

## SOCIAL MEDIA TOOLS AND INFORMATION DISSEMINATION BY LIBRARIANS IN NIGERIAN UNIVERSITIES

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### ABSTRACT

*This study investigated the use of social media for information dissemination among librarians in Nigerian universities. The study had three objectives, research questions, and hypotheses. The theories applied for the study were the Theory of Total Quality Management (TQM) and the Diffusion Theory, while the conceptual framework and empirical reviews were built on Facebook Messenger, Twitter, and WhatsApp for information dissemination. The study adopted a descriptive survey research design, with selected Nigerian university libraries as the area of study. A researcher developed questionnaire titled "Social Media Tools and Information Dissemination Questionnaire (SMTIDQ) was used to collect data from respondents for analyses. The population of the study consisted of 354 librarians, while the census sampling technique was used to sample 328 librarians. The collected data were analyzed using the mean and standard deviation to answer the research questions. The findings of the study revealed that Facebook Messenger, Twitter, and WhatsApp can be used for information dissemination by librarians in Nigerian university libraries, but the ones that are mostly used are Messenger and WhatsApp. The study recommended, among other recommendations that there is a need for more awareness programs in the form of conferences, workshops, and training sessions for librarians to stimulate new ideas and sensitize them to the great potential of social media tools in disseminating information in libraries.*

**KEYWORDS:** Social Media Tools, Information Dissemination, Librarians and Nigerian Universities

### Introduction

Libraries are the nerve center of every academic institution, which is why no institution can exist without a library. Robert (2019) sees a library as a collection or group of collections of books and other print or non-print materials organized and maintained for use. A library may be established by an individual,

a college, or even a public library established under state enabling laws or regulations to serve a community district or region. The concept of library 2.0 has been borrowed for web 2.0; it follows a similar philosophy to the concept of social media and information dissemination among librarians. Library 2.0, since its inception, has changed the scenario in libraries and communication. It is a mixed concept that focuses on a number of ongoing conversations around the changing ways that libraries should make themselves and their services visible to end users and to one another.

Consequently, Maness (2018) defined library as the application of interactive collaborative and multimedia web-based technologies to web-based library services and collections of resources in a variety of formats that are organized by information professionals or other experts who provide convenient access and offer targeted services and programs with the mission of educating, informing, or entertaining a variety of audiences with the goal of stimulating individual learning and advancing society as a whole. The development of information and communication technology (ICT) has become so pervasive that today libraries are using social media to make their services more popular and user-friendly. The concept of a library as a physical place where one can visit to get information is rapidly changing to a social cyberspace that is used to access information, communicate, and contribute to an existing body of knowledge. Social media has gradually erupted into the library profession, which has become a growing tool that is being used to communicate with more potential library users. According to Tise (2019), social media is a new model of online services that encourages an increased flow of information from the library to users and from users back to the library. The evolution of the internet and the World Wide Web (www) has transformed the whole globe and presented a new way of communication. The limitless connectivity and potential to create an open social order and system of interaction and collaboration have been made possible only because of the development of information and communication technologies (Parveon 2018). Ezean and Eka (2019) stated that the most applicable technology for library services is social media, where librarians can interact to study their needs. Feedback, photos, and archival pictures can be posted to users on the library website.

Nevertheless, social media has created a phenomenon on the internet that has gained popularity over time. Librarians use social media sites such as Facebook, Twitter, Myspace, Instagram, WhatsApp, etc. to create and sustain relationships with others (Ellison, 2019). Social media sites seem to be growing in popularity, especially among young people. It enables librarians to upload photographs, post what they are doing at any given time, and send personal or public messages to the public (Pempek et al. 2019). Librarians and students form a large proportion of users on social media. According to Lenhaint et al. (2010), 72% of all librarians and students have a social media site profile, with 45% of students using social media sites at least twice a day. Usanga (2019) sees social

media as a term that refers to a range of web-enabled software programs that allow users to interact and work collaboratively with other users. It includes the ability to browse, search, invite friends to connect and interact, share files, review comments, blog entries, favorite discussions, events, video ratings, music classifieds, tag adds, and more. It can be expressed as social networking sites among the social users in the web domain. Twitter is a social networking site launched in 2006; it is undoubtedly one of the most popular social media platforms available today, with over one hundred million daily active users and five hundred million tweets sent daily. Twitter is a social media application best utilized by libraries to understand and incorporate the experiences that people have using it (Gunton and Davis, 2012). It can be used to receive news, follow high-profile celebrities, or stay in touch with school friends, teachers, and the librarian. The idea of Twitter was brought about by Jack Dorsey in 2006; today, it has become one of the most popular social media tools in the world. It has grown experientially over the past years, with immeasurable potential.

According to Niranjana and Chanda (2018), WhatsApp is one of the social media tools used for disseminating information. WhatsApp has one billion users worldwide and is the biggest online messenger app on the market. The use of WhatsApp requires a compatible smart phone or tablet with a SIM card, an internet connection, and a phone number. It can be used to send messages, voice calls, films, and music, and as such, it is very educative and informative for teenagers, students, teachers, and other stakeholders in the educational system. Facebook is a site that allows users who sign up for a free profile to connect with friends, work colleagues, or people that are unknown online. It was established in 2004 in the college dorm room of Mark Zuckerberg (Oswarld 2002). The website is now worth billions of dollars and is one of the world's most recognized brands. With this social network, a film's displayed sites can be explored favorably. These social media tools can help in information dissemination, which is the sharing and passing down of information from person to person, especially among people of the same ideas and purpose of mind, in order to foster good relationships and also help achieve organizational goals. Librarians play pivotal roles in information dissemination because it forms a major part of their professional duties. Information can be disseminated from librarians to fellow librarians, librarians to library users, and other researchers; such information disseminated can include official information, personal information, scholarly information, archival records, etc. Therefore, social media tools can be used to easily disseminate information and records.

### **Statement of the Problem**

Prevalent use of social media has influenced librarians as information providers to leverage the benefits of keeping abreast of the latest trends to improve their information services and delivery systems. Due to the substantial use of social media, librarians have embraced this technology and its application to achieve

specific objectives. The wide spread adoption of social media amongst librarians, the extent of social media engagement, and the behavioral outcomes that have impacted the use of library resources and services remained unaddressed empirically. To what extent have social media tools potentially attracted the librarian's awareness, grabbed their attention and engagement, and consequently influenced their attitude and behavioral outcomes towards the dissemination of information? Librarians have embraced social media tools for various purposes, but nonetheless, they may still lack awareness about the availability and usefulness of the applications. Some studies revealed that the adoption rate of Web 2.0 in libraries was reported to be slow with regard to their commitment with regard to social media use. However, it has been observed that librarians have been quick in embracing social media technology, but there has been scarce exploration of how successful the social media application has met the library objectives and whether social media is being used to drive a participatory service and foster engagement among librarians, which has remained under or has yet to be addressed. Based on the above, this study intends to investigate librarians use of social media for information dissemination in Nigerian university libraries.

### **Purpose of the Study**

The main purpose of this study is to examine social media and information dissemination among librarians in Nigerian university libraries. Specifically, the study seeks to investigate:

- i. To determine the influence of Facebook messenger on information dissemination by librarians in Nigerian Universities.
- ii. To ascertain the influence of twitter on information dissemination by librarians in Nigerian Universities.
- iii. To examine the influence of WhatsApp on information dissemination by librarians in Nigerian Universities.

### **Research Questions**

The following research questions are formulated to guide this work.

- i How does Facebook messenger influence information dissemination by librarians in Nigerian universities?
- ii. How can Twitter influence information dissemination by librarians in Nigerian Universities?
- iii. How can WhatsApp influence information dissemination by librarians in Nigerian Universities?

## Research Hypothesis

- i. There is no significant influence of Facebook messenger on information dissemination by librarians in Nigerian Universities.
- ii. There is no significant influence of twitter on information dissemination by librarians in Nigerian Universities.
- iii. There is no significant influence of WhatsApp on information dissemination by librarians in Nigerian Universities.

## Theoretical framework

### Theory of Total Quality Management by Deming (1982)

This theory posited a philosophy that management uses to empower the entire organization and encourage each individual to contribute and participate in organizational improvement and betterment in terms of knowledge management. In this context, the use of social media for efficient information dissemination is crucial. The Deming The 14 points that managers in any organization can take to implement a total quality management program are as follows:

- o Create consistent purpose for improvement of product and service.
- o Adopt the new philosophy.
- o Cease dependence on mass inspection to achieve quality.
- o End the practice of awarding business on price tag alone.
- o Improve constantly and forever the system of products and services.
- o Institute training and retraining.
- o Institute leadership.
- o Drive out fear.
- o Break down barriers between staff areas.
- o Eliminate slogans exhortations and target for the workforce.
- o Eliminate numerical quotas.
- o Remove barriers to pride of workmanship
- o Institute a vigorous program of education and retraining.
- o Take action to accomplish the transformation.

However, Deming's 14-point theory is succinctly related to social media and information dissemination amongst librarians, with the following instances: in the creation of constancy of purpose, library users and staff require varieties of information, and it is important to presume that the services offered can keep a library strong and a head for accreditation. Libraries must create a consistency of

purpose by putting their users and staff first with the aid of social media tools. This theory is related to this research in that information dissemination, being a quality management service, should be carried out with reference to the 14 points of Deming's management theory, which would help in the quality dissemination of information by librarians.

### **Diffusion Theory by E. M. Rogers (1962)**

Diffusion Theory was developed by E. M. Rogers in 1962 and is one of the most quoted theories for information dissemination. It originated in information and communication. This theory states how, over time, an idea or product gains momentum and diffuses (or spreads) through a specific population or social system. The end result of this diffusion is that people, as part of a social system, adopt a new idea, behavior, or product. This theory is applicable to this present study in that social media, when introduced to the library and used over time, can gain momentum and spread among the librarians, who will adapt to it and use it in the dissemination of information while working.

### **Concept of Social Media**

Social media applications are a powerful technological tool for the communication of facts, knowledge, attitudes, norms, and ethical orientations. It is summed up as technologies used for interacting, (Kaplain & Haentein 2010). Roger et al. (2009) posited that social media is an instrument for communication that allows the democratization of knowledge by transforming people from content consumers to content producers. Social media is usually used interchangeably with Web 2.0 technology. Rogers (2009) provides clarity on the difference between the two concepts, stating that Web 2.0 refers to the actual applications available to internet users, while social media refers more broadly to the concepts of how these applications are used. Commode and Krishnamurthy (2008) stated that web 2.0 emanates from the enhancement of web 1.0, which never allowed interactive and collaborative aspects. Web1.0 in a library setting meant that patrons acted as consumers of information without any contribution, thereby resulting in one-way communication. Also, information is *prima facie* something that flows between a sender and a receiver. Shannon's definition of information is quantitative, concerning possible selections from a repertoire of physical symbols. As Underwood (2001) remarks, it is a fact, not a theory of signal or message transmission. Shannon's (2001) identified six elements of communication, which include a source, an encoder, a message, a channel, a decoder, and feedback. Volz (2002) gives an overview of the different approaches to the concept of information in natural science. According to Mahler (2005), information is a "contextual concept." In other words, the question "what is information?" cannot be stated without reference to a situation.

The use of the internet facilitates instantaneous access to information; it has resulted in massive amounts of information and data available to anyone

with a computer, mobile technology device, a modem, or a service provider. The advances in technology have made it easier for information seekers to access information, and this has also resulted in changes in the information-seeking behavior of library users. Today's information seekers are well conversant with the latest trends in the information environment (Jain, 2013). In the past, library users had no choice but to come to the library. With the advent of technology, library users are able to access information remotely. However, present-day information seekers should acquire information communication tools and skills in order to access information in the digital age. Anyira (2011) posited that unskilled library users will not be able to use library resources because of a lack of skill in ICTs. On the other hand, libraries were known to be physical buildings for housing collections of books, journals, manuscripts, and other recorded information. Ogunsola (2011). In contemporary times, we see a greater change in the way libraries are operated. Through the use of technology, the library walls have been broken. Users are now able to access information remotely through digital and virtual libraries. Terminology associated with present-day libraries includes automated library, digital library, hybrid library, virtual library, and library 2.0 (Halder, 2009).

In the 21<sup>st</sup> century library, there is more life and an energetic atmosphere, unlike traditional libraries. Many libraries are renovating their library spaces and environments around the concept of "learning commons" (Litzenberger, 2016). In contemporary libraries that have wireless connectivity and outlet access, some libraries even have extended services such as a coffee café, which makes new information seekers view the library as their social home due to the conducive environment and services offered in the digital age (Chutia, 2015). According to Ramos (2007), social media has been introduced into the library as a medium of information sharing, dissemination, and collaboration. It has made the connection between librarians and users and between users and librarians very smooth. The latest arrivals in the library can easily be displayed with the use of social media tools like Instagram, Facebook, WhatsApp, and Twitter, and connected users and others who are not directly connected to the library can still see the information and also access it at any time they have a need for it. The introduction of social media to library operations has now made access and connectivity easy. With the social media tools, one can easily ask the librarian a question and get feedback in real time. Social media has also made learning fun, as people now learn in excitement, which thereby makes assimilation and comprehension easier.

According to Gisolfi (2014), public libraries are busier and more popular with patrons than ever. Today's libraries are places for social interactions as well as quiet reading. It is a community and cultural center, not simply a repository for books. It is a welcoming building with a design focus on transparency, not a series of isolated spaces. Gisolfi (2014) identified various emerging trends in contemporary library spaces where there are informal community and cultural

centers, large spaces so patrons can be seen and more easily served, reading spaces within the various collections, larger and more varied spaces for children and teens, community meeting and activity rooms of varied sizes, daylight in all areas of the building, connections to outdoor space, spaces devoted to computer and internet instruction and online research, flexibility to accommodate future requirements, and the library model for sustainable practice. All these are made possible through the use of social media tools in order to make reading and studying interesting and engaging. Technology and continuous ICT developments are changing libraries in terms of information acquisition, storage, organization, maintenance, and the methods of rendering services (Fogbola et al., 2011). Because through social media, a library can easily know and acquire the new and various information resources available without necessarily changing location, all the transactions that associate with library operations can be easily achieved.

### **Concept of Information Dissemination**

Information dissemination is the means by which facts are distributed to the public at large. The means by which people and various organizations distribute information have exploded within the last several decades. Information dissemination in the field of communication means broadcasting a message to the public with or without direct feedback from the audience. According to Vasileios (2016), information dissemination has been a key social process, especially in modern information-centric societies. Furthermore, it can be observed that most of the commercial communication infrastructures have been initially developed in the last thirty years, mainly to allow the transfer of diverse types of information. Oral and visual communications were the first means humans used to distribute information, followed by written communication.

Traditional and social media represent the two general forms by which humans disseminate information in contemporary society. Traditional media include phones, television, oral communication, and print publications. Social media encompasses text messages, microblogs, and online news outlets. Improvements in technology have made these outlets increasingly popular and have become the main ways of distributing information because of the speed at which dissemination occurs. In librarianship, information dissemination is very essential and important, as it ensures that library users have access to the various information, they need to solve their scholarly problems with ease and satisfaction.

### **Facebook Messenger and Information Dissemination**

Social media tools such as Facebook Messenger enhance effective information dissemination by librarians. It is becoming more and more popular, triggering an increase in published research and impacting different aspects of daily life. Facebook is a social network or media site that allows people to

connect with friends, classmates, coworkers, casual acquaintances, and anyone else who is also connected to it by friendship or by belonging to the group. It involves an interactive platform allowing visitors to leave comments and message each other via widgets on the blogs, and it is the interactivity that distinguishes it from other static websites. Users must register before using the site, after which they may create a personal profile, add other users as friends, and exchange messages, including automatic notifications when they update their profile. Additionally, users may join common-interest user groups organized by work place, school or college, library, or other characteristics and categorize their friends into lists. Ellison (2007) noted that twenty-first century students are not very interested in printed work. For librarians to make libraries interesting, innovations such as social media sites should be introduced to attract them to the library environment. Social media (Facebook) would help establish a cordial relationship between librarians and students, market the library's services, and announce library programs on the wall.

At present, with many developed PDA (Personal Digital Assistance) devices like mobile phones with better applications and developed i-phones, tablets, etc., it has become easier for students and other professionals to use the internet and other web-based services effectively. According to many surveys and studies done on the use of Facebook and also according to Facebook records, it is noticed that the maximum number of users belong to the age group between 14 and 25, and it can be assumed most students, whether in high school, college, or university, fall under this age group. It has also been highlighted in many research papers and documents that most academicians also use various social media sites, of which Facebook has become more prominent (Smith, 2018). Nevertheless, Facebook has become a good platform for library professionals to connect with information users. Most of the conventional academic libraries lack updated information, and the majority of the available resources are also not enough to meet the initial needs of the users. In certain cases, if the library is developed and has good connections and resources with good library professionals, some students prefer web-based information sources over these library materials. According to Efua Ayiah (2011), some of the library services that can be provided through Facebook to its users are:

- Regular update of arrivals of new books, document, journals etc in the library.
- Providing links of different e-resources, like e-book, e-journals, and many other useful websites
- References services can be provided through instant messages and on chats, which will help the users in selecting the appropriate internet based resources without wasting much time.
- It helps librarians, library and its users group in the Facebook to keep active communication and prepares good user profile with their

information interest libraries can provide current awareness services to the particular users.

- Online open help desk for all the internet users.
- Using Facebook as a tool for library services may be more effective for distance education students.

However, being on Facebook requires a lot of activeness from the library and its professionals. Librarians must be aware that using Facebook as a tool requires a lot of attention, both technically and professionally. There must be a constant and regular update to the profile or the Facebook page at least once a week or more. If not updated, it will become useless, which requires regular monitoring of the page and the library as well (Penzhorn et al., 2016). In such a case, it may not be suitable for very small or conventional libraries; instead, it may be helpful for large and active libraries that host a lot of events, exhibitions, workshops, and other activities and have a large amount of data in their collection. Another problem from the users' side is that most of the Facebook users, including academicians, use it for socializing and recreational purposes, and they might not like the idea of combining education with their recreation. It may take time to adapt to the new changes (Ellison et al. 2007).

### **Twitter and Information Dissemination**

Blogs are web-based information-sharing systems in which content entries are posted in chronological order. Twitter is a microblogging system that restricts the length of content entries (i.e., posts or tweets) to 140 characters. (Having, Scheldt, Bonus, & Wright, 2004). Twitter provides social networking capabilities by enabling its users to follow each other, share their content, and hold conversations. According to Cuddy, Graham, and Morton-Owens (2010), there are five (5) topics that libraries tweet about: library facilities, resources, staff, services, and library and campus events. Thomas (2011) has argued that Twitter could be used for community building and employee interaction in organizations, including libraries. Kim, Abel, and Yangs (2012) explored the types of users who retweeted academic library tweets. A study has shown that there are now 241 million monthly Twitter users, 500 million registered users, and 76% of users are mobile (Twitter, 2014).

Social networks allow individuals to connect with individuals and groups with whom they share common interests, either personally or professionally. The identification of a library as being perceived as a person and acting as one through posts and connections made through Twitter has resulted in a number of studies. Twitter use in libraries has increased noticeably in the past several years. Torres-Salin et al. (2015) found a 52% decrease in blog usage within the library and information science category in 2006 and 2009 and identified the emergence of Facebook and Twitter as potential causes of the decrease. Many libraries have decided to use Twitter as a bridge to patrons through the sharing

of pertinent information. Gunton and Davis (2015) suggested that social media spaces should be best utilized by libraries to understand and incorporate the experiences that people have using social media applications, such as Twitter.

### **WhatsApp and Information Dissemination**

WhatsApp is the second-most acceptable social media tool for effective work among librarians. Niranjana and Ghanada (2018) conducted a study on WhatsApp as a means of sharing information among LIS professionals (librarians) and found people mostly use instant messenger apps for communication. In that case, it will be very effective if the library uses WhatsApp for delivery of information, and it would be a great opportunity for the library to implement WhatsApp to reach and satisfy users of the library for better service satisfaction. WhatsApp acts as a tool for disseminating knowledgeable information among library and information professionals. Ansari and Tripathi (2017) studied the use of WhatsApp for effective delivery of library and information services. There, it was examined that librarians and users attitudes towards using WhatsApp as a tool for providing library information services suggested that libraries can use WhatsApp for delivering library services. Findings indicated that respondents showed a positive attitude towards getting services over WhatsApp. Most of the respondents believe that the use of WhatsApp can improve alert services and virtual reference notifications that libraries can utilize.

Dhokani et al. (2017) found in their study the use of library 2.0 and mobile messaging applications, and the findings indicated that librarians and library users were more familiar with the Web 2.0 application. The frequency of librarians and users responsiveness to using the mobile messenger applications was quite high. The librarian also agreed on providing a variety of virtual social media services in the library. Achala Munigal (2017), Ansari (2016), Sankar (2016), and Kavitha (2016) clearly indicated in their papers that mobile instant messaging (MIM) applications made them connected with each other. The applications are also useful for information dissemination in a timely and cost-effective manner. So, librarians have to make an effort to provide their services through WhatsApp. WhatsApp has no additional cost for message and data exchange among mobile devices.

### **Methodology**

A descriptive survey research design was adopted for this research, and the area of study was selected from public universities in Nigeria. The population of the study was 351 librarians from these selected universities. A researcher-designed questionnaire titled "Social Media Tools and Information Dissemination Questionnaire" (SMTIDQ) was sent electronically by email to certain librarians and WhatsApp groups of librarians in some Nigerian universities and used to collect data for this study. The collected data were analyzed using the mean and

standard deviation for the research questions and an independent t-test for the hypothesis. Most of the questionnaire was administered in electronic format and sent to the various WhatsApp platforms of the institutions under study. At the end, 328 responses were received, which formed the sample used for the analysis.

## Results

**Research Question One:** What is the Influence of Facebook messenger on Information Dissemination?

**Table 1: Mean and standard deviation scores of respondents on Facebook and information dissemination**

S/N	ITEMS	X	SD	Remarks
1.	I have access to Facebook and messenger	1.79	0.64	Agreed
2.	I use Facebook for academic discussions with library users	1.82	0.80	Agreed
3.	I make use of Facebook to share scholarly information with library users	1.74	0.87	Agreed
4.	I use Facebook to answer user query.	3.64	0.69	Agreed
5.	My library has a facebook group where users join and information concerning the library services and issues concerning their use of library is shared there.	3.88	0.64	Disagreed
6.	I use facebook and messenger to share scholarly graphic materials with library users	3.16	0.39	Agreed
7.	Face book is a useful social media tool for dissemination of library information services	2.45	1.11	Agreed
<b>Cluster Mean</b>		<b>2.51</b>		

Source: Field Survey, 2022

The result presented on table 1 above shows that items 1,2,3,4,6 and 7 agreed that they use face book and messenger in their libraries to share scholarly information, answer users query, share graphics materials and dissemination of other information. They only disagreed that their institutions have a facebook page and group for user interface with a mean value of 3.88.

**Research Question Two:** What is the influence of WhatsApp on information dissemination?

**Table 2: Mean and standard deviation scores of respondents on WhatsApp and information dissemination**

S/N	ITEMS	X	SD	Remarks
1.	I have access to WhatsApp	2.45	1.11	Agreed
2.	I use WhatsApp for academic discussions with library users	2.61	0.49	Agreed
3.	I make use of WhatsApp to share scholarly information with library users	3.17	0.65	Agreed
4.	I use WhatsApp to answer user query.	2.51	0.46	Agreed
5.	My library has a WhatsApp group where users are added and information concerning the library services and issues concerning their use of library is shared there.	3.07	0.64	Agreed
6.	I use WhatsApp to share scholarly graphic materials with library users	3.26	0.54	Agreed
7.	WhatsApp is a useful social media tool for dissemination of library information services	3.18	0.38	Agreed
<b>Cluster Mean</b>		<b>3.04</b>		

Source: Field Survey, 2022

The result presented on table 1 above shows that all items agreed that they use whatsapp in their libraries to share scholarly information, answer users query, share graphics materials and dissemination of other information. They further agreed that whatsapp is a very useful tool for dissemination of information in libraries.

**Research Question Three:** What is the influence of Twitter on information Dissemination?

**Table 3: Mean and standard deviation scores of respondents on Twitter and information dissemination**

S/N	ITEMS	X	SD	Remarks
1.	I have access to Twitter	2.22	0.52	Agreed
2.	I use for Twitter academic discussions with library users	2.02	0.64	Disagreed
3.	I make use of Twitter to share scholarly information with library users	3.12	0.62	Disagreed
4.	I use Twitter to answer user query.	3.00	0.32	Disagreed
5.	My library has a Twitter page where user's link and information concerning the library services	2.16	0.37	Disagreed

and issues concerning their use of library is shared there.

6.	I use Twitter to share scholarly graphic materials with library users	3.05	0.65	Disagreed
7.	Twitter is a useful social media tool for dissemination of library information services	3.18	0.36	Agreed
<b>Cluster Mean</b>		<b>2.56</b>		

Source: Field Survey, 2022

**Hypothesis one:** Face book messenger does not significantly influence dissemination of information by librarians

**Table 4: Dependent t-test analysis of the influence of facebook messenger on information dissemination**

Variables	Mean	SD	t-cal	t-crit
Facebook messenger	11.15	1.75	45.72	2.00
Information Dissemination	36.76	3.15		

Significant at .05 level, df= 327

The result as shown in table 4 above shows that the calculated t- value is greater than the critical t-value 2.00 at .05 level of significance and at 327 degree of freedom. Hence the null hypothesis is rejected and it therefore means that facebook messenger significantly influences information dissemination by librarians to library users in Nigerian University Libraries.

**Hypothesis Two:** WhatsApp does not significantly influence dissemination of information by librarians

**Table 5: Dependent t-test analysis of the influence of WhatsApp on information dissemination**

Variables	Mean	SD	t-cal	t-crit
WhatsApp	16.03	2.10	64.51	2.00
Information Dissemination	36.76	3.15		

Significant at .05 level, df= 327

The result as shown in table 5 above shows that the calculated t- value of 64.51 is greater than the critical t-value 2.00 at .05 level of significance and at 327 degree of freedom. Hence the null hypothesis is rejected and it therefore means that WhatsApp has great significant influence on information dissemination by librarians to library users in Nigerian University Libraries.

**Hypothesis Three:** Twitter does not significantly influence dissemination of information by librarians

**Table 6: Dependent t-test analysis of the influence of Twitter on information dissemination**

Variables	Mean	SD	t-cal	t-crit
Twitter	10.08	0.75	17.49	2.00
Information Dissemination	36.76	3.15		

**Significant at .05 level, df= 327**

The result as shown in table 6 above shows that the calculated t- value of 17.49 is greater than the critical t-value 2.00 at .05 level of significance and at 327 degree of freedom. Hence the null hypothesis is rejected and it therefore means that Twitter has a slight significant influence on information dissemination by librarians to library users in Nigerian University Libraries.

### Discussion of Findings

**Facebook and Information Dissemination by Librarians:** The findings of this research work are discussed based on the objectives and research questions of the study. Based on the research questions analyzed, it was discovered in Table 1 that librarians have access to Facebook and Messenger tools and that their libraries have Facebook groups and pages where they can interface with the library users who join the groups. It was also noted that Facebook and Messenger can be used to disseminate various scholarly information to library users, like graphic information, sharing scholarly information, holding academic discussions, and answering user queries, including creating awareness and displaying library current awareness information and resources. This shows that Facebook and Messenger can be very useful in the dissemination of information resources to library users and can go a long way to encouraging scholarship among librarians and library users. This finding is in line with the assertion of Smith (2018), who noted that most academics use social media to carry out research and that Facebook has become very prominent in this aspect.

**WhatsApp and Information Dissemination by Librarians:** Based on the research questions analyzed, it was discovered in Table 3 that librarians have access to WhatsApp social media tools and that their libraries have WhatsApp groups where information materials, bulletins, current information on various library activities, and information display can be of benefit to all library users that have been added to the platform. It was also noted that WhatsApp can be used to disseminate various scholarly information to library users, like graphic information, sharing scholarly information, holding academic discussions, and answering user queries, including creating awareness and displaying library current awareness information and resources. This shows that WhatsApp can be very useful in the dissemination of information resources to library users and can go a long way toward encouraging scholarship among librarians and library users. This finding is in line with the assertions of Achala Munigal (2017), Ansari

(2016), Sankar (2016), and Kavitha (2016) in their papers, which clearly indicated that mobile instant messaging (MIM) applications made them connected with each other. The applications are also useful for information dissemination in a timely and cost-effective manner. So, librarians have to make an effort to provide their services through WhatsApp. WhatsApp has no additional cost for message and data exchange among mobile devices.

***Twitter and Information Dissemination by Librarians:*** Based on the research questions analyzed, it was discovered in Table 2 that some librarians have access to Twitter's social media tool while others don't. It was also discovered that most university libraries don't have Twitter accounts. It was also noted that Twitter is not used by the various librarians studied to disseminate various scholarly information to library users, like graphic information, sharing scholarly information, holding academic discussions, and answering user queries, including creating awareness and displaying library current awareness information and resources. This shows that Twitter has not been used even when some of the librarians were of the opinion that it may or may not be useful in library information dissemination by librarians. But as noted by Having et al. (2004), Twitter is a microblogging system that restricts the length of content entries (i.e., posts or tweets) to 140 characters, which probably explains why a lot of librarians don't use it. But Cuddy, Graham, and Morton-Owens (2010) opined that Twitter provides social networking capabilities by enabling its users to follow each other, share their content, and hold conversations. According to the authors, there are five (5) topics that libraries tweeted about: library facilities, resources, staff, services, and library campus events. This also shows that Twitter can be used for the display of information, but users would need to intentionally go to the Twitter handle or follow the tweet to see the information.

## Summary

The main purpose of this study was to examine how social media tools can be used by librarians to disseminate information to library users in selected universities in Nigeria. Two theories were used to guide the research, which included the theory of total quality management and diffusion theory. Concepts of social media and information dissemination were reviewed in the literature by renowned scholars. The survey research design was used for the study, and the area of the study was selected from Nigerian universities, mostly from the southern part of Nigeria and very few from the north. A sample size of 328 librarians was used for the study, and a researcher-structured questionnaire was used to collect data. The mean and standard deviation were used to answer the research questions, while the independent t-test was used to test the hypothesis. The result revealed that social media tools like Facebook Messenger and WhatsApp are very useful in the dissemination of information to library users by librarians. It also revealed that Twitter is not used very well by librarians but shows a possible usage of it in the dissemination of information.

## Conclusion

Based on the findings of the study, it was concluded that;

- i. Facebook and Messenger influence information dissemination by librarians to library users in Nigerian universities.
- ii. WhatsApp influences information dissemination by librarians to library users in Nigerian universities.
- iii. Twitter slightly influences the dissemination of information by librarians to library users.

## Recommendations

Based on the conclusion deduced from this study, the following recommendations are made;

- i. University libraries should explore the usage of social media tools like Facebook Messenger, WhatsApp, Twitter, and others to disseminate information to users.
- ii. University libraries should ensure they have detailed contacts for all their users and use them to connect with them on social media in order to be able to give them current information on library activities and other information that can aid their research output and other scholarly activities.
- iii. Further studies should be carried out on how other types of social media tools can be effectively utilized to disseminate information.

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