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Role of Social Media for Knowledge Sharing among Students and Staff in Institutions of Higher Learning: A Case Study of Bomet University College, Kenya

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Abstract: Social media has a lot of promise for improving networking, collaboration, experience sharing, and communication. Everyday, the number of people who use these sites grows. The study's goal was to see how Bomet University College (BUC) students and staff used social media to improve their learning. A case-study survey was employed using mixed methodologies to analyze the role of social media for knowledge sharing. The study's target population was the personnel and students of Bomet University College, which included a total of 684 undergraduate students. Cronbach's Alpha Coefficient was utilized to confirm the instrument's reliability, with a coefficient of 0.812 obtained from the findings of the pilot study. Interviews and questionnaires were used to gather information. The study established that all respondents used social media for information exchange, sociability, and educational endeavor support, with WhatsApp and Facebook being the most popular social media platforms among both staff and students. The study recommends that policymakers in institutions of higher learning inspire students and staff to make use of social media in a professional and productive manner.

Keywords: Digital media, Institutions, Knowledge sharing, Social networking.

I. Introduction

Digital media platforms have become increasingly powerful over the last few years. Digital platforms such as Twitter, WhatsApp, Facebook, Instagram, Library Thing, Myspace and others have promoted socio-economic development in Kenya in the last few years. Knowledge sharing involves creating, sharing, capturing, and effective utilization in an organizational setting. It refers to a multidisciplinary approach to attaining corporate goals through the most effective use of knowledge [1]. Knowledge sharing plays a key role in formal apprenticeship, on-the-job talks, discussion forums, professional training, corporate libraries, and mentorship programs, which are all examples of knowledge management efforts.

With the increasing use of computers in the second half of the twentieth century, explicit adaptations of technologies like knowledge bases, expert systems, knowledge repositories, group decision support systems, intranets, and computer-supported cooperative work have been introduced to help such efforts [2, 3]. Information sharing is an activity in which individuals, groups, families, communities, or organizations communicate information (specifically, information, skills, or expertise). At times, knowledge sharing can be a substantial challenge in the field of knowledge management [4, 5]. The challenge of knowledge sharing is the transfer of knowledge from one entity to another. Some employees are resistant to sharing their expertise because they believe knowledge is property; ownership, as a result, becomes extremely essential. However, Davenport proved that people are typically rewarded for what they know rather than what they share [6, 7]. When information sharing is hampered, negative outcomes such as isolation and rejection of ideas emerge to enhance knowledge sharing and remove knowledge sharing hurdles, especially in academic institutions. Universities should promote social media use.

Organizations have recognized that knowledge is a key intangible asset for establishing and maintaining competitive advantages [3]. Knowledge management systems are commonly used to facilitate knowledge sharing activities. However, technology is only one of several elements that influence knowledge sharing in businesses, including organizational culture, trust, and incentives [8]. Because some individuals avoid sharing their expertise with the rest of the

business, knowledge sharing is a key difficulty in the field of knowledge management. Knowledge is a valuable intangible asset that may be used to create and preserve competitive advantages within enterprises. Organizational culture, trust, incentives, and technology are all elements that influence knowledge sharing [9]. Knowledge management systems, a type of information technology (IT) that enables and organizes information within a firm or organization, are often used to assist knowledge sharing activities.

The study thus sought to ascertain BUC students' and staff's use of social media in knowledge sharing.

A. Statement of the Problem

It has never been easier for people to share their knowledge, especially when there is a potential risk that other people will take advantage of it [10]. Statistics show that university students and staff are the biggest users of social media in the world. A study by Goodyear and Ellis *et al.* (2008) showed that emerging technologies provide new opportunities that facilitate knowledge sharing among higher education fraternities, the majority of whom are students and staff [11]. Students and staff of Bomet University College use social media for their day-to-day activities, some of which are not related to their studies. The emergency of new pedagogies in teaching and learning, which require one to have knowledge of these social platforms, forms the basis for this study. With opportunities provided by social media, there is limited research on the role of social media for knowledge sharing in a university setting, hence the need for this study.

B. Objectives of Study

- To determine the extent to which students and staff use social media to enhance learning at Bomet University College.
- To assess the extent to which students and staff use social media for knowledge sharing at Bomet University College.

C. Significance of the Study

This study investigated the use of social media for knowledge sharing at institutions of higher learning. This study has brought to light the fact that social media improves learning outcomes as it promotes the sharing of information among university staff and students. Social media is a means of communication through the internet that enables socialization. It is an effective way for university staff and students to communicate with each other and interact with each other.

II. Literature Review

A. Enhance Learning

Many scholars and educational professionals believe that social media enhances the learning experiences at the university [12]. The growing interest in social media has led educators to examine its use for academic practice. As institutions of higher learning are challenged to enhance collaborative learning and community building amongst students, Minocha (2009) recommends that educators make use of tools that facilitate collaborative authoring, such as blogs, library things, Myspace, and wikis; applications that enable applications that enable the sharing of bookmarks, photographs, and videos; social networking platforms such as Facebook, WhatsApp, Twitter, and virtual worlds [13].

According to Andreas and Haenlein (2010), students, especially at higher levels of learning, can function collaboratively through exploring the opportunities given by the online social atmosphere to resolve certain academic issues or issues with their peers [14]. The improved usage of websites has become a worldwide phenomenon for quite some time. What began out as a hobby for several computer-literate people has been converted into a social norm and existence-style for individuals from around the globe [15].

Distance learning is considered by Kamel Boulos and Wheeler (2006), who comment on how students can feel socially isolated if they are geographically distant from teachers or fellow students and/or studying during unsociable hours and that this isolation can pose a significant barrier for some learners [16]. They state that social media tools encourage a more human approach to interactivity on the Web, support group interaction better and foster a greater sense of community. This social media tool encourages more active learning and enables feedback from tutors to learners; this tutor-student interaction further increases student motivation.

B. Knowledge Sharing

According to Baruah (2012), social networks are increasingly being used by teachers and learners as a communication tool [17]. Teachers create chat rooms, forums, and groups to extend classroom discussion, from posting assignments, tests, and quizzes, to assisting with homework outside of the classroom setting. Learners can also form groups on the social networking sites and engage in discussion on a variety of topics. Social media tools bridge the distance between different people. It offers a platform for online users to find others who share their same interests and build virtual communities based on those shared interests. With the availability of social media

technologies and services, content sharing and user interaction have become relatively easy and efficient.

Leslie and Landon (2008) argue that this approach aligns well with learner-centricity. Because people can communicate with other practitioners in the field, they can move beyond the more limited circle of their immediate contacts [18]. Leslie and Landon observe that people desire to form groups in order to support their learning and that social networking helps to create both an environment and an infrastructure for informal and borderless learning. They quote Cross's talk on YouTube (Cross, 2006) that although 80% of learning is informal, 80% of the educational budget is expended on formalized ways of teaching and learning, in order to argue for capitalizing on informal learning as representing a better balance of investment in education [19].

O'Fallon and Butterfield (2005) in their personal blog similarly characterize social media as tools that support communication using the five "devices" of identity, presence, relationships, conversations, and groups [20]. Face-to-face teaching is not the only way to reach learners because asynchronous learning online is available at any time [21]. Asynchronous learning allows users to access the Internet to obtain information outside of the constraints of time and place and among a network of people through social networking tools such as Wikis, WhatsApp, blogs, podcasts, Facebook, and YouTube [22]. E-learning platforms are also undergoing a transformation in response to the communicative and collaborative opportunities that Web 2.0 technologies and social media tools provide. Learning management systems (LMSs) such as Sakai, Moodle, and even Blackboard have integrated many of the popular tools and functionality of Web 2.0: blogs, wikis, simple syndication (RSS) feeds, and bookmarking [23].

Critical thinking and discriminatory skills are essential parts of the learning toolkit. Active learning principles and constructivist pedagogy support the notion that learning happens when students are engaged in producing knowledge [24, 25, 26]. In this sense, the constructivist classroom is like a Web 2.0 platform in which everyone is invited to participate in content-creation, and peer production is central to the intrinsic value of the platform. According to Satapathy (2019), the constructivist classroom is transformational and teachers must cede some of the control in the direction of learning to allow for the emergent learning that takes place when students are allowed to interact [24]. In a social context of rapid technological innovation and dissemination, it is vital to be aware of the role that technology plays in all our lives, and particularly in the lives of those we are responsible for, including the children and young people in the education systems [27].

Academic institutions may not know enough about young people's experiences of online social media and how this is interwoven with life offline. There is a need for a stronger focus on students' everyday use and learning with social media in and outside of classrooms [23]. Academics can benefit from social media tools when checking on the progress of student teams, accessing information on the history of their work and seeing the full extent of the students' collaboration, including their latest research and assignments, meeting agendas and minutes, and updated business plans, and then leaving feedback on their progress and reading the comments of others [15, 22].

C. Social Media and Education

Sites such as Facebook, MySpace, Twitter, WhatsApp, Library Things, Blogs, Wikis, and LinkedIn are examples of social media [22]. These social media constitute the environments that are specifically designed to support and develop friendships and whose overall purpose is to provide a context and appropriate medium for communication, hence knowledge sharing. Based on the review of existing scientific literature on social media, no studies have been conducted to evaluate the use of social media for knowledge sharing in universities. In the argument of Attwell (2008), Barbour and Plough (2009), social media has recently managed to grab the attention of higher education institutions as a means to connect with students [21, 28]. Statistics indicate that almost all market-driven tertiary education institutions in the world are actively involved in some type of social media activity. Since social media first appeared on the World Wide Web in the 1990s, they have become extremely popular, especially with college students [29]. Many students view the sites as a way to maintain existing relationships or to form new friendships [23]. This may be particularly important for students as they leave their families and high school friends to head off to college campuses where they may feel isolated or lonely [15]. Once at college, students can also use social media tools to identify study partners or exchange ideas for school projects. For the purposes of this study, social media is defined as a group of internet-based applications that build on the ideological and technical foundations of Web 2.0 and that allow the creation and exchange of user-generated content [30].

Therefore, social media is a means of communication through the internet that enables social interaction and is an effective approach for people to use in communicating and interacting with each other [31]. Simultaneously, more organizations are applying social media to promote their services and interact with their users or patrons.

Today, the focus of attention is on social media delivered by mobile and web-based technologies, which create interactive platforms such as WhatsApp, Facebook, LinkedIn, and Twitter. Social media provides and creates fresh opportunities for organizations, communities, and individuals, such as blogs and wikis. They continue to have a significant impact on how people behave online, including how they search, play, converse, form communities, build and maintain relationships, and create, tag, modify, and share content across a variety of sites and devices

[14, 32]. Media tools are attracting the attention of educators who are beginning to ask about their relevance to different kinds of learning [22, 33]. The internet has worked as a channel for communication in social media. The internet has always been social (Davies & Merchant, 2009) because most social media are online-based and provide a variety of ways for users to interact [33]. Millions of people use social media on a regular basis, making it an indelible part of daily life [34].

Social media is a way of describing the patterns of everyday social interaction, including those that take place within family structures, between friends, and in neighborhoods and communities. Wellman (2002) suggests that social media in traditional societies are characterized by a predominance of face-to-face encounters contained within relatively small geographical areas [35]. The use of networking is one way through which knowledge and information can be easily transmitted. For the purposes of this study, the researcher shall use the gratification theory, whose tenets are useful and best suited for the study.

III. Methodology

A. Research Design

Burns and Groove (2003) explained research design as a plan for performing a study with maximum control over issues that may interfere with the validity of the findings [36]. This study used a case-study survey methodology using mixed techniques, which included both qualitative and quantitative components. Qualitative research is most effective at eliciting underlying explanations, perspectives, and motivations for the topic at hand. It provides insights into the situation or aids in the development of ideas. Quantitative research, on the other hand, is ideal when it is necessary to ask individuals for their thoughts in a systematic manner so that actual data and statistics can be produced to aid the researcher [37]. To obtain valid statistical data, it is necessary to survey a large number of people and ensure that they are a representative sample of the target population, as was done in this study [38].

B. Target Population

The study's target population included 684 Bomet University College students and staff. The students who participated in the study were solely undergraduate students because they had completed numerous ICT courses and had developed acceptable abilities.

C. Sampling Procedure and Sample Size

The research aims and research questions were taken into account when determining the optimum sample for this study. The sample size for this study was students and employees from Bomet University College who were identified using systematic random sampling. Purposive sampling was used to identify the following important informants for the study: Deputy Principal Academics and Student Affairs; Head of ICT; Dean School of Education; Dean School of Business; Senior Librarian; and Student Leader.

i. Sample Size

Mugenda and Mugenda (2003) determined that a sample size of 30% would provide the greatest response based on the target demographic [39].

This means that the sample size was = 684 x (30100) = 205 people.

The following is how the sample size was distributed:

199 students

6 key informants

The students' sample was chosen using systematic random selection, whereas the key informants were chosen using the purposive sampling method.

D. Research Instruments

Questionnaires were utilized to collect data for the study. Questionnaires were chosen because they are less expensive, save time, and capture multiple types of information at the same time.

i. Questionnaires

The questionnaires were used to solicit information from the students. The questionnaires for the data collection were semi-structured. They sort information with regard to the membership of participants in social media, hours spent on social media, knowledge sharing, knowledge management, and socialization using social media. These questionnaires were preferred because they ensure anonymity, respondent acceptability, and save costs, thus enabling the researcher to collect huge volumes of data using a flexible design.

ii. Interviews Schedules

Interviews were administered to six (6) key informants, who included: the Deputy Principal of Academics and Student Affairs, and the Head of ICT. Dean School of Business, Senior Librarian, Student Leader, and Dean School of Education. The interview schedule obtained information on the improvements to facilitate social media for knowledge sharing, policies regarding the use of social media within the college, and the purpose of social media in the university. The interviews enabled the researcher to probe for more information from the

key informants. During the data collection, the researcher took notes on those issues found worthy of substantiating the data.

E. Pilot Study

Pilot research was carried out at the University of Kabianga in Kericho County to check the validity and reliability of the data gathering equipment. The pilot study included 30 students and staff from the main campus of the University of Kabianga. The university was chosen because of its similar setting to the research area. The number of respondents and faculty was sufficient to test the validity and reliability of the study instruments.

i. Validity

Validity is a metric that describes how well a method investigates what it is designed to examine [40]. Its goal is to determine whether the questionnaires and interview content are measuring what they are designed to measure. The questionnaire was reviewed by the study supervisor and information science experts, whose feedback was incorporated into the final questionnaire. These modifications included cross-checking the questions against the study objectives as well as the research questions. Assuring validity, the researcher's questions were streamlined so that they were simple to grasp.

ii. Reliability

A checklist was utilized to verify the reliability of the surveys on language, technical terminology, grammatical errors, invitations for possible recommendations via questions, and other relevant resources. Cronbach's Alpha Coefficient was utilized to confirm the instrument's reliability, and a coefficient of 0.812 was obtained from the pilot research data. This demonstrated the instrument's dependability.

F. Data Analysis

The data was coded by the researcher into useful descriptive sections. When analyzing quantitative data, the Statistical Package for Social Science (SPSS) version 22.0 was utilized.

The collected data was utilized to compare the research findings with related literature in order to get accurate results on which to base suggestions for the usage of social media for knowledge sharing.

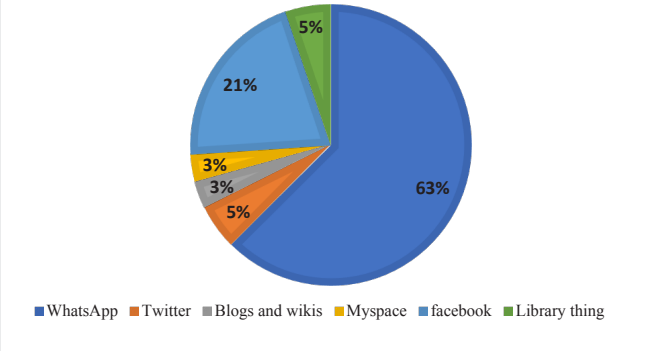
IV. Results and Discussion

A. Questionnaires Return Rate

The study targeted six hundred and eighty-four (684), undergraduate students and students of Bomet University College. A sample size of 205 was used, out of which 171 responses were received. The response rate was therefore eighty-three percent (83%).

B. Social Media for Knowledge Sharing

The study established the usability of the social media and the social media platforms used by both the students and the staff of BUC. The findings of the study are presented in Fig. 1.



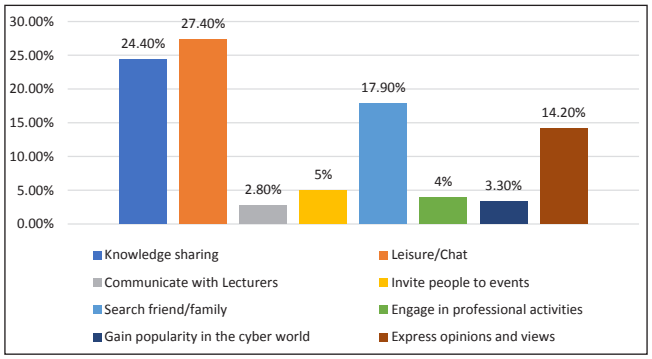
N = 171

Fig. 1: Types of Social Media Used for Knowledge Sharing

From the findings of the study, the majority (63%) of the respondents noted that WhatsApp was widely used, followed by Facebook at 21%. Twitter at 5% and library things at 5% usability, respectively. Similarly, Myspace was at 3% and blogs and wikis had the same percentage of 3%. The findings were in line with that of Carpenter (2020), who established that social media has the ability to reap the benefits of employing technology for academic objectives in addition to facilitating the establishment of professional learning groups [41]. This is also supported by Hemmi, Bayne, and Land (2009), who argue that because students already collaborate, search for information, communicate, and socialize using web technologies in their daily lives, there is no reason why they cannot use the same skills and behaviors in the classroom to support learning [42].

C. Purpose of using of Social Media

Fig. 2 depicts respondents' responses when asked to define their purpose for utilizing social media. This information was crucial since it would assist establish whether they used social media for knowledge sharing. Furthermore, the study tried to ascertain the librarian's motivation for using social media.



N = 171

Fig. 2: Purpose for using the Social Media

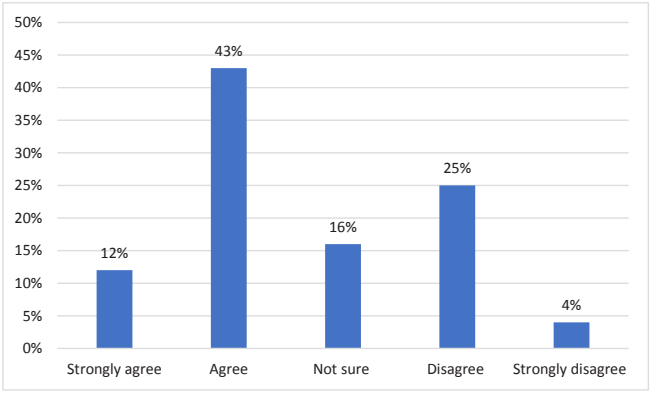
According to the study's findings (Fig. 2), 25.4% of respondents utilized social media for knowledge sharing, 14.2% used it to express their opinions and views, 2.8% spoke with professors, and 4.0% engaged in professional activities. This demonstrated that social media can be utilized to provide information to assist student-centered learning. This is due to the fact that respondents utilize social media to express their thoughts, communicate, and engage in professional activities. Furthermore, social media may be good for teaching and learning, as well as information sharing, and can open up interesting new avenues for institutions to interact and collaborate.

In terms of socialization, the majority (27.4%) used it for leisure/socialization, 17.9% for searching for friends/family, 5.0% for inviting people to activities, and 3.3% to gain popularity in the cyber world. This means that social media is interactive, instant, and a mass medium. That is, it has become a natural background of daily life and, therefore, its significance in the university setting.

These findings are in accordance with findings by Dwyer (2007), who discovered that millions of individuals use social media on a regular basis, and it now appears that social media will be an enduring part of everyday life [31]. For an increasing number of people, social media has become an integral part of their everyday lives. Students are not only remaining connected with their friends through the use of mobile phones, laptops, iPads, and online social networks, but they are also growing more reliant on keeping up with world events and contributing to shaping them. Olubiyi (2012) observed that students nowadays are so involved in social media that they remain online for about 24 hours a day [43]. Even in classrooms and lecture halls, it has been seen that some students are constantly conversing or Facebooking while lectures are taking place. Time that should have been spent learning, doing academic research, and innovating has been squandered by the need to meet new people online and spend time discussing social concerns. As a result, most students experience difficulties as a result of social media attention.

D. Respondents Attitude on Social Media for Knowledge Sharing

The survey attempted to ascertain respondents' attitudes toward using social media for knowledge sharing. This was accomplished by asking respondents whether they trusted the use of social media. Whether they believe social media can provide valuable knowledge, their attitude toward social media in connection to libraries, and their attitude regarding the provision of library services via social media. The findings are illustrated in Fig. 3.



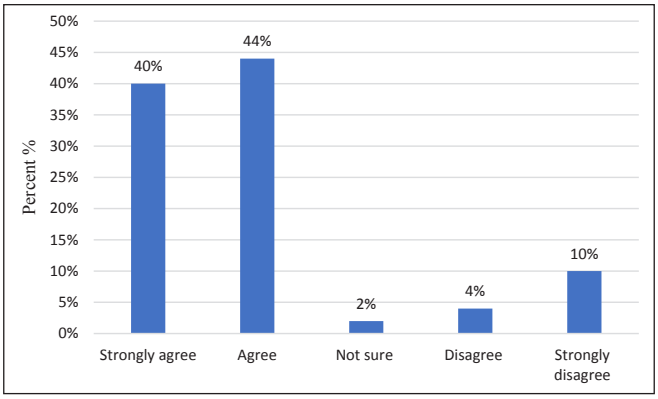
N = 171

Fig. 3: Respondents Attitude on Use of the Social Media

According to the study's findings in Fig. 3, the majority of respondents (43%) agreed that social media provides important knowledge, while 12% strongly agreed and trusted that social media provides valuable knowledge. Furthermore, 25% disagreed, with 4% strongly disagreeing. Finally, 16% of respondents did not have complete trust in the usage of social media and did not believe that social media provided valuable information. Trust is essential in the sharing of knowledge. Trust among members is essential for facilitating information transfer, as is a knowledge-friendly culture in which people are intellectually interested, free to explore, and encouraged to create and apply new knowledge.

E. Social Media for Valuable Knowledge

This was a critical and fundamental factor in evaluating the ability of social media to provide relevant knowledge. The question was phrased as "strongly agree," "agree," "strongly disagree," "disagree," and "did not know/not sure". The findings are summarized in Fig. 4.



N = 171

Fig. 4: Social Media for Valuable Knowledge

Fig. 4 illustrates the findings on social media for valuable knowledge, which reveal that the majority of respondents, 44% agreed, while 40% strongly agreed. Furthermore, 10% strongly disagreed, 4% disagreed, and only 2% of respondents were unsure. As a result, it is clear that the ultimate purpose of social media is to build an active and knowledgeable network community in which individuals may share useful information.

V. Summary, Conclusions and Recommendations

A. Summary of the Findings

According to the findings of the study, all of the respondents used social media. WhatsApp and Facebook were the most popular social media platforms. The usage of social media is regarded as critical due to the widespread observation that social media may be utilized as communication platforms, as marketing information resources, and to improve an organization's process of disseminating information, resulting in knowledge sharing. When used in conjunction with educational practices, social media tools provide new and exciting possibilities. They increase convenience, flexibility, and time freedom while decreasing resource consumption.

Social media has evolved into a beneficial tool for information exchange, user interaction, and education. They appear to be a more accommodating platform for users to reflect on existing knowledge, document new experiences, and provide constructive comments to cultivate a knowledge-sharing atmosphere. The study also discovered that social media facilitates users' expressions of social support, strengthening their motivation to participate in knowledge management procedures. Furthermore, social media encourages openness of thought, collaborative knowledge sharing, shared decision-making authority, and interactivity.

According to the data, WhatsApp is the most popular social networking platform among both employees and students. It was also shown that almost two-thirds of the respondents used social media multiple times per week. Students make increasing use of social networks, which are an integral part of their lives and daily activities.

B. Conclusions

This study indicates that there is a potential for significant use of social media for knowledge sharing by students and staff at Bomet University College, meaning that improved access to and use of social media is conceivable if appropriate measures are examined and implemented. The study revealed that a majority of 63% of the respondents noted that WhatsApp was widely used, followed by Facebook at 21%. On the same basis, 25.4% of respondents utilized social media for knowledge sharing, 14.2% used it to express their opinions and views, 2.8% spoke with professors, and 4% engaged in professional activities. This demonstrated that social media can be utilized to provide information to assist student-centered learning.

C. Recommendations

The use of social media for knowledge exchange at Kenyan and global institutions of higher learning should be promoted. This can be accomplished by making information provided via social media compelling and interactive, so users feel compelled to participate, resulting in the creation of their own content and the establishment of a self-sustaining flow of information. Furthermore, the institution should restrict passive sites and instead encourage the usage of social media sites that are used to answer queries, generate discourse, and encourage creativity among staff and students.

D. Suggestion for Further Research

Since this study investigated the function of social media in knowledge sharing in universities, similar research should be conducted to investigate the usage of social media in strengthening online programs in Kenyan institutions. Furthermore, more study should be conducted to uncover new approaches to enable improvements in terms of accessibility and privacy of social media to enhance knowledge sharing in higher education institutions. It is further recommended that research on the negative effects of social media on knowledge sharing be investigated.

Acknowledgement

I would like to thank Maasai Mara University and the National Commission for Science, Technology and Innovation (NACOSTI) for their assistance, as well as all of my respondents who took part in the study.

Conflict of Interest

The authors declare that they have no conflicts of interest.

Ethical Consideration

Before beginning this investigation, the researcher sought authorization from all appropriate authorities. The researcher additionally received a research authorization from the National Commission for Science, Technology and Innovation (NACOSTI) in the Ministry of Higher Education Science and Technology (MHEST) via Maasai Mara University's Office of the Director, Postgraduate Studies. The questionnaires didn't involve respondents' identities in order to maintain secrecy. This was reviewed with the respondents just before filling out the surveys, so that they did not withhold important information. Only those participants who were willing to participate received questionnaires. Those who did not want to participate were equally respected, and their wish was granted. No one was compelled to complete the questionnaire.

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