oriented platforms like Instagram, it is true also of other platforms that people want to do their best to have a good reputation on such platforms. Students who partake in this research agree that they feel more confident to interact with other students online than they do physically. They also agree that they feel happy when they receive positive comments or feedbacks on their comments or questions. Such a platform like ESN will allow other people to give feedback to people's question and comments. Students believe that they will have a healthy sense of belonging to the community when they know that such a platform as this will help them to air their opinion and concern and that their voice can be heard. Students tend to be more sociable and free on social platforms as social media which ESN is a type. The respondents also agree to a very large extent that they can easily build a social identity with such a platform.

H4: Implementation of ESN has a positive effect on Student Management

It could be deduced that there is a positive relationship between ESN and improved student knowledge but the relationship is not statistically significant($r=0.065$, $p>0.05$).

Even though there is a positive relationship between the implementation of ESN and improved students management, the relationship is not statistically significant as seen in the results session. This means that ESN alone is not enough to enhance student's management according to the respondents of the questionnaire. This can be

understood knowing that students alone may not be able to measure the effect of ESN on this parameter. When other factors are brought in the picture, such as Students collaboration, the relationship was effective.

The hypothesis summary can be seen below:

Hypothesis	discovery
H1: Implementation of ESN has a positive effect on Student Academic Performance	Supported and Statistically Significant ($r=0.618$, $p<0.05$).
H2: Implementation of ESN has a positive effect in Student collaboration in an Academic Community	Supported and Statistically Significant ($r=0.234$, $p<0.05$).
H3: Implementation of ESN has a positive effect on Student Social Acceptance	Supported and Statistically Significant ($r=0.272$, $p<0.05$).
H4: Implementation of ESN has a positive effect on Student Management	Supported but it is NOT statistically significant except mediated by Students collaboration (H3) as shown in Results in chapter four. ($r=0.065$, $p>0.05$).

5.3 Conclusion

There is a conversation going on now on the realization of a fifth generation university; a place where technology can be used in the university system to enhance all the functions of the university. The goal of this research is to test if the implementation of Enterprise Social Network which is an ICT based technology in a University community will help in the fulfillment of what a University is meant to be and this is tested by measuring its implementation effect on four major factors which are students' academic performance, students collaboration, students social acceptance and Students management. From the responses of the participants and the analysis of the data, we can conclude that the implementation of such a platform like Enterprise Social Network in the University will be a good investment for the government or the University owners as students will be able to learn better in turn have a good academic experience, they will also be able to build a healthy collaboration for project which can result into a massive and creative development of solution for the school and the community. The Implementation of this platform will also help in building a healthy social esteem for the students as they will be able to communicate with their community with confidence and excitement.

Lastly, it can also be concluded that putting into consideration some other factors, Students management can be improved on such a platform as ESN.

5.4 Implication of Research

The results from this Research show different implication to different groups in the Education Industry:

1. For Students, it means they can have better experiences in the tertiary education period of their Lives. They can connect more with other students, Lecturers, Alumni and other members of their Community. Having such a system also help them to also have a good sense of feeling about themselves especially when they know their voice can be heard.
2. For Lecturers: The lecturers can learn how to use Technology more and also connect with their Students.
3. For Academics: Education can be more fun and the standard can get better.

5.5 Recommendation

I recommend that the government implement or make good policies that will encourage or help the adoption or that will favour Information Communication Technology deployment in the Education sector.

I recommend that universities also need to implement more ICT technological tools especially when it comes to Student managements and interaction.

The University management should train the teaching and the non-teaching faculties on latest ICT technologies that can be adopted in management and support.

I recommend that Universities implement such a platform as Enterprise Social Network for overall better experience of Students during their University Education.

5.6 Suggestion for Future Research:

This research was able to consider the ways ESN can benefit the students of a Tertiary Institution from the students' perspective. I suggest that future researchers can research the Lecturers' perspective of this same research. I also suggest that future researcher can research on how Enterprise Social Network can impact the efficiency of the Lecturers and University management. Future researchers can also research on how Social media can be designed with education in mind. Research can also be made on the possibility of adoption of such a platform as ESN in the Education sector just like it is done in the organizations.

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Appendix

Research Questionnaire

Near East University

Institute of Social Science

Innovation and Knowledge management

KOLAWOLE AMOS OMOLE

THE STUDENT PERSPECTIVE ON THE IMPLEMENTATION OF ENTERPRISE SOCIAL NETWORK IN TERTIARY INSTITUTION.

Dear Recipient,

The questionnaire below is designed as a part of my master's work in Innovation and Knowledge management and it is to measure the perspective of students in the implementation of Enterprise Social Network in the Tertiary Institution. The document is for academic research purpose only and all information provided will be treated with utmost confidentiality. Thank you very much for your time and assistance.

Please read the questions carefully and give your honest feedback.

Thank you.

Yours Faithfully,

Kolawole Omole.

ENTERPRISE (Internal) SOCIAL NETWORK

Enterprise Social Network is a digital system used to enhance communication and collaboration in an organization. For the purpose of the Study, the organization will be a University. It is more like having a social media that connect a university community together. A place where students and lecturer, potential students and alumni, the top admin managers and the other members of that community are connected through an effective and secured social platform.

Section A (General Information)

1. Gender

Male ☐Female ☐

2. Educational Level

Undergraduate ☐Masters ☐PhD ☐

3. Age group you belong

Below 20 ☐20 to 25 years ☐26 to 35 ☐Above 35 ☐

4. School

NEU ☐CIU ☐EMU ☐EUL ☐

5. What specifically do you use social networking sites for?

For Entertainment ☐Find out about academics' information ☐☐

Others

6. How often do you engage other students on academic related activities using social network sites?

Never ☐Rarely ☐Often ☐

Very Often

7. Do you find it interesting to read academic related materials on social network sites?

Yes ☐No ☐

8. In a day, on average how many hours do you spend on social networking site?

Less than 1 hr ☐2-5 Hou ☐More than 5 h ☐

9. Kindly tick your most interesting social network platform?

Facebook ☐ Instagram ☐ Twitter ☐ WhatsApp ☐
 Others ☐

Section B This session seek to know what your general disposition and exposure is to Social Media

SD = Strongly Disagree D= Disagree N= Neutral A= Agree SA= Strongly Agree

SN	Enterprise Social Network(ESN)	SD	D	N	A	SA
1.	I am part of more than ONE social media platform? (Examples of Social media are Whatsapp, Facebook, Instagram, Twitter etc)					
2.	Content shared by me and my academic peers on social media is useful					
3.	I find very educative materials on social media to read and to study					
4.	Social media is a good place to meet academic friends.					

5.	Social networks are useful to share academic contents with other people.					

(Gupta & Bashir, 2018)

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Kindly choose the one that applies in the illustration below

Student Academic Performance

This session seeks to measure your perception on how implementation of ESN will positively affect Student Academic Performance

SD = Strongly Disagree D= Disagree N= Neutral A= Agree SA= Strongly Agree

SN	Enterprise Social Network(ESN)	SD	D	N	A	SA
1.	I find solutions to difficult class questions when I go through examples shared on social networking sites					
2.	Free opportunity to ask questions and give opinions on a particular subject can help me learn better					

3.	Micro-groups with other students for discussion on a platform like ESN can help enhance student engagement at any time.					
4.	The use of ESN in teaching through blogging, posting on walls, commenting and sharing will improve innovation and teaching creativity.					
5.	ESN can provide effective learning environment which will enhance academic performance because of multimedia quiz functions that are available.					
6.	I communicate with my friends via social network to prepare for exams and tests					

(Adu-Manu, Arthur, & Yeboah, 2013) (Gupta & Bashir, 2018)

Students Collaboration

This session will measure your perception of the effect of Implementation of ESN on Students Collaboration

SD = Strongly Disagree D= Disagree N= Neutral A= Agree SA= Strongly Agree

SN	Enterprise Social Network(ESN)	SD	D	N	A	SA
1.	Internal Social media within my University can help me to expand relationship with other students in my university					
2.	ESN can provide a platform that will enhance academic collaboration between students					
3.	ESN implementation can enhance social relationships and work groups					
4.	Platform like ESN can help expand my personal Network (that is I can easily influence and engage other students of my institution from the comfort of my home)					
5.	I can easily ask for people who are interested in my idea or project on such a platform like ESN					

(Q14 of Schäffer & Thorradottir Thesis, 2015)

Student Social Acceptance

This Session will measure your perception about the effect of ESN implementation on Student Social Acceptance in the University.

SD = Strongly Disagree D= Disagree N= Neutral A= Agree SA= Strongly Agree

SN	Enterprise Social Network(ESN)	SD	D	N	A	SA
1.	Students feel confident to interact on social Networks					
2.	Students will be more motivated to share their thoughts or ask questions on Social Network than in a classroom					
3.	Students feel happy when they receive feedback to their questions or contribution on Social networks					
4.	Students will have a sense of belonging if they have a platform where they can air their opinion in an academic community					
5.	I always look forward to providing answers to questions asked by other students					
6.	Social Networks help me to be more sociable					
7.	I use Social Network to create my Social Identity.					

(Gupta & Bashir, 2018)

Improved Management:

This session will measure your perception about the effect that the implementation of ESN in your University will have on the Management.

SD = Strongly Disagree D= Disagree N= Neutral A= Agree SA= Strongly Agree

SN	Enterprise Social Network(ESN)	SD	D	N	A	SA
1.	Information dissemination will improve with an active Internal Social Network like ESN in my School					
2.	Idea generation on how to improve student experience for student body leader and school management will increase with ESN implementation in my University					
3.	Knowledge Management (which includes finding experts, knowledge sharing, idea generation etc) will greatly improve with the implementation of ESN in my University.					
4.	I believe ESN implementation will enhance quick feedbacks to information which will indirectly guide the Management decision process and choices.					
5.	Communication between Students and other stakeholders of my university will be better with the implementation of such a platform as ESN in my					

	University					
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(Gupta & Bashir, 2018)

References:

Adu-Manu, K. S., Arthur, J. K., & Yeboah, C. (2013). Challenges and Opportunities for the Implementation of Social Network Technologies (SNTs) in Teaching in Universities in Ghana. *IJCSI International Journal of Computer Science Issues*, 10(5), 268–275.

Gupta, S., & Bashir, L. (2018). Social Networking Usage Questionnaire: Development and Validation in an Indian Higher Education Context. *Turkish Online Journal of Distance Education*, 214–227. doi: 10.17718/tojde.471918

Schäffer, B., & Thorradottir, K. (2015). Dept. of Informatics, Lund University School of Economics and Management., Lund, Sweden.

IMPLEMENTATION OF ENTERPRISE SOCIAL NETWORK IN A TERTIARY INSTITUTION (STUDENTS' PERSPECTIVE)

ORIJINALLIK RAPORU

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BENZERLIK ENDEKSI	İNTERNET KAYNAKLARI	YAYINLAR	ÖĞRENCİ ÖDEVLERİ

BIRINCIL KAYNAKLAR

1	lup.lub.lu.se İnternet Kaynağı	% 3
2	www.ijrar.org İnternet Kaynağı	% 1
3	pdfs.semanticscholar.org İnternet Kaynağı	<% 1
4	erepository.uonbi.ac.ke:8080 İnternet Kaynağı	<% 1
5	www.academicjournals.org İnternet Kaynağı	<% 1
6	www.slideshare.net İnternet Kaynağı	<% 1
7	Library Hi Tech News, Volume 33, Issue 9 (2016) Yayın	<% 1
8	www.uniassignment.com İnternet Kaynağı	<% 1



YAKIN DOĞU ÜNİVERSİTESİ

BİLİMSEL ARAŞTIRMALAR ETİK KURULU

13.04.2020

Dear Kolawole Amos Omole,

Your application titled **“The Perception of Students on the implementation of Enterprise Social Network in tertiary Institution”** with the application number YDÜ/SB/2020/687 has been evaluated by the Scientific Research Ethics Committee and granted approval. You can start your research on the condition that you will abide by the information provided in your application form.

Assoc. Prof. Dr. Direnç Kanol

Rapporteur of the Scientific Research Ethics Committee

Note:If you need to provide an official letter to an institution with the signature of the Head of NEU Scientific Research Ethics Committee, please apply to the secretariat of the ethics committee by showing this document.