Determinants of Social Media Communication Usage in the Tertiary Institutions

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Abstract: *The purpose of this study was to determine factors that affect social media communication usage in tertiary institutions in the absence of a communication policy. The study was conducted in 10 universities located in Kigali. Those are Kigali Institute of Management (KIM) university, University of Kigali (UoK), University of Lay Adventist of Kigali (UNILAK), Integrated Polytechnic Regional College (IPRC Kigali), Kigali Independent University (ULK), University of Tourism Technology and Business studies (UTB), Mount Kenya University (MKU) Rwanda, Adventist University of Central Africa (AUCA), University of Global Health Equity (UGHE), African Leadership University (ALU) Rwanda. The research interviewed 385 where 200 were universities staffs at different levels and 185 students. The researcher found that the main social media tools used in tertiary institutions are electronic mail, websites, applications, face to face, mobile phones and electronic mail as mentioned by all respondents. This research also showed the benefits of using those social media tools that are immediate feedback, personalized messages and knowledge sharing where 40 percent of respondents show that the main benefit is to get personalized messages. 30.27 percent of respondents benefited from knowledge sharing and then 29.73 percent benefit immediate feedback in using social media with their followers. The research revealed that misuse of social media communication in tertiary institutions has many inconveniences such as widespread rumours and misinformation, echo chambers, civility or to be precise the lack of it and social currency.*

Keywords: Social media, Tertiary institution, communication, Blog, Micro blog, Social Networks

1. Introduction

Social media platforms are internet-based applications focused on broadcasting user-generated content. While primarily web-based, these services are increasingly available on mobile platforms. Globally, Communities and individuals share information, photos, music, videos, provide commentary and ratings/reviews, and more. In essence, social media is about sharing information, consuming information, and repurposing content (U.S. Department of Energy, 2014).

Facebook and YouTube lead this landscape, as remarkable majorities of U.S adults use each of these sites. At the same time, younger Americans (especially those ages 18 to 24) take lead for using a variety of platforms and using them frequently. Some 78% of 18- to 24-year-olds utilise Snapchat, and a sizeable majority of these users (71%) visit the platform many times per day. Similarly, 71% of Americans in this age group now use Instagram and close to half (45%) are Twitter users (Pew Research Center, 2018). Murphy (2010) points out that picking the right communication channel for your message would contribute significantly to the success of your message reaching your audience and therefore, it is important to understand the various communication channels available. Communication channels, also known as media, are the delivery vehicle for your message.

A research done by The Neighborhood Skum (TNS), (2011) revealed much statistics that has made this market more worth to invest in. According to their research, globally, people who have online access have digital sources as their number one media channel. 61% of online users are of the internet daily against 54% for TV, 36% for Radio and 32% for Newspapers. Insites consulting (2012) indicates that

awareness of social networks sites is very high. Facebook is close to 100%, Twitter reaches 80% awareness, while Google+ is known by 70%. LinkedIn continues to have relatively low awareness where about 4 out of 10 users are familiar with this network. More than 7 out of 10 internet users are members of at least one social network.

In Australia, according to Sensis Social Media Report (2017), 81% of the Australians use Facebook Messenger and other 25% use Facebook Live to watch live or recently recorded videos, with 5% having published their own live video. More than one in three have published videos or pictures using the story function on Facebook (44%), Snapchat (37%) or Instagram (36%). Twitter is increasing in popularity from 19% to 32% in terms of usage, while Instagram has risen from 31% to 46%. Snapchat has almost doubled in popularity, jumping from 22% to 40% of social media users. According to a research done by Anyanwu, Oyemike & Iroeze (2013), In Nigeria, students in undergraduate of tertiary institutions use social media in socialization purposes while they have a good knowledge of social media tools. Facebook is leading in Nigeria among the other social media.

Over 98% of web access in Kenya is via mobile phones. According to a study by a Kenyan based research firm estimated the combined monthly airtime expenditure for the youth of Kenya, Uganda, and Tanzania at $70 million. This clearly shows that Kenyan youth are active users of mobile phones and online social networks. According to Communications Authority of Kenya (CA) 2011 report, Kenya had 25.27 million mobile phone subscribers by June 30, 2011 representing 64.2% of the total population. The total internet users in Kenya are 12.8 million and 98% of these people access the internet via their phones (Mayeku, 2011).

According to a research done by Ng'ang'a Mugera (2015) social media is yet to be appreciated by the management of public institutions in Kenya. This is shown by the fact that majority of the staff and students use social media on daily basis yet important communication is relayed via notice boards, institutional websites and face to face basis. It thus remains ineffective medium thanks to it is under utilization. Lack of a policy to incorporate it is partly to blame for this impasse. Facebook is the most popular social network with over 2.32 billion monthly active users (MAU) as of December 31, 2018 (Crunch base, 2018). The network's popularity with digital natives who grew up with the social media is due in part to the networks ability personalize content with interactivity as users share and discuss contents with friends and family (Yaros, 2009).

In Rwanda, according to www.statcounter.com (2019), 81.65% are Facebook users which is the most used social media in Rwanda. According to Rwanda Utilities Regulatory Authority report (2018), 47.8% of Rwanda are using internet services. The major concern of this research was to find out the determinants of social media communication usage in tertiary institutions in Rwanda with a view of encouraging them to adopt this latest version of communication.

2. Research Methods and Procedures

This study is designed for successful achievement. Kerlinger (1986) takes research design as a plan, structure and strategy of investigation so conceived as to obtain answers to research questions or problems. The plan is the comprehensive scheme or program of the research. It will include an outline of what the investigator did from the hypothesis and their operational implications to the final analysis of data (as cited in Ranjit, 2010). This is quantitative and qualitative study which was based in Kigali. Data had collected via documentation, interview and questionnaires. Both qualitative and quantitative data had captured.

The target population of this research was students, employees and leaders at different levels of identified tertiary institutions as mentioned earlier.

The respondents derived from the students, employees, leaders at different levels of 5 identified tertiary institutions. The students, employees and leaders at different levels of those institutions have been met in their respective institutions to answer to designed questions for them.

Cluster sampling was used to obtain 10 universities in 26 private universities in Rwanda. Each name of the 26 university was written on a piece of paper and 10 names were picked randomly. The Universities obtained were Kigali Institute of Management (KIM) University, University of Kigali (UoK), University of Lay Adventist of Kigali (UNILAK), Integrated Polytechnic Regional College (IPRC Kigali), Kigali Independent University (ULK), University of Tourism Technology and Business studies (UTB), Mount Kenya University Rwanda (MKU Rwanda), Adventist University of Central Africa (AUCA), University of Global Health Equity (UGHE), African Leadership University, Rwanda (ALU Rwanda). (Saifuddin Ahmed, 2009).

The sample size from population size was calculated by using Cochran's sample size formula, give a desired level of precision, desired confidence level and estimated proportion of attribute present in the population.

The formula of Cochran is put into consideration especially in situation with large populations. A sample of any size provides more information about a smaller population than a larger one. Therefore, there is a correction through which the number given by Cochran's formula can be condensed if the whole population is relatively small. The Cochran formula is:

$$n_0 = \frac{Z^2 pq}{e^2}$$

Where:
- e is the desired level of precision (Margin of error)
- P is estimated proportion of the population which has the attribute in question
- Q is 1-p

The z-value is found in z table.

We did a study in 10 universities and we want to find out the sample size of that population of interest. We don't have much information about how much people using social media in these universities, so we are going to assume that a half of students and staff use social media in communication this gives us maximum variability. So, p=0.5, let say we want 95 percent confidence level and at least 5 percent plus or minus precision. A 95 % confidence level gives us Z values of 1.96 on the normal tables.

So, we get: $((1.96)^2(0.5)\,(0.5)) / (0.5)^2 =385$, so a random sample of 385 staff and students in our target population should be enough to give us the confidence levels we need. We interviewed 200 staffs and 185 students.

Probability sampling was applied to choose respondents. Simple random sampling had used to that group because all members of the population had the equal chance to be selected.

The following techniques had used to collect data: the documentary (literature search), questionnaires and the direct observation. Below is explained how those techniques facilitated the researcher.

Data were collected from primary sources. Questionnaires were administered. The researcher reproduced enough questionnaires for distribution. Selected research assistants, assisted in the data collection, briefed and oriented in order to be consistent in administering the questionnaires.

3. Empirical Results and Discussion

3.1 Respondents' characteristics

This section provides a socio-demographic profile of respondents of the research questions. The information that respondents provided is important for understanding the behaviour and knowledge of the population of interest with respect to the factors that affect social media communication usage in tertiary institutions. The individual questionnaire for students gathered information concerning respondents' gender, age group, level of education and department of study and for staff individual questionnaire gathered information concerning name of department, designation and age group of respondents. These characteristics are used to interpret findings elsewhere in the research paper.

3.2 Background characteristics of respondents

Table 2 below shows the identification of respondents according to the gender whereby 50.3% males and 49.7% females has been asked. This clearly shows that the number of males is greater than for females in this study. Given the implication of age in analyzing demographic characteristics, outstanding attention was paid to making sure this statistic was accurately recorded in the research.

Prior to recording any information, the interviewer asked respondents to tell truly accurate information about themselves and the respondents' age bracket. The study found that majority of respondents are under 25 representing 40 percent of all respondents whereas 30% aged between 26-30, 20 percent of respondents reported that they are aged between 31-35, slightly 9.7 percent of respondent reported that they are aged from 36 and above. This shows that majority of the respondents were aged below 30 years. As shown in table 4 for socio-demographics characteristics for staff, the majority were in age between 31-40 with 50 percent, 30 percent are between 18-30 and the remaining 20 percent aged from 41 and above.

3.3 Education background for respondents

Table 2 presents that 80 percent of respondents are in undergraduate and only 20 percent of respondents are for postgraduates. The table 2 also shows that accounting, statistics, engineering and economics are equally represented with 20 percent in each department and the remaining 20 percent are in two departments sciences with 10 percent and 10 percent for Technology. These respondents are in different years of study where 60 percent are in year 2, 19.5 percent are in year 3, 10.3 percent in year 4 and also 10.3 percent in year 1.

3.4 Current occupation of respondents

In Table 2 all respondents are students and in table 4.1.b the majority are teacher with 62 percent of all respondents and 38 percent remaining are from staffs of the universities of interest. Table 4 revealed that the majority of respondents are from accounting department with 21 percent, 20 percent are from economic, 19 percent are from sciences, 11 percent

for Technology, 10 percent for engineering, 10 percent for statistics and after 9 percent for law department.

Table 1: Socio-demographic characteristics of respondents (Students)

		Count	Percent
Sex	Female	92	49.7%
	Male	93	50.3%
age of student	Under 25	74	40.0%
	Between 26-30	56	30.3%
	Between 31-35	37	20.0%
	36 and above	18	9.7%
year of study	1	19	10.3%
	2	111	60.0%
	3	36	19.5%
	4	19	10.3%
department or course	Accounting	37	20.0%
	Technology	37	20.0%
	Law	19	10.0%
	Economics	37	20.0%
	Sciences	19	10.0%
	Statistics	37	20.0%
level of education	undergraduate	148	80.0%
	postgraduate	37	20.0%

Source: Primary data

Table 2: Socio-demographic characteristics of respondents (staffs)

		Count	Column N %
Name of department	Accounting	42	21.0%
	Management	22	11.0%
	Economics	40	20.0%
	engineering	20	10.0%
	Law	18	9.0%
	Sciences	38	19.0%
	Statistics	20	10.0%
Designation	Teacher	124	62.0%
	staff	76	38.0%
Age	Between 18 and 30	60	30.0%
	Between 31-40	100	50.0%
	41 and above	40	20.0%

Source: primary data

3.3 The challenges of the effective social media communication usage in tertiary institutions

The table 3 reveal that 80 percent of people who use social media in tertiary institutions face different challenges and the only 20 percent don't face any. Table 5 shows that 148 out of 185 face challenges in using social media effectively while only 37 out of 185 use social media communication effectively. That means that there are different challenges in using social media as the statistics from the research show.

Many respondents identified some of the challenges like how to choose social media channel which is right to use, because respondents mentioned that there are many new social media channels starting every day. Second challenge is to find the right time to share your posts. Check the social media analytics and find out the maximum engagement time. The third challenge is how to engage audience and gain new followers and retain the existing ones. Other challenge is that social media require too much times in order to be updated. The availability of many social media platforms disturbs working hours of users.

Table 3: Challenges of using social media

Do you face any challenges when using social media?		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	148	80.0	80.0	80.0
	No	37	20.0	20.0	100.0
	Total	185	100.0	100.0	

Source: primary data

3.4 The benefits of using social media in tertiary institutions

3.4.1 Benefits of social media

The table 4 highlight three benefits of social media for their users. Those are immediate feedback, personalized messages and knowledge sharing. 40 percent of respondents show that the main benefit is to get personalized messages, 30.27 percent of respondents benefit from knowledge sharing and 29.73 percent benefit from immediate feedback in using social media with their followers. The table 6 shows that 74 out of 185 report that the benefit of using social media is to get personalized messages, 56 out 185 benefit from knowledge sharing and 55 out of 185 benefit from using social media by getting immediate feedback.

Table 4: Benefits of social media

How having social networking sites benefited you?		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Immediate feedback	55	29.7	29.7	29.7
	Personalized messages	74	40.0	40.0	69.7
	Knowledge sharing	56	30.3	30.3	100.0
	Total	185	100.0	100.0	

Source: Primary data

3.4.2 Reasons for using social networking sites

The researcher revealed that there are many reasons highlighted by respondents that make them use social sites. Those are to stay in touch with what friends are doing, to stay up-to-date with news and current events, to fill up spare time, to find funny or entertaining content general networking with other people.

3.5 The specific social media tools mostly utilized in tertiary institutions studied

3.5.1 The Level of communication in universities

The table 4 shows that great number of respondents said that their level of communication is very effective with 40.54 percent of all respondents, 20 percent of respondents reported that their communication is effective and after 39.46 percent said that is less effective, none said that his level of communication is poor. It means that the majority of respondents reported their level of communication is good at 60 percent.

3.5.2 Level of communication in department

The table 5 below show the level of communication in different departments of public and private universities in Kigali. The researcher revealed that 40 percent (80/200) said that their level of communication is excellent, 40 percent

(80/200) said also that the level of communication is very good, 19 percent (38/200) agreed that their level of communication is good and only 1 percent (2/200) reported that it is fair in their department. It means that the level of communication is at brilliant level as the majority reported.

Table 5: Level of communication in universities

How do you rate your level of communication by university staff?		Frequency	Percent	Valid Percent	Cumulative Percent
	very effective	75	40.5	40.5	40.5
	Effective	37	20.0	20.0	60.5
	less effective	73	39.5	39.5	100.0
	Total	185	100.0	100.0	

Source: Primary data

3.5.3 Channels used in communication at different universities in Kigali

This research reveal that 40.5 percent of all respondents choose electronic mail as most used by students in communication with staffs. The second, there are three channels that are websites, applications and face to face communication with 22.2 percent for each channels. 15.1 percent of respondents said that they use mobiles phones in communicating with staff. There is none student who communicate with staff by using mail as channel of communication.

Table 8 presents that websites and applications are the main channel used in communication between students as 38.4 percent said it. The second channel is mobile phones with 29.2 percent of all respondents, 22.2 percent reported that face to face communication is also used and after 10.3 percent of all respondents said that they use electronic mail in communication between students. This research revealed that students are not using mail channel in their communication.

3.5.4 Preference of social media channels

Table 6 shows social media channels that are mostly preferred by staff from tertiary institutions. The research reveal that the most preferred channels are flicker with 61 percent of all respondents. The second are linked in and twitter with 60 percent of all respondents. The third channels are twitter and Facebook with 50 percent of all respondents. The last one is flip with 39 percent.

Table 6: Preference of social media channels

		Count	Percent
Do you prefer facebook?	Yes	100	50.0%
	No	100	50.0%
Do you prefer flicker?	Yes	122	61.0%
	No	78	39.0%
Do you prefer linked in?	Yes	120	60.0%
	N0	80	40.0%
Do you prefer twitter?	Yes	120	60.0%
	N0	80	40.0%
Do you prefer google+?	Yes	100	50.0%
	No	100	50.0%
Do you prefer flip to?	Yes	78	39.0%
	No	122	61.0%
Do you prefer Instagram?	Yes	62	31.0%
	No	138	69.0%

Source: primary data

3.6 Reasons for utilizing the identified social media tools

3.6.1 Factors that influence using social media in your institutions (Students responses)

The table 7 below shows factors that influence tertiary institutions to use social media. Those factors are the following: privacy, convenience, times, cost, credibility and permanency. The researcher founded that the main factors are cost, convenience and time where each factor has 20 percent of all respondents (37/185 for each factor). The remaining factors are privacy with 19.46 percent (36/185). Credibility with 10.27 percent (19/185) and permanency with 10.27 percent (19/185). This means that time, cost and convenience are the main factors in tertiary institutions that influence use of social media in tertiary institutions.

Table 1: Factors that influence using social media

	Frequency	Percent	Valid Percent	Cumulative Percent
Privacy	36	19.5	19.5	19.5
Convenience	37	20.0	20.0	39.5
Time	37	20.0	20.0	59.5
Cost	37	20.0	20.0	79.5
Credibility	19	10.3	10.3	89.7
permanency	19	10.3	10.3	100.0
Total	185	100.0	100.0	

Source: primary data

3.6.2 Factors that influence use of social media communication in tertiary institutions

The table 8 below shows factors that influence use of social media communication in tertiary institutions between staffs and with shareholders. The research reveal that the main factor is time with 30percent of all respondents. The second factor is permanency with 21percent of all respondents. 20 percent of respondents said that the factor that influence the use of social media is convenience. 11percent of respondents chose credibility as factor that influence social media communication and lastly 9 percent of respondents reported cost and also 9 percent reported privacy as the factor that influence social media communication in tertiary institutions.

Table 8: Factors that influence use of social media communication in tertiary institutions

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Privacy	18	9.0	9.0	9.0
	Convenience	40	20.0	20.0	29.0
	Time	60	30.0	30.0	59.0
	Cost	18	9.0	9.0	68.0
	Credibility	22	11.0	11.0	79.0
	Permanency	42	21.0	21.0	100.0
	Total	200	100.0	100.0	

Source: primary data

3.6.3 Knowledge of social media tools by users

This research show that all respondents, 100 percent, know what is social media and use at least one site or channel in their communication. The table 12 below shows the level of ICT literacy. 70.3 percent of respondents are literate, 20 percent are very literate and 9.7 percent have average knowledge about ICT. There is none who is illiterate in this study about ICT. In this study, the respondents gave the social networking sites that they know such as Facebook, Instagram, Google+, WeChat, WhatsApp, Badoo, Twitter, Skype, LinkedIn,

Table 9: Knowledge of social media tools

		Do you know what social media is?			
		Yes		No	
		Count	Column N %	Count	Column N %
What is your level of ICT Literacy	Very literate	37	20.0%	0	0.0%
	Literate	130	70.3%	0	0.0%
	Average	18	9.7%	0	0.0%
	Illiterate	0	0.0%	0	0.0%

Source: primary data

3.7 The inconveniences of misuse of social media in tertiary institutions.

This research highlight that the misuse of social media communication in tertiary institutions has many inconveniences such as: **rumours widespread and misinformation** that had never been easier in the history of mankind.

People mostly read and engage with people they agree with. It's very easier on social media to mute or block the people with whom they disagree. And the ranking algorithms are optimized to show what they want to see based on previous interactions and de-prioritize a lot of what you should actually see.

Online public discussions quickly descend into angry mobs. We always forget that we are talking to real people not animals. It's really becoming hard to change our opinions. The speed and briefness of social media force us to jump quickly to conclusions in order to stay relevant. We quickly share sharp opinions about complex world affairs in 140 characters. And those opinions can stay on the Internet forever, making it difficult to change those positions or question them even after new information is provided.

The trend of social media today is likes, shares and retweets. This is how we are compensated for our contributions on social media. We are identified by the number, small or big, of followers we have. We find ourselves ending up in popularity contest. The social media eco-system rewards broadcasting over engagement, posts over discussions, shallow comments over deep conversations. As a result of that, people are exchanging each other, rather than talking with each other.

4. Conclusion

Basing on results of the statistics, the research has shown factors that are affecting social media communication usage in tertiary institutions. Those factors are cost, convenience and time between students' selves with staffs. The factors that are affecting social media communication usage between staffs with shareholders are time, permanency and convenience. According to these differences and similarities factors affecting use of social media communication usage of students and their identities are decided by their own individualities and the social factors of their own and

cultures. The major contributing factors for the social media communication usage are privacy, convenience and time spent. This research reveal the benefits of using social media communication that are immediate feedback, personalized messages and knowledge sharing.

5. Recommendations

Basing on the findings, social media providers should make improvements to protect user privacy. As tertiary institutions depend heavily on social media for immediate feedback, personalized messages and sharing knowledge in today's digital environment. It is important for tertiary institutions to integrate social media literacy education into regular academic learning and improve the level of ICT literacy.

6. Acknowledgement

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