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The Role of Social Media in Transforming Communication and Learning in Distance Education

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This study's insights into social media as a communication tool in university education offer valuable implications for distance learning. In a remote learning context, where face-to-face interaction is limited, social media becomes essential for facilitating communication and engagement. The positive correlation between perceived usefulness, information quality, and ease of use with communication efficacy suggests that students who find social media beneficial and have a user-friendly experience improve communication, which is critical in distance education. Platforms like Facebook and WhatsApp, highlighted in the study for group work and peer interactions, are especially relevant for distance learning. These platforms help bridge the gap left by the absence of in-person discussions, enabling students to collaborate, share resources, and support each other remotely. The study's finding that social media use can enhance students' performance and grades further underscores its value as a supportive tool in distance education, where students often require extra resources and peer encouragement to succeed. This research highlights the potential for technology, in this case social media, to overcome challenges in distance education, making it a relevant contribution to the impact of technology in academia. By showing how students leverage social media for learning, this study suggests that educational institutions could consider formally integrating social media into distance education models, not only for communication but also as an academic resource that can boost learning outcomes. Future research could expand on these findings by examining specific social media tools' roles in distance learning, particularly in facilitating access to materials, supporting discussions, and enabling real-time interaction—core elements of a successful remote education experience.

Keywords: Social Media in Education, Distance Learning, Communication Efficacy, Academic Performance, Perceived Usefulness.

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Introduction

In the virtual world, a significant number of people who are further classified as social networks are showing an increased willingness to engage in conversations that are mediated via the internet. The most well-known websites, such as Blackboard, Facebook, TikTok, YouTube, and Google Plus, attract a greater number of users and develop into large virtual communities. These places allow users to connect with their friends and colleagues in a setting that is devoid of geographical boundaries. A chance like this resulted in the construction of a large internet-sharing room that had never been constructed before. According to Kaplan and Haenlein (2010), social communities are founded on Web 2.0 technologies, which serve as a platform for a social web. This social web is comprised of a collection of services and applications that offer a technological and ideological foundation for online social networks. Members of social media platforms can share data and customise user-generated content thanks to these services and applications. According to Weber (2009), web-mediated communications can be found in a variety of forms, including but not limited to blogs, wikis, social networking websites, and communities that share video content. Weber also mentions the fact that, concerning social media websites, these search engines are also included in the definition of social websites. These websites are aimed at aggregating the finest services that websites offer and showing the website that has the highest rating based on the search query.

Because of the expansion of globalisation, rapid technological advancements have occurred, which have resulted in a transition away from traditional media and toward new media. Belch & Belch (2014) state that the global media landscape is constantly shifting, which increases the number of opportunities for individuals to gain access to international information. There are several other names for social media, including "social media sites" and a collection of information technologies that make it easier for people to network and connect. This is because individuals can freely collaborate, utilising tools that allow them to share their knowledge and ideas on the Internet. I concur with Diga and Kelleher (2009) that the introduction of Web 2.0 was the catalyst for the rise in popularity of social media. Web 2.0 refers to a platform that allows people to share, collaborate, or communicate with one another inside a social network to strengthen the connection between them. This platform is accessed through a website.

The convergence of social media platforms is being used in today's culture to learn, since today's learners are searching for flexibility and are familiar with all of the tools because they use them daily. This is because today's learners are constantly using these tools. Although the traditional education system is an effective method of instruction, the rapid growth of technology has brought about a change that has had an equal impact on the education sector. This change has been brought about as a result of globalisation. The acceptance of social media by students is a valuable source of learning because it allows students to interact with various data sources and access news, which ultimately results in a paradigm shift in the way that teaching is done. In today's world, the use of social media websites, blogs, and smartphones complements learning. Additionally, interactive electronic devices are replacing the use of books and conventional presentations, which could have a positive impact on the educational system. Increasing the effectiveness of learning and broadening access to distance higher education are both facilitated by the presence of new media learning materials, which also boost the contribution of the academy. Furthermore, the Internet has opened up the entire world of information. It is of enormous importance in the field of education, particularly at the stage of higher education, when students are encouraged to expand their minds and discover solutions to problems. As a result, it is possible to assert that the Internet makes the educational process more straightforward by providing individuals with the ability to acquire access to any information and data from both domestic and

international sources, all while simultaneously allowing them to communicate their ideas and perspectives (Diga & Kelleher, 2009).

According to Jon Russell (2011), the use of social media presents a chance for students of all ages to communicate with one another and for educational institutions to establish connections with students. Studies conducted in the past have demonstrated that the use of social media as a new technology is becoming increasingly prevalent in virtually all academic settings. In today's world, social media is available in almost every culture.

These tools have the potential to bring about a range of beneficial and harmful changes to the education system, particularly in the realm of higher education. Additionally, they have the opportunity to establish themselves as powerful instruments for collaboration and communication that are in line with the educational requirements of currently existing generations. Boyson and Ellison (2008) say that. According to Statistics Mauritius (2018), the percentage of people who use the internet is steadily rising. Between the years 2016 and 2017, the number of people using the Internet at the national level increased by 14.5%, going from 1,090,300 to 1,248,000. A further increase of 14.2% was seen in the number of mobile internet subscribers, which went from 875,200 to 999,600. For the past few years, there has been a surge in the utilisation of home-based and fixed devices such as game consoles, TV streaming packages, and smart TV platforms. Users of the internet engage in the most popular activities, which include visiting social networking platforms and communicating via text message. The Internet has become an essential medium for social participation.
Because students communicate through a variety of social media platforms, social media has become a handy tool for students. The purpose of this research is to focus on students as users of technological advancements in education. Additionally, the study will investigate the impact of using social media as a communication tool on the education of students. In addition, this study will be focused on descriptive research, and students from five different colleges will be asked to submit quantitative data through the use of a survey questionnaire. As a consequence, the findings will reveal, at a later time, whether or not the use of social media as a tool for research and communication among students is effective.

This study examines how private university students use social media for communication, education, and research. Social media's negative impact on pupils' academic performance is the most significant educational issue. Today's social lifestyle makes it impossible for young people to limit their social media use. The Pearson Research Group and Seaman and Kane (2013) reported that 50% of respondents said mobile and web technology made learning more participatory. Online and mobile technology improve participatory education, according to 50% of respondents. However, 56% claimed online and mobile technology distracts students from schoolwork.

The main educational issue is that students' use of social media is affecting them, which makes their education less effective, according to various studies. However, the evidence gaps show that social media is altering society and education across media and platforms (Jacobsen & Forste, 2011).

Similar investigations have examined social media's ability to promote communication, its usefulness as a communication tool, and its potential to support technology-facilitated relationships. However, university students' usage of social media for communication, education, and research has not been experimentally tested. This means no studies have shown students' capacity to use social media for

communication, education, and research. Thus, this study will empirically examine the theory.

Literature Review

Active Collaborative Learning Theory

Organisations practice cooperative learning, according to H. Jonassen, Howland, Moore, and M. Marra (2003). People work together to achieve their educational goals in this style of learning. The needed results benefit both individuals and their groups. Cooperative learning is based on social interdependence, cognitive growth, and cognitive learning theories. Active cooperative learning involves favourable interdependence, employee accountability, promotional interaction, small group interpersonal relationships and capacities, and group processing. Each component is crucial to cooperative learning. One of the most critical aspects is positive interdependence, which is "the phenomenon that takes place when members of a group have the perception that they are connected in such a way that it is impossible to succeed unless everyone succeeds if anybody fails." The fifth component, group processing, is when group members evaluate their work to achieve goals and maintain working relationships. In addition, F. Novak, R. Razzouk, and E. Johnson (2012) note that cooperative learning needs extensive instructor planning to ensure all five critical components are present. Active co-learning organisation students are distinct from other teaching communities because they believe they cannot fulfil their teaching goals if others cannot. Most cooperative learning organisations include two to four students, and smaller groups are more productive. There is no ideal cooperative learning group size. The size of groups depends on the length of time they will work together, the pupils' prior group work experience and ages, and the materials and equipment available.

Perceived Usefulness of Social Media

Davis et al. (1989) defined perceived usefulness as the extent to which an individual believes a technology adaptation will increase job performance. This study found that perceived usefulness corresponds to a user's belief that social media use will benefit them. According to Davis et al. (1989), users' perceptions of product utility are usually high when they believe in a positive user-performance relationship. The user recognises the system as an efficient task performer. Al-Daihani (2010); Kim et al. (2007). An individual's behaviour can be judged by the expected advantages based on their view of its usefulness. This is due to expected capabilities. Technology is easy to use, yet some individuals don't utilise it because they think it's useless. According to Davis et al. (1992), several academic studies have shown that a technology's perceived usefulness affects user adoption and satisfaction. Sago (2013) also found that the perceived value of social media services grows with frequency and positively impacts an individual's social media engagement.

On the other hand, Lee et al. (2007) performed an online survey on business students. They discovered that the influence of perceived usefulness was less significant than the impact of perceived simplicity of use on the behavioural intention to practice immediate messaging. In addition, Strader et al. (2007) found that perceived utility negatively affected social media intention. This was observed in an online poll that included both undergraduate and graduate students. It was also agreed upon by Lu et al. (2009) that, for students to boost their communication efficiency, they should make use of social media platforms that allow them to readily convey information, thoughts, and opinions to their peers and teachers. In addition, Shirazi (2013) examined the function that social media performs in communication in the countries of the Islamic Middle East and North Africa. He also noted that students were able to participate more in

conversations and mobilisation with the support of social media. Therefore,

H1: Perceived usefulness of social media affects communication effectiveness

Perceived Information Quality of Social Media

By the findings of Ilsever, Cyr, and Parent (2007), the quality of information that is perceived can be characterised as the quantity and selection of information, in which the contents must be rich and easy to browse. It is conceivable to state that it is a ubiquitous and familiar idea and a significant forerunner to overall user pleasure (Aggelidis & Chatzoglou, 2012; Chang, Li, Wu, & Yen, 2012; Zhou, 2013). This idea has an impact on the perceived value of the e-commerce system as well as the success of information systems (DeLone & McLean, 1992). According to Yvette and Karine (2001), it is necessary to develop a relationship that is founded on trust by exchanging information that is pertinent, dependable, substantial, and personalised. Furthermore, Chau, Au, and Tam (2000) acknowledge that the quality of the information available on the Internet affects the user's experience when using mobile social networking sites while engaging in multiple tasks. As an illustration, if a person is unable to supply consumers with information that is dependable, up-to-date, and thorough, then that person will have more negative perceptions about the quality of the information that is available on social media platforms.

Klein (2002) conducted a study to find out the students' perspectives on the calibre of internet information. She concluded that the quality of the material that is available on the internet was a concern. This is because the material that is available on the internet is not constantly revised, which causes students to have challenges if they use knowledge that has not been confirmed. Additionally, she concurred with the assumption that the information that students use for their academic pursuits is not of good quality because it is not always vetted. Furthermore, the framework for the information quality dimensions only presents the students' opinions of the quality of the information, but it does not display the genuine quality of the information. For a piece of information to be regarded as accurate and of high quality, it must first be verified appropriately and then used appropriately.

Kim and Sin (2011) researched the principles that students ought to consider when choosing material from the Internet, particularly on social media platforms. They conducted an inquiry into the opinions of a large number of students regarding the various sources of information and the information that they decided to employ. According to the findings of the study, there was a disparity between what students ought to have done and what they did while selecting material for their studies. This gap was attributed to the fact that students were uninformed of the evaluation of the quality of the information (Kim & Sin, 2011). According to Gross and Latham (2009), the students' lack of information literacy was a direct result of their inability to select the appropriate source of information on the topic. There are some college students, according to Wei and Zhang (2008), who are not aware of the importance of resources that their peers have reviewed. As a result, it is necessary to devise specific tactics to lessen the disparity between the way information is perceived and how it is utilised on social media platforms.

As was mentioned before, it is possible to argue that in this information age, students should be equipped with knowledge of literate information skills to assist them in their academic pursuits. Students need to be able to examine, assess, and apply the material that they have obtained for their research projects because the use of inquiry-based learning is becoming increasingly

prevalent in educational institutions. In addition, the fact that students choose not to utilise the material that they find on social media platforms for their studies or decide to use it will affect their previous expectations and experiences regarding social media platforms. According to Wei and Zhang (2008), the selection of information on the Internet is influenced by the users' expectations of the quality of the information, which includes the perceived usefulness and ease of use of the information. Consequently, it is the responsibility of lecturers to ensure that students thoroughly consider the quality of the information they use and are aware of the challenges they encounter when they rely on sources that have not been vetted for their academic work. Accordingly,

H2: Perceived information and quality of social media affect communication effectiveness

Perceived Ease of Use of Social Media

According to Davis et al. (1989), the degree to which an individual believes that utilising a system does not require any effort on their part is the degree to which perceived ease of use can be described. Because a person's effort is a limited resource, the system is recognised to be easier to use than another system, which means that it has a greater chance of being accepted by the users. Furthermore, several studies have demonstrated that the perceived simplicity of use is a significant component of one's attitude towards technology (Burton-Jones and Hubona, 2005; Setterstrom et al., 2013). Sago (2013) provided evidence that people use social media services more frequently because they believe them to be simpler to use than other currently available services.

After conducting a survey online among business students, Lee et al. (2007) concluded that perceived ease of use has a greater impact on behavioural intention when it comes to instant messaging. In addition, Strader et al. (2007) found that the perceived ease of use had a favourable effect on the use of social media. This was seen in the online survey that was conducted with both undergraduate and graduate students who were studying business. In a different piece of research, Van Slyke (2007) and Ilie et al. (2005) concluded that perceived ease of use has a relative advantage over perceived utility in situations where it impacts business students to utilise social media effectively in their studies. Accordingly,

H3: Perceived ease of use of social media affects communication effectiveness

Research Methodology

This study used a Likert scale questionnaire as its primary data collection tool. University students in the program received surveys. To acquire data from respondents quickly, a self-administered questionnaire was chosen for this study. Pilot testing was done for the questionnaire pre-test. This study used a Likert scale questionnaire as its primary data collection tool. University students in the program received surveys. To acquire data from respondents quickly, a questionnaire was chosen for this study. Pilot testing was done for the questionnaire pre-test. Out of the population, 300 students were randomly selected from each university to participate in this study. Sixty students can be expressed as 0.46% for the Open University of Mauritius, 0.84% for UOM, 1.92% for UTM, 5% for Middlesex University and 3.2% for Charles Telfair Institute, respectively. Initially, 150 questionnaires were emailed. This was done because multimodal email surveys had better response rates. After replying to the first survey, Google Form emailed them 150 more. The questionnaire employed a five-point Likert scale for each topic: strongly disagree, disagree, neutral, agree, highly agree, and very agree. Some questionnaires were delivered online, while others were handed out to respondents to fill out immediately or collected later, depending on their availability. 300questionnaires were distributed to students, while each university (UOM, OUM,

UTM, Middlesex University, and Charles Telfair Institute) received 60 questionnaires to collect quantitative data. Because convenience sampling was the most practical strategy, this study used it. It is a nonprobability sampling method, and the word "convenience" implies that the questionnaire was disseminated according to respondents' availability and that respondents were selected at random, indicating zero bias. The Morgan and Krejcie (1970) formula determined the sample size. The sample size was approximated as 300 using Raosoft's sample size calculator. Convenience sampling was used since it was the easiest way to obtain data. A quantitative survey's sample size and non-response bias management were crucial. Participants were also assured that their identity, comments, and opinions would be kept private. Each respondent was informed of the study's goals and procedures and provided their consent.

Data Analysis and Results

Descriptive Statistics

Of the respondents, 57.2% were male, and 42.8% female. Age distribution was as follows: 31.6% were 18–20, 31.2% were 21–23, 17.9% were 24–26, and 19.3% were 27 or older, with most respondents under 23, indicating younger students' greater social media use. Education levels showed that 59.6% pursued a bachelor's degree, followed by master's (20.7%), diploma (11.6%), and doctorate (8.1%). Zoom was the most used platform (42%), followed by other platforms (28%) and WhatsApp (25%). About 44.6% of students agreed that social media enhanced academic performance, with most using it for over 24 hours weekly for educational purposes. The Cronbach Alpha value for all items was greater than 0.8, which indicates that the research is consistent.

Correlation Analysis

Correlation analysis evaluates linear correlations between two continuous variables. Initial analysis included independent and dependent variables. Then, the bivariate Pearson correlation was used to compare the three independent variables. According to Hair (2008), the Pearson correlation coefficient can range from -1 to +1, although a value of 0 implies no association.

Correlation Statistics Results between Perceived Usefulness and Communication Effectiveness

Table 1: Correlation between perceived usefulness and communication effectiveness

		perceived usefulness	communication effectiveness
perceived usefulness	Pearson Correlation	1	.604**
	Sig. (2-tailed)		.000
	N	285	285
communication effectiveness	Pearson Correlation	.604**	1
	Sig. (2-tailed)	.000	
	N	285	285

**. Correlation is significant at the 0.01 level (2-tailed).

Table 1 shows the relationship between perceived utility and communication effectiveness. This test examines the relationship between perceived usefulness and communication performance. The Pearson correlation, R = 0.604, shows that perceived usefulness positively affects communication efficacy. This is shown in the table above. The table also shows 0.000 p-values. The result is less than 0.05, indicating a substantial correlation between perceived usefulness and communication efficacy. This means that communication effectiveness increases with perceived usefulness.

Table 2: Correlation between perceived information quality and communication effectiveness

		communication effectiveness	perceived information quality
communication effectiveness	Pearson Correlation	1	.581**
	Sig. (2-tailed)		.000
	N	285	285
perceived information quality	Pearson Correlation	.581**	1
	Sig. (2-tailed)	.000	
	N	285	285

**. Correlation is significant at the 0.01 level (2-tailed).

Table 2 shows how perceived information quality affects communication efficacy. This test examines the relationship between the independent variable—information quality—and the dependent variable—communication efficiency. According to the table above, the Pearson correlation coefficient (R value) is 0.581. The perceived quality of information positively correlates with communication efficiency. The table also shows 0.000 p-values. It is less than 0.05, suggesting a substantial relationship between perceived information quality and communication efficacy. Higher perceived information quality increases communication efficacy.

Table 3: Correlation between perceived ease of use and communication effectiveness

		communication effectiveness	perceived ease of use
communication effectiveness	Pearson Correlation	1	.573**
	Sig. (2-tailed)		.000
	N	285	285
perceived ease of use	Pearson Correlation	.573**	1
	Sig. (2-tailed)	.000	
	N	285	285

**. Correlation is significant at the 0.01 level (2-tailed).

Table 3 shows the relationship between perceived ease of use and communication efficacy. This study examines how perceived ease of use affects communication efficacy. From the table above, the Pearson correlation coefficient (R-value) is 0.573. This suggests a strong positive correlation between perceived ease of use and communication effectiveness. The table also shows 0.000 p-values. Perceived ease of use and communication efficacy are strongly correlated, with a correlation coefficient of less than 0.05. This means that communication efficacy increases with perceived ease of use.

Table 3 shows the association between perceived utility, information quality, and ease of use.

		perceived ease of use	perceived usefulness	perceived information quality
perceived ease of use	Pearson Correlation	1	.661**	.571**
	Sig. (2-tailed)		.000	.000
	N	285	285	285
perceived usefulness	Pearson Correlation	.661**	1	.575**
	Sig. (2-tailed)	.000		.000
	N	285	285	285
perceived information quality	Pearson Correlation	.571**	.575**	1
	Sig. (2-tailed)	.000	.000	
	N	285	285	285

**. Correlation is significant at the 0.01 level (2-tailed).

This study analyses the relationship between the three independent variables using Pearson Correlation. Perceived ease of use and usefulness have a 0.661 Pearson correlation, which is significant at 0.01. Perceived information quality and ease of use have a 0.571 Pearson association, which is significant at 0.01. Both relationships are substantial. In addition, the Pearson Correlation between perceived usefulness and perceived ease of use is 0.661, which is significant at 0.01. Similar to perceived usefulness, perceived information quality has a Pearson Correlation of 0.575, which is significant at 0.01. As well, the Pearson Correlation between perceived information and perceived usefulness is 0.571, which is significant at 0.01. The Pearson Correlation between perceived information and perceived ease of use is 0.575, also significant at 0.01.

The table above shows no multicollinearity because the correlation between variables is less than 0.8. Thus, variables are linked.

Table 4: Correlation between My Grades and performances is better when using social media compared to before—loss of ability in face-to-face interactions, Exposure to inappropriate content, and being highly distracting.

		My grades and performances are better when using social media compared to before	The lost ability for face-to-face interaction	Exposure to inappropriate content	Highly distracting – too many ads pop up during research.
My grades and performances are better when using social media compared to before	Pearson Correlation	1	.185**	.185**	.185**
	Sig. (2-tailed)		.002	.002	.002
	N	285	285	285	285
The lost ability for face-to-face interaction	Pearson Correlation	.185**	1	1.000**	1.000**
	Sig. (2-tailed)	.002		<.001	<.001
	N	285	285	285	285
Exposure to inappropriate content	Pearson Correlation	.185**	1.000**	1	1.000**
	Sig. (2-tailed)	.002	<.001		<.001
	N	285	285	285	285
Highly distracting – too many ads pop up during research.	Pearson Correlation	.185**	1.000**	1.000**	1
	Sig. (2-tailed)	.002	<.001	<.001	
	N	285	285	285	285

**. Correlation is significant at the 0.01 level (2-tailed).

Table 4 shows that social media improves my grades and performance, but it also causes a decline in face-to-face relationships, exposure to inappropriate content, and distraction. This test examines the relationship between my grades and performance, which is better while using social media, but it also involves loss of face-to-face interactions, improper content, and significant distraction. As seen in the table above, my grades and performance are better on social media than face-to-face, despite the presence of inappropriate content and distractions. This indicates that there is a weak positive association between my

grades and performance being better when using social media, compared to a loss of ability for face-to-face, exposure to inappropriate content, and high distraction. It does not affect my grades or performance. The table also shows 0.002 p-values. A significant correlation exists between social media use and improved grades and performance, as well as reduced ability for face-to-face interactions, exposure to improper content, and high distraction.

Multiple Regression

The hypotheses from Chapter One are tested using multiple regression. When the variables are constant, this approach determines the relationship between the dependent and independent variables. This section examines how perceived utility, information quality, and ease of use affect communication efficacy. Multiple regression approaches include model summary, ANOVA test, and the coefficient of regression.

Table 5: Model Summary

Mode	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.685[a]	.469	.464	1.77100	2.379

Model Summary

Table 5 shows model summary test results. This study considers R-squared values. R is 0.469, or 46.9%. Thus, R-squared is 46.9%, while perceived utility, information quality, and ease of use constitute communication efficacy.

a. Predictors: (Constant), perceived ease of use, perceived information quality, perceived usefulness
b. Dependent Variable: communication effectiveness

Table 6: ANOVA Test

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	779.441	3	259.814	82.837	.000[a]
	Residual	881.342	281	3.136		
	Total	1660.783	284			

Table 6 shows ANOVA results. To evaluate the ANOVA test results, the significance value is used in the table above. It is considered that the significance value is 0.000 and the p-value is lower than 0.05. This leads to the conclusion that the alternative hypothesis is accepted. This indicates that perceived usefulness, perceived information quality, and perceived ease of use all have an impact on the effectiveness of communication when taken into consideration.

Table 7: Coefficient Regression

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.540	.876		2.901	.004
	perceived usefulness	.310	.063	.299	4.892	.000
	perceived information quality	.276	.053	.289	5.170	.000
	perceived ease of use	.252	.073	.210	3.456	.001

Additionally, Table 7 shows the coefficient regression test results. The data in the table above indicates that perceived usefulness has the most significant impact

on communication effectiveness. The fact that Beta is 0.299 and the significance value is 0.000 supports the idea that perceived usefulness positively affects communication efficacy. The 29.9% prediction level shows that perceived usefulness and communication effectiveness are strongly correlated. Findings show that perceived information quality has the second-largest impact on communication effectiveness. The perceived quality of information has a positive and significant relationship with communication efficacy, as demonstrated by a beta value of 0.289 and a significance value of 0.000. The 28.9% prediction level shows that perceived information quality and communication effectiveness are strongly correlated.

The data also show that perceived ease of use has the third-largest impact on communication efficacy. With a beta value of 0.210 and a significance value of 0.001, which is less than 0.5, perceived ease of use is positively and significantly associated with communication efficacy. A 21.0% prediction level shows a strong correlation between perceived ease of use and communication effectiveness.

Table 16: Chi-Square Tests between perceived usefulness and communication effectiveness

Chi-Square Tests

	Value	df	Asymp. Sig. (2sided)
Pearson Chi-Square	2661.799[a]	899	.000
Likelihood Ratio	887.877	899	.598
Linear-by-Linear Association	103.749	1	.000
N of Valid Cases	285		

a. 958 cells (99.8%) have expected count less than 5. The minimum expected count is .00.

Table 16 shows that asymptotic significance is 0.000, below 0.05. Since it is below 0.05, the alternative hypothesis is accepted. Thus, perceived utility affects communication efficacy.

	Value	df	Asymp. Sig. (2sided)
Pearson Chi-Square	2642.821[a]	992	.000
Likelihood Ratio	923.808	992	.940
Linear-by-Linear Association	95.946	1	.000
N of Valid Cases	285		

a. 1055 cells (99.9%) have expected count less than 5. The minimum expected count is .00.

Table 17: Chi-Square Tests between perceived information quality and communication effectiveness

Table 17 shows that asymptotic significance is 0.000, below 0.05. The alternative hypothesis is acceptable because it is below 0.05. The perceived quality of information affects communication efficacy.

	Value	df	Asymp. Sig. (2sided)
Pearson Chi-Square	2642.821[a]	992	.000
Likelihood Ratio	923.808	992	.940
Linear-by-Linear Association	95.946	1	.000
N of Valid Cases	285		

a. 893 cells (99.7%) have expected count less than 5. The minimum expected count is .00.

Table 18: Chi-Square Tests between perceived ease of use and communication effectiveness

Table 18 shows that asymptotic significance is 0.000, below 0.05. Since it is below 0.05, the alternative hypothesis is accepted. This suggests that perceived ease of use can affect communication efficiency.

Table 19: Hypothesis results

Hypothesis	Regression Results	Results
H1: Perceived usefulness affects communication effectiveness	Beta = 0.299; sig value = 0.000, which is less than 0.05	Accepted
H2: Perceived information quality affects communication effectiveness	Beta = 0.289; sig value = 0.000, which is less than 0.05	Accepted
H3: Perceived ease of use affects communication effectiveness	Beta = 0.210; sig value = 0.001, which is less than 0.05	Accepted

Table 19 shows hypothesis results. Based on the coefficient regression of test results (Table 15) and the chi-square test between dependent and independent variables, all three alternative hypotheses are accepted. Communication efficacy can be affected by perceived utility, information quality, and simplicity of use.

Conclusion and Recommendations

Secondary data are research results from past studies. Secondary data included journals, reports, the internet, and similar books (references at the back of the page) to help build the study. Secondary data was also used better to comprehend social media's research and teaching potential. This study used primary data to study social media for research, communication, and education. The population sample's fundamental data was acquired using questionnaires. During this inquiry, 300 questionnaires were distributed; however, only 95% were returned. Personal information about the respondent was found in their profile. It was helpful to discover that most 18-23-year-olds are male and degree-seeking. Analysis of the respondent's profile and other questionnaire criteria helped answer numerous study issues.

Research Objectives

This study examined whether university students use social media for communication, education, and research, with 285 students. To support this research, three objectives were created. This section will examine the three objectives and analyse the data. The research has three objectives:

- To determine the extent to which social media platforms are helpful and have promise as a means of communication.
- To investigate how students make use of various social media platforms to enhance their abilities.

- During the educational process at the university, the utilisation of social media is either beneficial or detrimental.

Objective 1: To assess the potential and usefulness of social media as a tool of communication

Many social media sites are used for education, and pedagogy and its benefits may be seen. Web 2.0 gives pupils easier access to cutting-edge technology, which boosts their understanding. Using social media extensively stimulates increased contact by employing the latest technology. Students are more engaged in working with their professors and communicating during the learning process. Several researchers' chapter two research showed how students view social media as a communication tool and a research tool. Based on user identification, the positive and negative effects of social media and their characteristics have been studied in education.

Objective 2: To analyse how students can use social media platforms to improve their skills

Social media helped students and teachers collaborate in this study. Its purpose is to assess how social media platforms improve students' skills. Social media can augment classroom education, but not replace it. Many students now use social media for academic and professional advancement. Social media sites that improve learning were studied, and the literature review examined the usefulness of introducing social media into the classroom. The empirical research evaluated how students improve their skills on social media. Comparing the actual inquiry results with the literature review provides a summary of the areas to consider.

Objective 3: The usage of social media as being positive or negative during the learning process at the university

The school examined social media's pros and cons to understand its benefits. The empirical study was followed by a survey at five institutions to analyse social media use. The statistics showed both strengths and weaknesses, but how users used social media while studying improved the results.

Discussions based on the summary of findings and conclusions

Here is the hypothesis that was developed after reviewing the research objectives:

H1: The perceived utility of social media influences the efficacy of communication

This hypothesis was tested using SPSS. The multiple regression analysis showed that perceived usefulness had the most significant effect on communication efficacy, controlling for standardised coefficients. Research indicates a positive and substantial correlation between perceived usefulness and communication efficacy (Beta = 0.299, $p < 0.05$). Thus, H1, the alternative hypothesis, was accepted. As demonstrated above, communication efficacy increases perceived utility. The studies listed and the literature review confirm the hypothesis, explain the findings, and show that the effectiveness of communication tools depends on perceived utility.

H2: The efficacy of communication is influenced by how information is perceived and the quality of social media.

After controlling for other variables in the multiple regression analysis, perceived information quality had the second-highest effect on communication effectiveness. Data suggests a positive and substantial correlation between perceived information quality and communication efficacy (Beta = 0.289, $p < 0.05$). The null hypothesis (H1) failed. The data above shows that information quality directly affects communication effectiveness. The investigations and literature review support and answer the hypothesis that perceived

information quality influences communication efficacy.

H3: The perceived ease of using social media influences the effectiveness of communication.

Among the various regression factors tested, perceived ease of use showed the third-highest significant effect on communication efficacy, according to standardised coefficients. As the beta-value is positive (0.210) and the significance level is smaller than 0.05 (0.000), perceived ease of use is associated with communication effectiveness. Thus, H3, the alternate hypothesis, was accepted. As noted above, communication efficacy increases perceived ease of use. The research and literature review support the notion that perceived ease of use influences communication efficacy.

The study and results showed a high link between the dependent and independent variables. Multiple regression shows a link between all variables. Cronbach's Alpha confirmed the study's dependability. When social media is used in the classroom, students are more engaged and motivated. Social media technologies get kids more connected with technology, which enhances student-teacher interaction. Tools provide access to general course material. Data shows social media has more benefits than drawbacks. According to research, social media can be a good teaching tool when students are excited about utilising it. Additionally, social media improves course management, communication, and marketing.

The empirical study reveals that social media is used positively. Social media improves value, usability, and information quality. Overall, genuine use is good. The data show that students use social media to conduct more conversations and collaborate with academics. Social media improves students' lecture experience, active learning, and class engagement, according to the results. Social media can also help students stay focused during long lectures. In addition, it helps kids learn. One study found that social media benefits both in-person and online students. These results show that social media can improve students' education in the globalised modern world, benefiting both students and teachers.

Limitations of the study

Acceptance of the values was based on the 285-time frame results. Nevertheless, the investigation ran into several issues.

- A total of 300 responses were selected, with 20% coming from each university. The poll was challenging to conduct because of limited time and resources. Time limitations meant that the population sample had to be small to accomplish the research's aims. The study's small sample size of five institutions was also a result of time restrictions.
- A total of 285 completed and returned surveys were received out of 300 total. Consequently, due to uncooperative respondents, the study was limited to 285 respondents (a 95% response rate).
- Incomplete information could also pose problems when researchers are unable to comprehensively analyse the data due to respondents' reluctance to fill out the surveys.
- The use of questionnaires as the sole sample method was another weakness of this study. More precise findings would have been achieved with the use of alternative sampling techniques, such as surveys.
- The questionnaires were distributed and collected solely through social media platforms due to transportation, economic, and sanitary constraints.

Suggestions for further research

The research proposal provides some background, but it could use more. Many title-related points could be expanded. Future studies will benefit further research. Social media is crucial to college students' life and must be recognized. One may also claim that college students utilize social media to establish new friends and strengthen old ones, making class more fun and productive. Thus, universities should promote academic research on social media sites that could benefit academics. Most universities have been using it for a while.

The studies also suggest assessing how students connect with colleges via social media. Higher education institutions must be prepared and aware of the pros and cons of using social media for training. Finally, students must use multiple social media platforms to stay updated. University bandwidth should be free or heavily subsidized since students use social media for academic purposes. This study is limited to five universities, so other universities can readily reproduce it.

Data shows that kids utilize social media daily. Universities should foster scholarly research on social media platforms for course evaluation, tutorials, and collaborative learning. Studies reveal that pupils who used social media for educational purposes outperformed their peers. Since students in this study mostly use social media to communicate and share documents, the data and analysis reveal that these platforms are used more for education than research. Schools should have students analyze social media platforms to maximize their benefits. According to the studies, social media improves kids' academic achievement. However, excessive social media use would hurt pupils' grades.

Finally, social media exists and regular students use it to communicate, share ideas, and work in real time even when they can't meet. Academics exchange and discuss research largely on social media. Modern data is linked to educational resources and kept confidential. Thus, research reveals that many students use social media to learn every day and to analyze and share content.

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Bibliography

Agarwal, S. & Mital, M. (2009). An Exploratory Study of Indian University Students' Use of Social Networking Web Sites: Implications for the Workplace. Business Communication Quarterly, 72(1), 105-110.

Ajjan, H. & Hartshorne, R. (2008). Investigating faculty decisions to adopt web 2.0 technologies: Theory and empirical tests. The Internet and Higher Education, 11(2), 71–80.

Akcaoglu, M., & Bowman, N. D. (2016). Using Instructor-led Facebook Groups to Enhance Students' Perceptions of Course Content. Computers in Human Behaviour, 65, 582-590

Albayrak, D., & Yildirim, Z. (2015). Using Social Networking Sites for Teaching and Learning: Students´ Involvement in and Acceptance of Facebook as a Course Management System. Journal of Educational Computing Research

Al-Daihani, S. (2010) 'Exploring the use of social software by master of library and information science students', Library Review, Vol. 59, No. 2, pp.117–131.

Al-Rahmi & Othman (2013a).The impact of social media use on academic performance among university students: A pilot study. Journal of Information Systems Research and Innovation, 4(12).

Al-Rahmi, W., & Othman, M. (2013b). Using TAM model to measure the use of social media for collaborative learning. International Journal

of Engineering Trends and Technology (IJETT), 5(2).

Al-Rahmi, W., Othman, M., Musa, M., 2014. The improvement of 493 students' academic performance by using social media through 494 collaborative learning in Malaysian higher education. Asian Soc.495 Sci. 10 (8), 210–221.

Altbach, P. G. (2015). The emergence of a field: Research and training in higher education. Studies in Higher Education, 39(8), 1306–1320

AntonSon, M., & Christopher, W. (2014). Corporate Social Media Facilitating Better and Faster Change Management.

Asterhan, C., & Rosenberg, H. (2015). The Promise, Reality and Dilemmas of Secondary School Teacher-

Bansal, T., & Joshi, D. (2014). A Study of Students' Experiences of Mobile Learning. Global Journal of

Bennett, S., Bishop, A., Dalgarno, B., Waycott, J., and Kennedy, G. 2012. "Implementing Web 2.0 technologies in higher education: a collective case study," Computers & Education (59:5), pp.524-534.

Bonwell, C. C., and Eison, J. A. (1991). "Active Learning: Creating Excitement in the Classroom," Eric Digest, Washington, DC: George Washington Press

Bovee, M. W. (2004) Information quality: A conceptual framework and empirical validation. Ph.D. dissertation, University of Kansas, Lawernce, KS

Boyd, D.M., & Ellison, N.B. (2008). Social Network Sites: Definition, History, and Scholarship. Journal of Computer-Mediated Communication, 13(1), 210-230.

Burton-Jones, A. and Hubona, C.S. (2005) 'Individual differences and usage behaviour: Revisiting a technology acceptance model assumption', The Database for Advances in Information Systems, Vol. 36, No. 2, pp.58–77.

Cain J, Fox BI. Web 2.0 and pharmacy education. Am J Pharm Educ. 2011; 73(7): Article 120

Cain, J., & Katherine, C. (2013). Exploring Social Media's Potential in Interprofessional Education. Journal of Research in Interprofessional Practice and Education, 3(2), 1-7.

Chapman, E. (2003). "Alternative approaches to assessing student engagement rates," Practical Assessment, Research & Evaluation, Vol. 8, No. 3

Choi, K. J., & Yang, S. C. (2009). Internet social media and journalism. Seoul: Korea Press Foundation

Choney, S. (2010) Facebook Use Can Lower Grades by 20 Percent, Study Says.

Chromey, K. J., Duchsherer, A., Pruett, J., & Vareberg, K. (2016). Double-edged Sword: Social Media Use in the Classroom. Educational Media International, 53(1), 1-12

Cohen, J., & Nee, J. C. N. A comparison of two no central F approximations, with applications to power analysis in set correlation. Multivariate Behavioural Research, 1987, 22, 483-490.Contemporary Chinuch, (14), 14–16. Creative Writing, 1(4), 57–64.

Dabbagh, N. & Kitsantas, A. (2012). Personal Learning Environments, social media, and self-regulated learning: A nautical formula for connected formal and informal learning. Internet and Higher Education, 15 (3-8).

Dahlstrom, E., deBoor T., Grunwald, P., & Vockley, M. (2011). The ECAR national study of undergraduate students and information technology. Boulder, CO: EDUCAUSE Centre for Applied Research.

Davis, F.D (1989) Perceived Usefulness, Perceived Ease of Use and User Acceptance of

Information Technology. MIS Quarterly [online] 13 (3/9) pp.319-340

DeLone, W.H. and McLean, E.R. (1992). "Information Systems Success: The Quest for the Dependent Variable," Information Systems Research, Vol. 3, No. 1, pp. 60-95.

Diga, M., & Kelleher, T. Social media use, perceptions of decision-making power, and public relations roles. Public Relations Review (2009)

Dillenbourg, P., Jermann, P., Buiu C., Traum, D. & Schneider D. (2002) «The design of MOO agents: Implications from an empirical CSCW study. Proceedings, 198th World Conference on Artificial Intelligence in Education, Kobbe, Japan

Dunn, J. (2012). The 10 Best and Worst Ways Social Media Impacts Education. Retrieved from Edu emic Connecting Education and Technology

Etim, P. J., Udosen, I. N., & Ema, I. B. (2012). Utilization of WhatsApp and Students ' Performance In Geography In Uyo Educational Zone , Akwa Ibom State, 3(5), 3–6.

Farmer, R. (2005) Instant Messaging, Edu cause Review, 40(6), 48-62.

Fox, C., Levitin, A., & Redman, T. (1993). The notion of data and its quality dimensions. Information Processing & Management, 30(1), 9–19

Friedman, L.W. and Friedman, H.H (2008). High impact areas of the new media technologies: A review, Management Online Review

Fu B., O'Sullivan D., Trust Management in Online Social Networks, 7th IT&T Conference, "Digital Convergence in a Knowledge Society", Blanchardstown, Dublin, October 25-26, ITB, 2007, 3, 13

Golden, M. (2011). Social Media Strategies for Professionals and Their Firms: The Guide to Establishing Credibility and Accelerating Relationships. John Wiley and Sons, Hoboken, New Jersey, USA.

Gómez, M., Roses, S., & Farias, P. (2012). El uso académico de las redes sociales en universitarios. Comunicar, 19(38), 131-138.doi:10.3916/c38-2011-03-04

Goodman, R. Y. (2014). Our Children's WhatsApp Culture – An Educational Look. Institute for

Greenhow, C., Robelia, B., & Hughes, J. (2009). Learning, Teaching, and Scholarship in a Digital Age: Web 2.0 and Classroom Research: What Path Should We Take Now? Educational Researcher, 38, 233-245.

Gross, M., & Latham, D. (2009). Undergraduate perceptions of information literacy: Defining, attaining, and self-assessing skills. College & Research Libraries, 70(4), 336–350

Gunawardena, C. N. & Zittle, F. J. (1997). Social presence as a predictor of satisfaction within a computer-mediated conferencing environment. The American Journal of Distance Education, 11(3), 8-26

Hamid, S., Waycott, J., Chang, S., & Kurnia, S. (2011). 'Appropriating online social networking (OSN) activities for higher education: Two Malaysian cases'. Ascilite, 526–538

Hargittai, E. (2007). A framework for studying differences in people's digital media uses. In N. K. a. H.-U.Otto (Ed.), Cyberworld Unlimited? (Pp.121–137).

Haythornthwaite, C. (February, 2006). Facilitating collaboration in online learning. Journal of Asynchronous Learning Networks, 10(1)

Hemsley-Brown, J. V., & Oplatka, I. (2006). Universities in a competitive global marketplace: a systematic review of the literature on higher education marketing.

Hershkovitz, A., & Forkosh-Baruch, A. (2013) Student-teacher relationship in the Facebook

era: the student perspective. International Journal of Continuing Engineering Education & Lifelong Learning. 23(1), 33-52

Hollyhead, A., Edwards, D. J., & Holt, G. D. (2012). The use of virtual learning environment (VLE) and social network site (SNS) hosted forums in higher education A preliminary examination. Industry and Higher Education, 26(5), 369-379

Hsieh, C., C., KUO, P.L., YANG, S.C. and LIN, S.H (2010): Assessing Blog User Satisfaction using the expectation and disconfirmation approach. Computers in Human Behaviour [online] 26 (5) pp. 1434-1444

Huebner, H., Varey, R. and Wood, L. (2008), "The significance of communicating in enacting decisions", Journal of Communication Management, Vol. 12 No. 3, pp. 204-223.

Huh, Y. U., Keller, F. R., Redman, T. C., & Watkins, A. R. (1990). Data quality. Information and Software Technology, 32(8), 559–565 HUMAN-SOCIAL SCIENCE: H Interdisciplinary, 14(4).

Ibrahim, A.A., Idris, R. G., & Hafiz, H. (2015). Psychometric Properties of WhatsApp Use

Ilie, V., van Slyke, C., Green, G. and Lou, H. (2005) 'Gender differences in perceptions and use of communication technologies: a diffusion of innovation approach', Information Resource Management Journal, Vol. 18, No. 3, pp.13–31.

Informal Channel to Motivate Learners to stay Connected. Asian Journal of Research in Social Institutions. Wawasan Open University Penang, Malaysia. International Journal of Public Sector Management, 19(4), 316-338.

J. Seaman, H. Tinti-Kane, and L. Solutions, Babson Survey Research Group, Social Media for Teaching and Learning, Pearson Learning Systems UK, (2013)

Jabr, N.H. (2011). Social networking as a tool for extending academic learning and communication. International Journal of Business and Social Science, 2(12), 93-102.

Jacobsen, W. C., & Forste, R. (2011). The Wired Generation: Academic and Social Outcomes of Electronic Media Use Among University Students. Cyber Psychology Behaviour & Social Networking 18, (5) pp.6, 275-285.

Jonassen, H., Howland, L., Moore, L., and Marra, M. (2003). Learning to solve problems with technology: A constructivist perspective. Upper Saddle Rover, NJ: Merrill Prentice Hall.

Kaplan, A.M and Haenlein, M. (2010). "Users of the world, united; Challenges and Opportunities of social media". Business Horizons, no. 53.

Kennedy, Judd, Dalgarno and Waycott (2010). Beyond natives and immigrants: exploring types of net generation students. Journal of Computer Assisted Learning (2010), 26, 332–343

Kim, H.W., Chan, H.C. and Gupta, S. (2007) 'Value-based adoption of mobile internet: an empirical investigation', Decision Support System, Vol. 43, No. 1, pp.111–126.

Klein, B. D. (2002). Internet data quality: Perceptions of graduate and undergraduate business students. Journal of Business and Management, 8(4)

Krejcie, R.V., & Morgan, D.W. (1970). Determining Sample Size for Research Activities. Educational and Psychological Measurement, 30, 607-610

Kwon Ohbyung and Wen Yixing. (2009). an empirical study of the factors affecting social network service use. Computer in Human Behaviour, 26 (2010) 254-263.

Lars Backstrom, Dan Huttenlocher, Jon Kleinberg, Xiangyang Lan (2006): Group formation in large social networks: membership, growth,

and evolution, Proceedings of the 12th ACM SIGKDD international conference on Knowledge discovery and data mining, August 20-23, 2006, Philadelphia, PA, USA.

Lee, JS, Cho, H, Gay, G, Davidson, BD & Ingraffea, A 2003, 'Technology acceptance and social networking in distance learning', Educational Technology and Society, vol. 6, no. 2, pp. 50-61.

Lee, M., Cheung, C. and Chen, Z. (2007) 'Understanding user acceptance of multimedia messaging services: an empirical study', Journal of the American Society for Information Science and Technology, Vol. 58, No. 13, pp.2066–2077.

Lee, M.-C. (2007). Factors influencing the adoption of internet banking: An integration of TAM and TPB with perceived risk and perceived benefit. Electronic Commerce Research and Applications, 8(3), 130–141.

Lillank, P. (2003). The quality of information. International Journal of Quality and Reliability

Littlejohn, S. (1999). Theories of human communication. Belmont, CA: Wadsworthlogies: Theory and empirical tests. The Internet and Higher Education, 11(2), 71–80

Lu, Y., Zhou, T. and Wang, B. (2009) 'Exploring Chinese users' acceptance of instant messaging using the theory of planned behaviour, the technology acceptance model, and the flow theory', Computers in Human Behaviour, Vol. 25, No. 1, pp.29–39.

Madge, C., Meek, J., Wellens, J., & Hooley, T. (2009). Facebook, Social Integration and Informal Learning at University: "It Is More for Socialising and Talking to Friends about Work than for Actually Doing Work". Learning, Media and Technology, 34, 141-155.

Malaysian Communications and Multimedia Commission (2018): A Pocket Book of Statistics, a half yearly statistical bulletin of the Communications & Multimedia industry Management, 20(6), 691–703. Management, III(11), 1021–1035.

McCarthy, J., Rowley, R., Ashworth, C.J. & Pioch, E. (2011). Social Network Sites and

McCorkle, D. E., and McCorkle, Y. L. 2012. "Using LinkedIn in the marketing classroom: exploratory insights and recommendations for teaching social media/networking," Marketing Educational Review (22:2), pp.157-166

Munkaila, A. (2015). THE IMPACT OF SOCIAL NETWORK SITES ON THE ACADEMIC

Muñoz, C, & Towner, T. (2010). Social networks: Facebook's role in the advertising classroom. Journal of Advertising Education, 14(1), 20–27

Naizabekov S. 2012)- ' . Negative impact of social networking sites on academic performance of students

Newaz, N., & Karim, A. M. (2016). Motivation Factors for using Social Network Applications : A Case

Ngai, E., Moon, K., Lam, S., Chin, E. and Tao, S. (2015), "Social media models, technologies, and applications", Industrial Management & Data Systems, Vol. 115 No. 5, pp. 769-802

Nicholson, S. (2002) Socialization in the "Virtual Hallway": Instant Messaging in the Asynchronous Web-based Distance Education Classroom, The Internet and Higher Education, 5(4), 363-372.

Novak, E., Razzouk, R., & Johnson, T. E. (2012). The educational use of social annotation tools in higher education:

O' Keeffe and Clarke – Pearson (2011), the impact of social media on children, adolescents and families, paediatrics, 127(4), 799-805

Pardo, A. (2013). Social learning graphs: combining social network graphs and analytics to represent learning experiences. Int. J. Social Media and Interactive Learning Environments, 1(1), 43-58 PERFORMANCE OF STUDENTS IN. International Journal of Economics, Commerce

Pilgrim, J., & Bledsoe, C. (2011). Engaging preservice teachers in learning through social networking. The Journal of Literacy and Technology, 12(1), 2-25.

Pimmer, C., Linxen, S., and Gröhbiel, U. 2012. "Facebook as a learning tool? A case study on the appropriation of social network sites from mobile phones in developing countries, "British Journal of Educational Technology (43:5), pp. 726-738.

Pipino, L. L., Lee, Y. W., & Wang, R. Y. (2002). Data quality assessment. Communications of the ACM,

Ramachandran, S.D., S.C. Chong and H. Ismail, 2009. The practice of knowledge management processes: A comparative study of public and private higher education institutions in Malaysia. The Journal of Information and Knowledge Management Systems, 39(3): 203222

Rauniar R, Rawski G, Yang J, Johnson B (2014) Technology Acceptance Model (TAM) and social media usage: an empirical study on Facebook. Journal of Enterprise Information Management [online] 27 (1). Pp. 6-30

Rauniar, R., Rawski, G., Crumbly, G. and Simms, J. (2009), "C2C online auction website performance: buyer's perspective", Journal of Electronic Research, Vol. 10 No. 2, pp. 56-75 Relationship Marketing Communications: Challenges for UK Football Clubs. In MindTrek.

Renfro, A. (2011). 8 social media strategies for your classroom. Getting Smart.

Rice, R. E. (1993). Media appropriateness: Using social presence theory to compare traditional and new organization media. Human Communication Research, 19(4), 451-484

Roblyer, M. D., McDaniel, M., Webb, M., Herman, J., & Witty, J. V. (2010). Findings on Facebook in higher education: A comparison of college faculty and student uses and perceptions of social networking sites. Internet and Higher Education, 13(3), 134–140

Ryan G (2014), Social media use in the classroom. Pedagogy and practice. Proceedings of the 58th ICET World Assembly 308-319

Ryberg, T. (2008). Challenges and potentials for institutional and technological infrastructures in adopting social media. In V. Hodgson, C. Jones, T. Kargidis, D. McConnell,

S. Retalis, D. Stamatis & M. Zenios (Eds), Proceedings of the 6th International Conference on Networked Learning (pp. 658-665).

Safko, L., Brake, D. (2009). The social media bible: Tactics, tools, and strategies for business success. Hoboken, NJ: John Wiley & Sons.

Sago, D. (2013) 'Factors influencing social media adoption and frequency of use: an examination of Facebook, Twitter, Pinterest and Google+', International Journal of Business and Commerce, Vol. 3, No. 1, pp.1–14.

Sam. (2016). Asian Research Consortium Learning beyond the Classroom through WhatsApp

Saunders, M., Lewis, P. and Thornhill, A. (2012) Research Methods for Business Students. Pearson Education Ltd., Harlow

Schwartz, H. (2012). Interpersonal boundaries in teaching and learning. New directions for teaching and learning. San Francisco: Jossey-Bass. Sciences and Humanities,

6(9), 1826–1827. http://doi.org/10.1016/j.compedu.2008.12.020

Selwyn, N. (2012). Social Media in Higher Education. The Europa World of Learning 2012, Routledge [interactive].

Selwyn, N. 'face working: exploring students' education-related use of Facebook', in Learning, Media and Technology, 34, 2, pp. 157–74, 2009

Setterstrom, A.J., Pearson, J.M. and Orwig, R.A. (2013) 'Web-enabled wireless technology: an exploratory study of adoption and continued use intentions', Behaviour and Information Technology, Vol. 32, No. 11, pp.1139–1154.

Sheehan, K. B., & Gleason, T. (2001). Online privacy: Internet advertising practitioners' knowledge and practices. Paper presented at the Regulating the Internet: EU and US Perspectives Conference, in Seattle, Washington

Shirazi, F. (2013) 'Social media and the social movements in the Middle East and North Africa', Information Technology and People, Vol. 26, No. 1, pp.28–49

Shiue et al. (2010) Exploring and mitigating social loafing in online communities. Computer in Human Behaviour. 26 p.768-777

Strader, T., Ramaswami, S. and Houle, P. (2007) 'Perceived network externalities and communication technology acceptance', European Journal of Information Systems, Vol. 16, pp.54–65.

Strong, D. M., Lee, Y. W., & Wang, R. Y. (1997a). 10 potholes in the road to information quality. Computer, 30(8), 38–46. Student Interactions in Facebook: The Teacher Perspective. Computers & Education, 85, 134-148. Study Analysis among Undergraduate Private Universities Students of Chittagong, Bangladesh.

Swan, K. (2001). Developing social presence in online discussions. In S. Naidu (Ed), Learning and Teaching with Technology: Principles and Practices. Kogan Page, London, 147164

Tamer Cavusgil, S. and Elvey-Kirk, L. (1998), "Mail survey response behavior", European Journal of Marketing, Vol. 32 No. 11/12, pp. 1165-1192

Teclehaimanot, B., & Hickman, T. (2011). Student-Teacher Interaction on Facebook: What Students Find Appropriate. TechTrends, 55(3), 19-30

Tolmie, A., & Boyle, J. (2000). Factors influencing the success of computer mediated communication (CMC) environments in university teaching: a review and a case study. Computers & Education (34), 119-140.

Trisha Dowerah Baruah – Effectiveness of social media as a tool of communication and its potential for technology enabled connections: A micro-level study- published at: "International Journal of Scientific and Research Publications, Volume 2, Issue 5, May 2012 Edition".

Tyagi, S. 2012. "Adoption of Web 2.0 technology in higher education: a case study of universities in National Capital Region, India," International Journal of Education and Development using Information and Communication Technology (8:2), pp. 28-43.

Uma Sekaran 2003 Research Methods for Business. A skill Building Approach (4th Edition). New York

Van Slyke, D.M. (2007) 'Agents or stewards: using theory to understand the governmentnon-profit social service contracting relationship', Journal of Public Administration Research and Theory, Vol. 17, No. 2, pp.157–187.

Walther, J. B. (1992).Interpersonal effects in computer-mediated interaction: A relational

perspective. Communication Research, 19(1), 52-90

Wand, Y., & Wang, R. Y. (1996). Anchoring data quality dimensions in ontological foundations. Communications of the ACM, 39(11), 86–95.

Wankel, C. and Global Team Q12 (2009). Management through Collaboration: Teaming in a Networked World.

Weber L. (2009). Marketing to the social Web. Hoboken, New Jersey: Wiley and Sons

Wei and Zhang (2008): The impacts of information quality and system quality on users' continuance intention in information-exchange virtual communities: an empirical investigation. Decision Support Systems, 56, 513-524

Weinberger, A., Ertl, B., Fischer, F. & Mandl, H. (2005). Epistemic and Social Scripts in Computer-Supported Collaborative Learning. Instructional Science: An International Journal of the Learning Sciences, 33(1), 1-30

Wirtz, J., Chew, P., & Lovelock, C. (2012). Essentials of Services Marketing. Singapore: Pearson Education South Asia Pre Ltd.

Yin. (2016). Adoption of WhatsApp Instant Messaging Among Students in Ipoh Higher Education

Zaidieh, A. (2012). The use of social networks in education: challenges and opportunities .World of Computer Science and Information Technology Journal. 2(1).18-2

Zmud, R. W. (1978). An empirical investigation of the dimensionality of the concept of information. Decision Sciences, 9(2), 1