

Social Media Strategies for Marketing in University Libraries: Undergraduate User Attitudes and Motivation for Engagement

By

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Abstract

Social media has dramatically revolutionised the way people communicate and interact in the 21st century. The benefits of these tools are manifested in the increasing uptake worldwide by individuals, groups and organisations for knowledge exchange and marketing purposes. The academic/university library is no exception to this. As librarians seek to understand the ever-changing information needs of their customers, they must consider alternative means of interaction which social media offers. However, despite the attractiveness of social media outlets, university libraries cannot yet claim to have understood fully how to utilise them for marketing purposes effectively. Although studies on social media have received extensive attention in academic literature, little research has been conducted in the specific area of social media engagement. With many librarians bemoaning the lack of engagement from users on social media owing to negative attitudes, it is relevant to explore factors that affect sustainable social media engagement. This is a perspective that has been underexplored, particularly through the application of a strong theoretical base anchored on persuasion and attitude change.

Underpinned by the theoretical foundations of the Elaboration Likelihood Model and the Strategic Social Media Marketing Framework, this study explores the factors that affect social media engagement of undergraduate student users with the university library. Employing a mixed-method approach, the study utilised semi-structured interviews, a questionnaire and content analysis to gather data from six university libraries in Nigeria that was used to examine the social media engagement phenomenon. The interview results revealed that participating libraries failed to plan the adoption and management of social media carefully. Evidently, among the participating libraries, only a few commenced with a defined purpose, which often is neither management-driven nor guided by policy. These purposes were focused on promoting library resources and services and getting traffic to the library website. Results of analysed social media data confirmed this, revealing that posts were made infrequently, lacked creativity, and generated a low engagement rate. The result of a multiple regression revealed that argument feature (post content, language, and type) is a significant influencer in the predictions of factors that motivate undergraduate students to engage with the library on social media, while an ANOVA test indicated that course offerings influence students' attitude to the library and how they perceive the library on social media.

The implications of these results are discussed, informing the theoretical and practical contribution. A principal theoretical contribution is a framework titled Sustainable Library Social Media Marketing Management that explains high-level social media management in the library. The study provides a blueprint for practising librarians with insights on managerial factors and considerations for user engagement as well as ideas for the purposeful planning of social media marketing activities.

Keywords: Academic/university Libraries, Elaboration Likelihood Model, Marketing, Social media, Strategic Social Media Marketing Framework, User engagement

Author's Declaration

To the best of my knowledge, this thesis does not incorporate any material previously accepted by any institution for the award of a degree or diploma. Previously published materials were only used with due acknowledgements.

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Signature

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Chapter 1- Introduction

1.1 Introduction

Historically, libraries have continually changed their methods of information acquisition, processing, organisation, storage, and dissemination to meet the ever-changing information needs and seeking behaviour of their users. More recently, these users are increasingly shifting interest to alternative sources of information at an accelerated pace (Tripathi & Jeevan, 2013). In light of this shift, technologies have been consistently adopted and adapted in libraries, new services and methods of delivery have been contrived, relationships with users have been redefined, and there has been a continuous rethinking of approaches in library and information services (Ndungu, 2016). In libraries in developed countries, it appears these changes have been swift; whereas, in libraries in developing countries, it has been a gradual process (Ukachi, Onuoha, & Nwachukwu, 2014). The latter is the focus of this study given the increasing uptake of technologies (Arrigo, 2018; Ayiah & Kumah, 2011) and their potential advantage for repositioning these libraries for effective service delivery.

With the increasing uptake of technology, the overarching motivation for this study is that there is an apparent gap between the desire of librarians to provide the newest and most useful resources and the uptake of those resources by the users. Electronic resources, which provide the fastest and most comprehensive source of much information, are expensive so naturally, librarians want them to be utilised fully. This does not seem to be happening in many libraries around the world, suggesting a disconnect between the availability of the resources and the lower than anticipated use of them (Leonard & Snyman, 2019).

There is evidence suggesting a negative perception and attitude of undergraduate students towards the university library with ripple effects resulting in non-use of e-resources and services (Del Bosque, Mitola, Skarl, & Heaton, 2017; Goodall & Pattern, 2011). Irrespective of developments in the management and delivery of library services, it is somewhat disheartening to note that e-resources and services in libraries are not optimally patronised by library users, despite the effort to remain relevant in the face of reduced funding. This is a global trend that many scholars have acknowledged. Voicing this concern, Potnis, Deosthali, Zhu, and McCusker (2018) observed that academic libraries in the United States spend millions of dollars on e-resources and the supporting information resource infrastructure for making them available to their students for free. However, free access might not necessarily lead to generating students' sustained interest in and use of these resources (Potnis et al., 2018).

Lending support to this view, Leonard and Snyman (2019) noted that students would instead use non-library search engines such as Google, Yahoo and other commercial sites, neglecting the information-rich databases subscribed to by the library. This situation has been attributed to poor marketing of library services to actual and potential users (Kwanya & Stilwell, 2015). Consequently, scholars and library professionals have increased the call for libraries to engage more in marketing activities.

Given a renewed emphasis, university libraries internationally are devoting unprecedented attention to the marketing of library and information products (Del Bosque et al., 2017). It is argued that marketing concepts and techniques can contribute a dynamic approach to strategy development for librarians and information professionals that will ensure effective management, the achievement of goals, and the creation of a confident blueprint for the future (de Sáez, 2002). de Sáez further suggests that the real value of marketing is to ensure the survival and growth of libraries and information services, which exist to enhance the communities they serve. The value of marketing lies in two-way communication allowing libraries to understand the needs and preferences of their customers. However, evidence suggests that libraries approach marketing from a unidirectional standpoint, often assuming their customers want or need specific resources and services (Lee, 2016; Yi, 2016). This counterproductive approach to marketing is also carefully examined in this study.

With the current emphasis on marketing, advocacy for the use of social media to achieve marketing purposes has received considerable attention among library and information professionals and scholars. Kwanya and Stilwell (2015) observed that social media marketing offers a unique opportunity for libraries to increase their visibility and usage by taking services and products to the platforms where their actual and potential users already "hang out." However, little is known about the motivation of users to engage with librarians through social media platforms. Therefore, this study will contribute to the understanding of marketing in university libraries, particularly on social media marketing. This understanding will be valuable to other types of libraries. This is because the findings of this study, though focussed on university libraries will expand the understanding of social media marketing which can be extrapolated to other library contexts. The study also provides insight into the motivation of users for engaging with libraries on social media platforms, and whether they are a suitable vehicle for promoting the use of e-resources and services.

The terms ‘user’ and ‘customer’ are used interchangeably in this study. More specifically, ‘customer’ is used in marketing-related contexts, while ‘user’ is used in the context of the use of library services. For clarity, the remainder of this chapter is structured into the following subsections: key concepts, the research context, problem statement, study aims and objectives, the research question, hypothesis, justification, scope of the study, and thesis structure.

1.2 Key Concepts

This section discusses the key concepts that constitute the focus of this research. They are university libraries, e-resources in university libraries, marketing in libraries, social media in libraries, and user engagement with libraries through social media platforms.

The university library has a prominent role to play in supporting the academic community's learning and research activities. It is a collection of sources, services, and the building/s in which these are housed. It provides access to various resources to support teaching, learning, and research activities (Khan *et al.*, 2014). The university library has been adjudged to be the engine and soul of any university, positioned to support the mission and vision statements of the university through resource provision and service delivery designed to assist scholars, researchers, and students of the parent institution (Aras, 2014; Sriram, 2016). It often, in furtherance of these goals, seeks to go beyond the library walls to provide services for the satisfaction of users' needs. Some of these services include current awareness services, selective dissemination of information, online circulation and renewal services, among numerous others (Lenkart & Yu, 2017). University libraries in the 21st century are increasingly broadening their horizons to respond to the revolutionary changes occasioned by the emergence of information and communication technologies (ICTs) and associated technologies. This move has resulted in an emphasis on the digitisation of library resources, culminating in the transformation of conventional print materials to ‘e-based’ formats or electronic resources (Isibika & Kavishe, 2018).

An electronic resource is defined as a resource that requires computer access or an electronic product that delivers a collection of data appearing in full-text databases, electronic journals, image collections, multimedia products and numerical, graphical or time-based resources. These may be delivered via the internet or hosted in local databases (Leonard & Snyman, 2019). E-resources can be searched and manipulated easily and have the added advantage of round the clock access and multiple formats. Naturally, librarians are enthusiastic about the value of these resources to their current and prospective users. They are spending vast amounts

on securing access for them (Potnis et al., 2018) with some devoting 70 – 90% of their collection budget to e-resources (Kaur & Walia, 2016). Nevertheless, evidence in the literature suggests that negative perceptions and attitudes about the library limits the use of these resources (Del Bosque et al., 2017; Goodall & Pattern, 2011). Consequently, university libraries engage in marketing to address this anomaly.

Marketing is a management concept, and it is equally a part of organisational and management philosophy, reflected in attitude and approaches across the whole organisation. It provides the focus for successful organisations (de Sáez, 2002). Marketing supports the reaching of organisational goals by focusing on the identification and satisfaction of customer needs; thus it can also contribute considerably in achieving the objectives of non-profit organisations such as libraries (Garoufallou, Siatri, Zafeiriou, & Balampanidou, 2013). Marketing in libraries has received enormous attention in the literature. It represents a way of working and serving the customers in which every activity is committed to customer satisfaction. Library marketing is the effective execution of all the activities involved in increasing the satisfaction of users by providing maximum value to them (Gupta, 2003). The importance of library marketing lies in its ability to connect customers with services. More recently, social media marketing has received a prominent place in the discourse of library and information studies (e.g. Ayu & Abrizah, 2011; Bosque et al., 2017; Brookbank, 2015; Collin & Quan-Haase, 2014; Harrison, Burrell, Velasquez, & Schreiner, 2017). These works have highlighted the many benefits of marketing via social media.

Social media marketing is defined as a form of marketing that utilises social networking sites and other similar platforms for marketing to online communities and social networks (Rouse, 2016). It enables organisations to learn from their customers and to target their marketing initiatives to potential clients in specific places using context-specific information. It increases traffic to online outlets, improves search ranking, reduces overall marketing cost and helps to develop new or strengthen existing business networks and partnerships (Saravanakumar & SuganthaLakshmi, 2012). This useful channel for connecting with customers has received attention from professionals in all industries, librarians included. Kwanya and Stilwell (2015) have also argued that libraries of all types can benefit in several ways from social media marketing: low-cost marketing with a more significant impact; user education; and information literacy through peer to peer communication and rebranding. However, although the value of social media marketing for libraries has been identified, few attempts have been made to ascertain user engagement with the library through social media platforms. This is important

because engagement is one of the principal drivers of the numerous benefits libraries as non-profit organisations may gain from social media marketing.

User engagement is perceived as vitally necessary for the sustainability of the library today (Luo, Wang, & Han, 2013). Times are gone when librarians assume what users need or want. In this context, user engagement is the quality of user experience that stimulates positive interaction with the library, and in particular, the phenomenon associated with being captivated by library social media posts, and so being motivated to engage with it. Successful social platforms are not just used; they are engaged with; users invest time, attention, and emotion into them (Lehmann, Lalmas, Yom-Tov, & Dupret, 2012).

1.3 Research Context

The development of Web 2.0 technologies ushered in a social media revolution in the turn of the 21st century. Over the last 15 years, social media (SM) tools (websites and applications) have led the landscape in providing a means for two-way communication between the content producer and the consumer (Polger & Sich, 2019). Over the years, the widespread adoption of social media in libraries has been documented in the scientific literature. Libraries of different types, purposes, and sizes now use social media for varying reasons ranging from advertisement, marketing, promotion, collaboration and engagement (Del Bosque et al., 2017). In particular, university libraries have shown keen interest in maximising the potentials of these media technologies that offer the advantage of interaction with customers, community and relationship building to understand customer information needs and establish an atmosphere of trust (Winn, Rivosecchi, Bjerke, & Groenendyk, 2017). While the university libraries are serving many customers, undergraduate students seem to have received considerable attention. These libraries are motivated to market their resources and services to undergraduate students who are believed to be heavy users of social media on the one hand (Wickramanayake & Jika, 2018), but low users of library resources and services on the other (Del Bosque et al., 2017).

This study is set within the context of university libraries in Nigeria, a developing country in West Africa. Attention is focused on selected universities, undergraduate students of these universities and the librarians serving in these university libraries (see subsection 4.5).

1.4 Statement of the Problem

The library has been an increasingly and steadily ‘growing organism’ as espoused by S R Ranganathan in his Five Laws of Library Science (Bair-Mundy, 2014), through a continuous process of evolution. It adopts and adapts technology to serve its customers better, striving to

remain relevant to their needs. These efforts are evident in the extensive application of information and communication technologies that have revolutionised the landscape of the librarianship profession. Given the benefits associated with information technology, more university libraries endeavour to develop systems and structures such as the digital library, aimed at enhancing the efficiency and effectiveness of information delivery to actual and potential customers with maximum ease.

It is noteworthy that while many resources have been devoted to developing these systems, library researchers have observed that digital libraries remain underutilised (Awwad & Al-Majali, 2015; Leonard & Snyman, 2019). If these systems are not widely utilised, then it will be challenging to obtain a corresponding return on investment. This is undoubtedly the case in most Nigerian university libraries (Orji, 2010). Suffice it to say that organisations cannot achieve any return on their investments in information systems unless the systems are used by their intended users (Allameh & Abbasi, 2010). The limited use of e-resources could be because libraries have not given enough thought to what the customers want. Often, libraries assume that their customers need certain products and then promote them to attract use; this is the traditional idea of marketing in the library (de Sáez, 2002). Modern marketing concepts, however, focus on consulting the customers first to ascertain their needs and with the value of the feedback received, a new or refined product or service is designed to suit them and then promoted to the relevant user group (Ndungu, 2016).

Social media has become an essential and almost indispensable tool for communication and interaction today, so much that organisations are increasingly adopting them for marketing purposes. The library, as a service-oriented institution is not an exception. In this light, social media platforms have been described as critical new channels for library marketing for several reasons (Harrison et al., 2017). Libraries can leverage them to build the trust and confidence of users in their resources and services (Luo et al., 2013). Also, they offer unique opportunities for libraries to increase their visibility and usage by taking services and products to the platforms where their users are assumed to be (Kwanya & Stilwell, 2015).

However, what is not known is whether users consider the social media platform as space where they want to interact with the library. Despite the increasing adoption of social media by university libraries, very little success has been achieved on these platforms in the area of user engagement with undergraduate students (Chen, Chu, & Xu, 2012). Researchers have observed that there were few responses from users on some libraries' Facebook fan pages (Jacobson,

2011) and libraries' Twitter accounts had few followers (Stuart, 2010). Furthermore, evidence suggests that there may be an attitudinal barrier hindering university libraries from getting through to this category of students (Ukachi et al., 2014; Brookbank, 2015). Students still consider that social network sites are used mainly for communicating with friends (Hamade, 2013). Findings like these require further empirical examination, especially as university libraries seek to increase the chances for interactions with undergraduate students in a bid to build a relationship that fosters loyalty, resulting in the long-term use of service and resources. These libraries hope to promote this relationship partly through social media, where undergraduate students "hang out" (Kwanya & Stilwell, 2015). Despite the recognition of the importance of engagement for successful social media marketing communications, research efforts exploring the process and underlying factors in a library context is extremely scarce. This is the background that has motivated this study.

1.5 Research Question

The central research question articulated to guide the study is:

What are the factors affecting sustainable social media engagement between undergraduate students and the university library?

The sub-research questions are as follows

1. What are undergraduate students' needs, motivations and preferences for engagement with the university library on social media?
2. How do managerial factors in the university library impact undergraduate students' social media engagement?

1.6 Objectives of the Study

The objectives of this study are:

1. To investigate attitudinal barriers that impede undergraduate students' engagement with the library on social media.
2. To identify factors that affect sustainable social media engagement between undergraduate students and the university library.
3. To build a framework for sustainable social media engagement in/for university libraries.

1.7 Study Hypothesis

The following research hypotheses guided the quantitative analyses that were performed on the data

H₀1: The social media preference of students has no effect on their perceived engagement with the library on social media.

H₀2: The perceived features of library social media posts by students does not affect their engagement with it.

H₀3: The information preference of students has no effect on their engagement with library posts.

H₀4: Students attitude about the library has no effect on their perceived engagement with library posts on social media.

H₀5: Gender difference has no positive effect on students' perceived engagement with library posts on social media.

H₀6: The course of study has no effect on students' interest in library social media posts.

1.8 Delimitation of the Study

This scope of this study is delimited to cover three specific areas: subject, population and geography. The study focuses on the concept of social media marketing in the university library and does not cover other types of library. In this context, interest is in the posts made by the library within its social media pages. It has not considered posts made by other social media users about the library. Another focus of this study is the concept of engagement which entails active or inactive behaviour of a social media user on a platform. Within the confines of this study, it is conceptualised as the active or inactive response of undergraduate students to posts by libraries on social media. The areas as mentioned earlier will be investigated with a set of objectives, research questions and through the theoretical lenses of the Elaboration Likelihood Model (ELM) and the Strategic Social Media Marketing Framework (both are described in Chapter 3). The study population focused on library staff and undergraduate students in purposefully selected universities. The interest in undergraduate students arises from reports in the literature that show that they are part of an age group that is technologically savvy, are avid users of social media and also form the most significant population within most universities. The geography of this study is limited to universities in Nigeria, a West African country.

1.9 Justification of the Study

The use of social media in libraries has received considerable research attention. This is revealed in the categories of empirical studies presented in chapter two of this work (see section 2.6). Despite this extensive coverage, it is surprising that very little research has been conducted in the area of social media engagement. Given a renewed interest in the concept of engagement, it requires better theoretical understanding and analysis of its implications for researchers and practitioners. The underlying assumption in the engagement perspective is that social media content is more likely to be effective when a target audience is highly engaged. This implies that libraries can benefit maximally from social media in an atmosphere where user engagement is present and prospering. Other organisations may thrive on social media by only broadcasting their brand. However, university libraries which are mainly non-profit and service-oriented can only benefit through a clear strategy leading to greater interaction with their customers (Peacemaker, Robinson, & Hurst, 2016). Thus, this study places great emphasis on the concept of engagement. With many libraries bemoaning the lack of engagement from users on social media (Brookbank, 2015; Hamade, 2013; Stuart, 2010), it becomes contemporarily relevant to explore factors that affect sustainable engagement. This is a problem that has received little attention; notably lacking have been studies with a strong theoretical base anchored on persuasion and attitude change. As libraries seek to take advantage of the dialogic potential of social media to enhance the prospect of their digital future, it becomes necessary to understand what motivates library users to use social media. Equally important is the need to identify other contextual factors that may increase their willingness to engage with the library. This is the focus of the present study.

Interestingly, social media has redefined how people communicate and consume. Corporate institutions are keen to identify how these tools can be maximised. In the same vein, more studies are needed to uncover ways in which the library, as a service-oriented institution, can leverage social media tools. Therefore, the findings of this study will serve as a point of reference for academic libraries and other types of libraries that seek to use social media to improve community relations, user engagement and ultimately the fulfilment of their primary goals and objectives.

In recent years, libraries have attempted to use social media tools to communicate, connect and collaborate with their users, and current research suggests this will continue. However, despite the attractiveness of social media outlets, libraries cannot claim to have understood fully how to utilise them effectively. Against this backdrop, this study, using the Elaboration Likelihood

Model by Petty and Wegener (1999) as a theoretical foundation, seeks to provide a conceptual understanding of how user persuasion on social media occurs and identify the factors that explain how it operates. Although the study of social media in libraries is not new, this present one rethinks the approach adopted by earlier studies by investigating critical factors that affect sustainable social media engagement to address the current situation and propose a holistic understanding of the phenomenon. This is particularly crucial as libraries move to keep abreast with the ever-changing information needs of their users. Hence, understanding these factors will position libraries to stimulate a conversation that will equip them to serve their users better. The discussion in section 1.1 suggests the under-use of e-resources in universities. Therefore, a section of the literature review (see 2.2.1) is devoted to reviewing studies that discussed the use of e-resources among undergraduate and postgraduate students. This helps to set the context of the study.

1.10 Chapter Summary

In this chapter, the research is introduced to justify why it is necessary. It featured the background of the study, an overview of the key concepts, the research context, a statement of the problem, research questions, hypotheses, and objectives of the study. Also, the justification of the study was presented. The rest of the thesis is structured as follows: Chapter two reviews relevant concepts that inform the research as shown by the literature in the area; in Chapter three, the theoretical models that underpin the study are discussed; Chapter four presents the methodological background of the study. In Chapters five, six, and seven, the results of interviews, survey, and social media analysis are respectively presented. The implications of these results are discussed in Chapter 8, and Chapter 9 concludes the thesis.

Chapter 2- Literature Review

2.1 Introduction

The main concepts in this study are marketing, social media and user engagement. Given the research questions and objectives of the study, this section is divided into thematic headings that will guide the review of existing literature. These sub-headings are e-resources in libraries, use and non-use of e-resources among students (undergraduate and postgraduate), marketing concepts, social media, social media in the library context, students' motivation for the use of social media, user engagement, user engagement with the library on social media, and a review of empirical studies. Evaluative comments and short summaries are presented under each subsection to integrate the studies reviewed while drawing from their meanings and implications to the present study. This section is organised in this manner to contextually integrate the findings under each review with the present study while drawing from their meanings and implications. It is also considered valuable based on the structure of the thesis; aiming to maintain the interest of the reader while they navigate the lengthy literature review. The review was carried out in a narrative style. Narrative literature review was used as it critiques previous studies and summarises the body of literature on a subject matter. It also draws conclusions about the topic and identifies gaps or inconsistencies that exists. It was also considered relevant given the focussed nature of the research questions. Much of the literature presented is from developing countries and non-Us and Europeans as the study attempted to capture the constraints existing in this context. An overall summary is presented at the end of the chapter.

2.2 E-resources in libraries

This section presents an overview of e-resources in the library. Particular focus is on the meaning of e-resources and the use/underuse of e-resources by students. As explicated in the previous chapter (see subsection 1.2), e-resources are part of the library marketing story. Hence, a section is devoted in this chapter to review how they are utilised in libraries.

The widespread use of information and communication technologies, especially the internet and the web, has brought significant changes in the way information is generated, stored and accessed (Okello-Obura, 2010). With the rapid development and use of the internet and web-based technologies, the publishing and distribution of information resources in digital format have been revolutionised (Ahmed, 2013), giving rise to a proliferation of e-resources (Garg, Kumar, & Vandana, 2017). E-resources are regarded as mines of information that are explored

through modern ICT devices and often stored in cyberspace for access by multiple audiences (Swain & Panda, 2009). In a definition which offers a typological view, Deng (2010) posits that e-resources encompass databases, books, journals, newspapers, magazines, archives, theses, conference papers, examination papers, government papers, research reports, scripts and monographs in an electronic form. Similarly, Swain and Panda (2009) noted that e-resources include online databases, sources from web pages, e-journal articles, electronic personal papers, government publications, electronic theses and dissertations, e-newspapers and CDs/DVDs. These definitions, however, do not offer any idea on the context of use or the enabling technology.

Within an academic context, e-resources and services refer to the variety of electronic and digital sources of information available to teachers and learners (Okello-Obura, 2010). The International Coalition of Library Consortia (ICOLC) cited in Tripathi and Jeevan (2013) defines e-resources as a broad term that encompasses abstracting and indexing services, electronic journals, full-text materials and article delivery services which can be accessed via remote networks from information providers or locally mounted by a consortium. Addressing the issue of enabling technology, Johnson *et al.* (2012) observed that electronic resources refer to those materials that require computer access, whether through a personal computer, mainframe, or handheld mobile device. They pointed out that these resources may be accessed remotely via the internet or locally.

For this research, e-resources are defined as a collection of digital resources accessible with the aid of computer technologies, both online and onsite (libraries). They encompass databases, e-journals, e-books, e-theses and dissertations, e-newspapers, CDs/ DVDs, government publications, conference papers, examination papers and archival collections either digitised (converted from physical to electronic through scanning), acquired or subscribed to by a library. It is worth pointing out that these e-resources exist in two basic formats; as physical resources such as the CDs/ DVDs, and as electronic files stored in computers.

Electronic formats have brought changes in the way information is presented and disseminated (Bhatt & Rana, 2011), especially in library institutions. The emergence of electronic resources has drastically changed the traditional status of all libraries and information centres across the world over the last two decades (Swain & Panda, 2009).

2.2.1 Use and Lack of Use of E-resources Among Students (Undergraduates and Postgraduates)

The review under this subsection highlights the use of e-resources in libraries in developing countries consistent with the context of the study.

Many research studies exist in the literature on the use of e-resources by students and other categories of library users (Abubakar & Adetimirin, 2015; Adeniran, 2013; Egberongbe, 2011; Okello-Obura & Ikoja-Odongo, 2010; Swain, 2010; Tripathi & Jeevan, 2013). Evidence from these studies on the usage of e-resources such as library e-books, e-journals, e-theses and dissertations, and other subject gateway projects have revealed a marked difference in both occasions of use and non-use among students (Gakibayo & Okello-Obura, 2013). Gakibayo and Okello-Obura (2013) argue that while accessing electronic information resources offers opportunities to obtain accurate and timely literature, observation shows that there is low usage of e-resources in Mbarara University Library in Uganda. This, according to them, is evident from library statistics, register records and from information obtained verbally. Similarly, Adeniran (2013) reported that although his respondents were aware of the different types of electronic information resources available in the Redeemer's University Library, Nigeria, their use rate of these resources is low.

Consistent with these views, Okello-Obura and Ikoja-Odongo (2010) observed that the need to use electronic resources is of paramount importance to developing countries if access to up-to-date information is to be realised. They assert that when students use electronic resources effectively, there is strong justification for a library to use its budget to acquire or provide access to e-information resources and also to seek more funding. More so, Swain (2010) reported that the status of use of electronic resources among the students of business schools in Orissa, India based on the findings of a survey, is still in its infancy. The student community, according to the author, has yet to explore the potential benefits of various forms of e-resources that could help their academic needs.

In contrast, however, Sharma, Singh and Sharma (2011) observed that the attitude of students seems very positive towards e-resources for their education and research. The authors confirmed in their study of undergraduate students of NTR College of Veterinary Science, Andhra Pradesh that students of Veterinary Sciences are aware of e-resources and use them. In the same vein, Samson (2014) observed that students are using library e-resources at a higher than expected rate. Based on demographics in the author's study, the most frequent student

users were seniors at 91.6% followed by graduate students at 71.7% and surprisingly first years at 49.6% (Samson, 2014, p.623).

It is important to note that the studies that reported the reduced use of e-resources were carried out mostly in Africa and other developing countries of the world. Specifically, literature from Nigeria has revealed that many university libraries are subscribing to e-resources at the cost of millions of Naira, despite evidence of underuse while some e-resources are entirely unknown to the users (Ani & Ahiauzu, 2008; Egberongbe, 2011; Okiki & Asiru, 2011; Ozoemelem, 2009).

Evidence in the literature suggests a difference in the use of e-resources between undergraduate and postgraduate students. Postgraduates are heavy users of university library resources and services (Makori, 2015). The place and importance of research as a component of postgraduate studies could explain this (Ismail, Abiddin, & Hassan, 2011). The purpose of the use of e-resources by postgraduates in university libraries is encouraged for several reasons. One of such essential reasons is that it is time-saving (Abubakar & Adetimirin, 2015). Corroborating this view, Isibika and Kavishe (2018) submitted that time saved on using e-resources has a very positive impact on postgraduates' ability to be creative. E-resources have the potential for enhancing postgraduates' learning, as the resources provide them with vast quantities of information in an easily accessible non-sequential format (Abubakar & Adetimirin, 2015).

On the flip side, other studies also show limited use of e-resources by postgraduate students based on factor analysis. The most likely cause of low use of e-resources by postgraduates in university libraries for their research work, according to Singh, Ogbonnaya and Johnson (2011), includes language proficiency and information literacy. The study by Ozoemelem (2009) on the use of e-resources by postgraduates of the Department of Library and Information Science of Delta State University, Abraka, Nigeria revealed that there was a low level of computer literacy among the respondents. Abubakar and Adetimirin (2015) confirmed this in a study that showed that the more postgraduates are exposed to computer literacy skills, the better the use of e-resources for their research. This implies that computer literacy is necessary to influence the use of e-resources by postgraduates. These findings suggest that university libraries could seize this opportunity in their marketing approach to design literacy programmes and communicate them to students on social media to enhance interaction on the platform.

Similarly, for the undergraduate students, evidence in the literature highlight variability in their use of e-resources, but compared to the postgraduate students, they are lower users. Factors

influencing low use of electronic resources by undergraduate students include the returned large mass of irrelevant information, the need to filter the results from searches, download delays, failure to find information, inadequate or lack of search skills, high cost of access, and difficulty in navigating through electronic resources (Adeniran, 2013). Ukachi et al. (2014) also attributed this prevailing situation to the negative perception and attitudes of undergraduate students about the library. The current study examined this perception with the view of exploring possible ways of effecting attitude change. It is noteworthy, however, that the above-cited reviews do not give room for generalisation due to the setting and sample (usually small) used in the research. It seems, though, that there is a higher usage of e-resources by postgraduate students motivated by the demands of their studies.

2.2.2 Summary

With this overview, it is evident that e-resources have become a prominent aspect of library services. Definitions offered revealed the types, context and enabling technology of e-resources. Also, evidence in the literature shows a marked difference in the use of e-resources by different student groups. Still, studies have generally proven the case of underuse in Africa and other developing countries based on the factors highlighted above, such as information literacy, computer literacy, language barrier, negative perception and attitudes.

2.3 Marketing Concepts

This section presents the definition of marketing and a contextual review of marketing concepts that have surfaced over the last few decades.

The particular interest in marketing by scholars has resulted in myriads of definitions. Over time, these definitions have changed under new social and economic conditions (Nicolau, 2013). A commonly quoted description is provided by the Association American Marketing (2017), who see marketing as the activity, set of institutions and processes for creating, communicating, delivering and exchanging offers that have value for consumers, customers, partners and society in general. Also, Kotler and Keller (2012) who are famous thought leaders in marketing, defined it as a societal process by which individuals and groups obtain what they want and need through creating, offering and freely exchanging products and services carrying value.

The central ideas in these definitions hinge on the fact that marketing is a process and involves the exchange of values to satisfy needs and wants. These concepts shaped the direction of this study.

Consequently, to drive the exchange of values, marketing concepts have been proposed by different scholars. For instance, the marketing mix (Pomering, 2017), relationship marketing (Grönroos, 1994), personalised marketing (Dawn, 2014), word of mouth marketing (Groeger & Buttle, 2014), to name a few. In this review, the focus will be on those that have received sufficient attention in the marketing and information studies literature.

2.3.1 The Marketing Mix

The marketing mix is the most familiar concept of marketing. It encompasses a set of controllable marketing tools that a company uses to create a desired response in the target market (Tariq, 2014). It is also known as the 4 Ps (Tariq, 2014). The use of the apt and colourful term ‘marketing mix’ was started by Neil Borden in 1960 when he developed the 12 elements of marketing (Janakiraman, 1998), but credit is given to Jerome McCarthy for coining the 4 Ps by condensing these elements into four (Tariq, 2014). These elements are:

1. **Product:** is a tangible object or intangible service that is produced or manufactured and offered to consumers in the market.
2. **Price:** is the amount a consumer pays for the product or service, usually an economic cost (though it can be opportunity cost).
3. **Place:** represents the location where a product or service can be purchased and can often be referred to as the distribution channel. This can include physical stores as well as virtual outlets online.
4. **Promotion:** represents the communications that marketers use in the marketplace, including advertising, public relations, personal selling, and sales promotion (Gordon, 2012, p122).

Subsequently, Boom and Bitner added another 3Ps to the original 4Ps to apply the concept of the marketing mix to the service sector (Pomering, 2017) and these are:

5. **Participants:** the human actors who play a part in service delivery and thus influence the buyer’s perceptions. They include the firm’s personnel, the customers, and other customers in the service environment.
6. **Physical Evidence:** this consists of the environment where the service is delivered and where the firm and customers interact, and any visible component that facilitates performance or communication of service.
7. **Processes:** include the service delivery and operating systems and are the actual procedures, mechanisms, and flow of activities by which the service is delivered (Zeithaml, Bitner, & Gremler, 2006, p.27).

Over the years, different marketing mixes have been proposed, such as the 4 Cs, (Janakiraman, 1998), 5 Ps and 8 Ps (Tariq, 2014). This was because the initial 4 Ps, as well as the 7 Ps, were considered inadequate for explaining different dimensions of marketing. In particular, the 4 Cs were developed for service-oriented and non-profit making organisations (Lombardi, 2010), such as libraries. It was developed by Robert Lauterborn (Janakiraman, 1998). Lauterborn advocates:

- **Customer not product:** Remain focused on customer value instead of product features by engaging your customer and letting value define the product or service in the marketplace.
- **Cost not price:** Consider cost, something customer pay instead of price, instead of price, something you charge by being mindful of the customer's dilemma: limited money and unlimited need.
- **Convenience not place:** Strive for convenience, not place by going beyond who sells the products and where they are sold. Think about the shopping experience and new ways of connecting with the customers.
- **Communicate not promote:** Communicate means interacting with customers and building relationships, whereas, promotion is a relic of mass marketing no longer useful in a diverse marketplace requiring targeted marketing (Lombardi, 2010, p.71).

Similar criticisms of the marketing mix have led to the proposal of alternative marketing concepts reviewed below.

2.3.2 Relationship Marketing

The relationship marketing concept emerged within the fields of service marketing and industrial marketing (Ndubisi, 2007). According to Grönroos (1994), the pioneering proponent of this concept, relationship marketing aims to establish, maintain, and enhance relationships with customers and other partners, at a profit, so that the objectives of the parties involved are met. He argued that the 4 P's and the whole marketing mix management paradigm are, theoretically, based on a loose foundation in that the property or rationale for distinguishing them have never been clarified and they preclude some market-related phenomena.

The key mediating variables in relationship marketing are commitment, trust, communication, relationship quality, relationship satisfaction and relationship duration (Ndubisi, 2007; Palmatier, Dant, Grewal, Evans, & Evans, 2006). These mediating variables are not exhaustive but served the purpose of this study. Table 2.1 gives their definition and references, and they interact to build a successful relationship. Successful relationship marketing improves

customer loyalty through stronger relational bonds (De Wulf, Odekerken-Schroder, & Iacobucci, 2001).

Table 2.1 Mediators of Relationship Marketing

Mediator	Definition	Reference
Commitment	An enduring desire to maintain a valued relationship	(R. M. Morgan & Hunt, 1994; Ndubisi, 2007)
Trust	Confidence in an exchange partner reliability and integrity	(Doney & Cannon, 1997; Kharouf, Lund, & Sekhon, 2014; Sirdeshmukh, Singh, & Sabol, 2002)
Communication	Amount, frequency and quality of information shared between exchange partners	(Hung & Lin, 2013; Reynolds & Beatty, 1999)
Relationship Quality	Overall assessment of the strength of a relationship	(De Wulf et al., 2001; Giovanis, Athanasopoulou, & Tsoukatos, 2015)
Relationship Satisfaction	Customer's affective or emotional state towards a relationship typically evaluated cumulatively over the history of the exchange.	(Palmatier et al., 2006; Reynolds & Beatty, 1999)
Relationship Duration	Length of time that the relationship between the partners has existed.	(Giovanis et al., 2015; N. Kumar, Scheer, & Steenkamp, 1995)

Source: Adapted and modified from Palmatier et al. (2006)

2.3.3 Word of Mouth Marketing (WOMM)

Word-of-mouth (WOM) has been acknowledged for many years as a significant influence on what people know, feel and do (Groeger & Buttle, 2014). More recently, marketers have begun to explicitly seek ways to arouse and manage WOM to influence consumer behaviour (Godes & Mayzlin, 2009). It is now more widely understood to be a communication or promotion medium (Winer, 2009).

WOMM involves the seeding of products to targeted groups of consumers to encourage them to spread positive WOM, which, in turn, increases brand awareness and sales (Trusov, Bucklin, & Pauwels, 2009). Kozinets, de Valck, Wojnicki, and Wilner (2010) define it as the intentional influencing of consumer-to-consumer communication by professional marketing techniques.

WOM is inherently a social phenomenon because the information is transmitted between actors along social ties (Huang, Cai, Tsang, & Zhou, 2011). It captures the likelihood that a customer will refer a seller positively to another potential customer and, therefore, indicates both attitudinal and behavioural dimensions of loyalty. Many organisations have identified and driven their goals based on these concepts, including library institutions. It is also noteworthy that social media offers a real advantage for propagating relationship marketing and WOMM among libraries. The next section presents a review of library marketing.

2.3.4 Library Marketing

Various environmental changes such as an increasing number of organisations, intensified competition for limited resources, the rapid development of ICTs and economic, political and social changes have forced organisations to rely on marketing activities to cope with competition and achieve their goals (Lee, 2016). Libraries are no exception. The seminal work of Kotler on marketing for non-profit organisations paved the way for the resurgence of library marketing (Garoufallou et al., 2013).

Marketing in libraries has been widely discussed in the literature (Biggs & Calvert, 2013). Although there is no generally accepted definition, library scholars acknowledge that it involves strategic planning (Naikwadi & Chaskar, 2012), market research (Potter, 2012), segmentation (Yi, 2016) and the application of marketing principles in libraries (Biggs & Calvert, 2013; Garoufallou et al., 2013) for meeting the needs and wants of customers. More specifically, Iwu-James, Haliso and Ifijeh (2020) defined marketing concerning library and information services as the process of planning, pricing, promoting, and distributing goods and services to create exchanges that satisfy the library and the customer. Fulfilling this role of the library requires librarians to learn and apply marketing skills, understand the customer and stakeholder needs, create awareness, stimulate interest, build loyalty and demonstrate value (Luo et al., 2013). It also means a sufficient change in the traditional attitude of the librarians towards acquisition, organisation, processing and retrieving information (Kaur & Rani, 2008) bearing in mind the satisfaction of customer information need. Particularly, marketing of library e-resources is essential to justify the retention of useful resources for the patron population in all types of libraries. This could be based on the analysis of usage statistics which provides significant insights into the level of utilisation for each resource so that the return on investment can be documented and the identification of resources that are fair candidates for potential cancelation can be identified (Nagra, 2019).

Scholars have explored the goals and benefits of library marketing. Islam (2009) specifically mentioned that it facilitates the attainment of the goals of library and information centres while changing the concept of a library and ensuring easy accessibility of information by users. Iwu-James et al. (2020) also noted that through effective marketing, libraries could achieve customer satisfaction, increase their customer base and improve the perception of library and information products and services.

To market libraries, it is essential to understand the mindset and circumstances of the people librarians are trying to market to (Potter, 2012). In this study, library marketing refers to the strategic planning, communication and exchange of value between libraries and their customers in a manner that leads to the satisfaction of the customers and the promotion of the value of libraries. This form of communication seeks to understand and respond to the varied and increasing needs of these customers.

Going beyond traditional marketing and branding requires that library marketing be integrated with the overall library mission, vision and strategic plan. This coordinated integration will strengthen value by creating a common experience and understanding by a library community, including its patrons, boards, administrators, and donors as well as internet search engines, social media networks, and their users (Rossmann, 2019). A typical mission statement should answer: what does your library do? Who does your library serve? Whereas, a typical vision statement should answer: what is the personality of your library? What does your library aspire to be? How do you hope to achieve these aspirational goals? (Rossmann, 2019). These mission and vision statements would pave the way for a solid strategic plan. On the one hand, developing and executing a strategic plan to increase the awareness and utilisation of library resources depends upon awareness of internal factors such as budget, staffing, time, and collaboration within library units (Nagra, 2019). On the other hand, external factors such as how users find resources, collaboration with academic departments, and how using available communication venues to disseminate messages about resources, play a role. These ultimately add up for a successful library marketing strategy.

2.3.5 Summary

Evidence from the previous reviews shows that marketing has become a vital tool for the exchange of values hinged on the needs and wants of individuals. Organisations explore these needs through different marketing strategies discussed above with the primary motive of meeting them while also driving their mission and goals. This applies as much to libraries as it does to other organisations.

2.4 Social Media

Given the importance of social media in this research, selected definitions are presented to guide the focus of the study. Also, social media types and marketing are explored to underscore the popular ideas in the literature.

2.4.1 Defining Social Media

Social media is a term that frequently occurs in everyday conversations and news. Despite their frequent use in many contexts, this concept and its meaning are not clearly defined in the academic discussion (Vuori, 2011). There have been attempts to address this deficiency in definition by some scholars. Table 2.2 below presents three that are academically useful.

The definition by Kaplan and Haenlein (2010) suggests a socio-technical relationship between the essential elements of social media (McIlwaine, 2014). Kietzmann et al. (2011) extended this definition by adding a mobile-based technological component that is crucial today in social media communication. Vuori (2011) gave a similar description but with a focus on social media as an action performed by people assisted by technologies. This study will adopt the definition offered by Kietzmann et al. (2011).

Table 2.2 Definitions of Social Media

Definition	Reference
Social media is a group of internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content.	(Kaplan & Haenlein, 2010)
Social media employ mobile and web-based technologies to create highly interactive platforms via which individuals and communities share, co-create, discuss, and modify user-generated content.	(Kietzmann et al., 2011)
Social media is used to describe the technologies accompanied by the actions performed by people and enabled by Web 2.0 applications.	(Vuori, 2011)

Source: Adapted from (McIlwaine, 2014, p.14)

2.4.2 Types of Social Media

Categorising the types of social media in existence has been recognised as being more difficult than defining it, given that social media platforms have multi-purposes which can make a single classification difficult (Vuori, 2011). Most people wrongly refer to social networking sites as social media (Vuori, 2011). This misconception could be because social networking sites are more widely used. Social media is much more than social networking sites. In the literature, some scholars classify social media types by platform names such as Facebook, Twitter and MySpace (Islam & Habiba, 2015; Kumar & Singh, 2015; Saravanakumar & SuganthaLakshmi, 2012; Sriram, 2016). However, Ngai, Moon, Lam, Chin and Tao (2015) offer a more useful classification based on the categorisation of social media tools on different platforms. Table 2.3 gives a summary of this classification. Expanding on this, Vuori (2011) provides a functionality-based categorisation to reflect the kind of action people carry out using social

media. She described it as the 5 C model of categorising social media technologies. They are communicating, collaborating, connecting, completing and combining technologies.

Table 2.3 Social Media Classification

Social Media Tools	Description	Example
Media sharing sites	Allow users to upload, organise and share multimedia materials with people or selected community.	YouTube, Vimeo, Instagram, Flickr
Blogs/Microblogs	Allow authors to post their writings or information on the web, hoping someone will read them	Blogger, Twitter, Plurk, Tumblr, Weibo
Social Bookmarking sites	Allow users to collaboratively use tags to annotate and categorise the web contents they found interesting	Delicious, Pinterest, Digg, Foursquare
Virtual/Online Communities	Allow individuals to share specific information and interest through interactive tools on a website.	Lonely Planet, Yahoo Answers
Social Networking sites	Allow individuals to build a social relationship and interest among friends and acquaintances	Facebook, LinkedIn, Google+
Virtual Worlds	Provide computer-simulated environments where people can live in a virtual world	SecondLife, Active World, Onverse

Source: Adapted and modified from Ngai et al. (2015)

Communicating are social media platforms which enable publishing of contents and includes blogs, content distribution (YouTube), and microblogging (Twitter). *Collaborating* includes platforms that allow collaborative projects (Wikipedia, Wikispaces). *Connecting* encompasses applications such as social networks and virtual worlds and enables people to engage in an online environment. *Completing* includes social bookmarking and social news sites (Reddit, Digg) that allow the adding of social metadata to complement existing content. *Combining* explains platforms that utilise existing content in new ways and includes mashups (Vuori, 2011). These platforms have been widely acknowledged as useful channels for marketing. This view is reviewed under the next subsection.

2.4.3 Social Media Marketing

Social media marketing has attracted considerable research attention in recent years. An earlier study by Mangold and Faulds (2009) see it as an obvious choice in marketing which is fast becoming a crucial part of the integrated marketing communication strategies of firms. It is defined by Gunelius (2010) as any form of direct or indirect marketing that is used to build awareness, recognition, recall, and action for a brand, business, product, person, or other entity and is carried out using the tools of the social web. Social media marketing is a rapidly growing way in which businesses are reaching out to potential customers. It refers to the process of gaining users' attention and acceptance through social media (Li, Lai, & Lin, 2017). It embraces many possible techniques for advertising and branding across social networks, such

as social networking sites, blogospheres and micro-blogospheres (Liu, Min, Zhai, & Smyth, 2016). Key features of social media marketing are user-generated content, customer engagement, institution-generated content, electronic word-of-mouth (e-WOM) and online brand communities (Zahoor & Qureshi, 2017). It makes use of social media tools as an extension to complement traditional marketing (Zahoor & Qureshi, 2017). It is, however, not a replacement of the conventional marketing but an additional marketing channel that could be integrated with the traditional ones as a part of the marketing mix (Cvijikj & Michahelles, 2013).

Scholars have also highlighted the benefits of social media marketing. Some noted that it plays a significant role in promoting brand awareness and a unique brand image to current and prospective customers of organisations (Seo & Park, 2018). Others pointed out that it is a valuable space for content sharing and interaction among virtual communities (Beig & Khan, 2018). Arrigo (2018) affirms that social media marketing improves the connectivity and collaboration between firms and customers in all sectors. Hence, the benefits of social media marketing can be enjoyed by any organisation, including the library institution.

The literature suggests that social media tools offer great opportunities for delivering value to customers. However, the achievement of these values is dependent on how well marketing effect is managed, and this is the focus of the next sub-section.

2.4.4 Social Media Marketing Management

Social media marketing management is crucial for sustainable practice. It enables an organisation to develop social media competence (Braojos-Gomez, Benitez-Amado, & Javier Llorens-Montes, 2015). While establishing an account on social media platforms is easy, once the account is created, decisions need to be made about how often to post, what content to post and how to handle customer posts on the page (Lepkowska-White, Parsons, & Berg, 2019, p.322). These decisions are the purview of social media marketing management, and several researchers have focused on different aspects. Felix et al. (2017) proposed a framework outlining the structure, governance, culture and scope of social media management. The structure represents the social media personnel patterned on two extreme positions of hierarchies and networks; the scope is the level of social media implementation in organisations; culture represents the overall perception about social media and governance indicate the regulation of social media activities (Felix et al., 2017). Building on the framework of Felix et al., Parsons and Lepkowska-White (2018) proposed a new framework with four

dimensions related to the actions managers perform as they implement and engage with social media: messaging and projecting, monitoring, assessing and responding. Messaging and projecting describe the nature and content of social media posts; monitoring is the tracking of the responses to posts; assessing is the quantification of social media data generated and responding describes the implemented changes inspired by previous dimensions (Parsons and Lepkowska-White, 2018). While this framework suggests the day-to-day running of social media, it fails to describe the high-level management that organises and facilitates social media marketing.

The vital role of evaluation is highlighted by Keegan and Rowley (2017). They noted that as organisations increase their investment in social media marketing, the assessment of management techniques through metrics and a key performance index (KPI) is unarguably crucial for success. The authors went on to develop a framework for social media marketing evaluation with six critical stages such as setting evaluation objectives, identifying key performance indicators, identifying metrics, data collection and analysis, report generation and management decision making. On the subject of metrics, Peters, Chen, Kaplan, Ognibeni and Pauwels (2013) submitted that motives, content, network structure and social roles are critical elements that should not be ignored. They suggested nine guidelines for designing appropriate social media metrics, including the transition from control to influence; shift from states and means to processes and distributions; shift from convergence to divergence; among others. These studies seem to focus on specific aspects of social media marketing management in profit-making organisations with hardly any attempting a holistic approach to the management of the process of marketing. It is also noteworthy that none has specifically addressed library institutions. This suggests a gap (holistic library-related approach to marketing) in the literature that the current study would address.

2.4.5 Social Media Marketing in the Library Context

The library and information profession is currently witnessing a significant shift in the mode of information service delivery, particularly in user-librarian communication and interaction (Quadri & Idowu, 2016). Social media, as a web-based channel of information dissemination, plays an essential role in this shift and is rapidly permeating all aspects of library and information services (Quadri & Idowu, 2016). It has the potential to facilitate much closer relationships between libraries and their customers – wherever they are based, and however they choose to learn about and access library services and resources (Taylor and Francis Group, 2014). It has provided libraries with new avenues to connect with their users and promote

library resources and services beyond the library walls (Peñaflor, 2018). In the marketing and public relations context, organisations seek to achieve four main objectives regarding their use of social media: increasing sales, saving costs, aiming at a higher user satisfaction and improving their reputation and relevance. These objectives have some relevance to the library (González-Fernández-Villavicencio, 2014).

A survey conducted by EBSCO among European libraries suggests that the goals of libraries' social media involvement are to maximise library exposure, to modernise the library image and e-reputation, to promote specific content offers, to build discussion groups and collaborative work (Luo et al., 2013). As a feature of Web 2.0, social media offers libraries a new way to connect, engage, and communicate with customers (Harrison et al., 2017). This means that libraries are leveraging the ubiquity and communication advantages of social media to facilitate the achievement of their goals. Section 2.6 presents a review of empirical studies highlighting the application of social media in libraries.

2.4.6 Summary

Social media is unarguably a useful tool for interaction and participatory communication based on user-generated content. It has been gainfully employed as a channel by profit and non-profit organisations for marketing. The implication is that these marketers must understand social media dynamics, marketing concepts and customers' motivation to use these platforms effectively.

2.5 Students' Motivation for the Use of Social Media

This section explores students' motivation for the use of social media. It seeks to identify the factors that affect motivation to use this interactive and relationship building mediums. Also, it presents the concept of user engagement with a particular focus on engagement with libraries on social media.

Understanding why people use social media platforms would provide organisations with guidance when designing services for their customers. User values and needs define the intended purpose of using social media platforms (Mola, Zardini, & Confente, 2015). Drawing on the Uses and Gratification Theory, Al-menayes (2015) identified social and communication gratification as students' motivation for using social media. According to the author, social gratification includes things like the ability to keep in touch with family and friends, meeting like-minded individuals, social networking, maintaining relationships with old friends and being popular as indicated by the number of followers. Communication gratification, on the

other hand, is found in the individual's capacity to control their communication, alongside the opportunity to establish new contacts on the site (Al-menayes, 2015). Lin and Lu (2011) observed that enjoyment is the most influential factor in people's continued use of social networking sites, followed by the number of peers, and usefulness. In the same vein, Akram and Albalawi (2016) identify various determinants such as perceived connectedness, perceived enjoyment, perceived usefulness and perceived ease of use as the primary influencers of social media adoption intention. These may not have exhaustively discussed the specific values and needs of individuals but give insights as to why people decide to use social media. Also, people's motivation might change with time, as different social media platforms are rolled out by tech companies.

2.5.1 Defining Customer/User Engagement

One of the early definitions of engagement within brand communities refers to it as "consumer's intrinsic motivation to interact and cooperate with community members" (Algesheimer, Dholakia, & Herrmann, 2005). Since then, the term has been increasingly used in the marketing literature with different context-dependent definitions provided (Cvijikj & Michahelles, 2013). Bowden (2009) views customer engagement as a "psychological process" comprising cognitive and emotional aspects. Specifically, the author examines the differences in the engagement of new, as opposed to existing customers. Similarly, Mollen and Wilson (2010) describe consumers' engagement as the cognitive and affective commitment to an active relationship with the brand as personified by a website or other computer-mediated entities designed to communicate brand value while, Vivek, Beatty and Morgan (2012) define "consumer engagement" as "the intensity of an individual's participation and connection with the organization's offerings and activities initiated by either the customer or the organization".

While the first two definitions and interpretations focus on the emotional and cognitive aspects of engagement, the latter emphasises specific activity types or patterns. The keywords here are involvement and participation. On online platforms, this form of engagement is commonly referred to as online engagement. It is addressed from the perspective of measuring undertaken actions, such as the click-through rates (CTR), page views, etc., with different measures being applied depending on the possibilities offered by the platform (Cvijikj & Michahelles, 2013). Notably, user engagement with social media refers to the degree to which people are willing to contribute to online conversations with their friends on social media (de Oliveira, Huertas, & Lin, 2016). This definition focuses on horizontal communication and does not reflect interaction with marketers in organisations.

Engagement on social media platforms, also referred to as online engagement, has been conceptualized in the literature as both active and passive. Along these lines, Khan (2017) views it as comprising behavioural aspects or click-based interactions (participation) as well as simple content viewing and reading (consumption). Similarly, Men and Tsai (2014) also conceptualized public engagement on social media as a behavioural construct with hierarchical activity levels. These levels range from passive message consumption to active two-way conversation, participation, and online recommendation. These definitions seem to view passive engagement as involving behavioural activities that are focused on use, such as views and reads. In contrast, the active dimension is described as participatory, interactive and dialogic. This distinction presents two ways to evaluate how undergraduate students respond to library social media posts and is reflected in the questionnaire about perceived social media engagement (see Appendix A).

In this study, engagement is viewed as a behavioural process manifesting as either an active or passive response of a customer to specific library posts on social media. However, since, this study seeks to evaluate the dialogic potential of social media to the university library, active engagement will be given primary attention.

2.5.2 User Engagement with Libraries on Social Media

Aspects of user engagement with the library on social media have been addressed within the library studies literature but not extensively. As Wu, Chatfield, Hughes, Kysh and Rosenbloom (2014) pointed out, while there are many articles in the literature discussing tips and strategies for using social media in academic libraries, there are few studies that assess student willingness to interact with the library on these platforms. Furthermore, evidence from these studies presents a mixed view on the issue, especially as it concerns students. On the one hand, Chu and Meulemans (2008) found that students were uncomfortable using social media sites for academic purposes. According to them, students indicated that they were more likely and more comfortable interacting with educational personnel, such as librarians and professors, via more professional forms of communication, such as email.

Also, Burhanna, Seeholzer, and Salem (2009) reported that although most students they interviewed expected the library to have a social media presence, their willingness to interact with library personnel was limited to specific online media such as course management software. Students visited social networking sites, such as Facebook, primarily for non-academic purposes, namely to connect and share digital artefacts with friends, family, and

acquaintances (Quan-Haase & Young, 2010). This implies that students used social media to engage in social interactions with friends and families but would not use it as a medium for academic purpose such communication with their professor or the university library. In the same vein, Wu and colleagues (2014) found in a study across a range of health science institutions that the majority of students were not interested in interacting with their library using Twitter or Facebook.

On the other hand, there is also evidence that students are increasingly accepting the presence of libraries on social media (Peñaflor, 2018; Winn et al., 2017). Cassidy et al. (2014) found a sizable increase in the number of students who are interested in hearing about library services via social media. Of the options presented in the survey, most of that interest (71% of students) was focused on Facebook (Cassidy et al., 2014, p.129). Similarly, in a study conducted by Baggett and William (2012), student responses indicate that the library should expand its use of Facebook, posting daily or at least two or three times a week as a way to let students know what is new in library resources, events, or hours. According to the students, the more often a page posts, the more they will check-in (Baggett & William, 2012). Given this mixed evidence, students' willingness to engage with the library on social media may differ from campus to campus or country to country. Another possible reason could be traced to the way students use each platform. This presents a gap that needs further research.

2.5.3 Summary

The motivation for the use of social media is hinged on personal values and needs. These also play a significant role in the willingness of individuals to engage with either people or organisations on social media platforms.

2.6 Review of Empirical Studies

This section reviews empirical studies conducted on library use of social media. It drew insight from the work of Jacobson (2011) who identified five categories of research relating to the use of Facebook in libraries: how-to articles relating to best practices as well as ideas for the use of Facebook; library centred case studies on the successful use of Facebook by libraries; student-based research studies examining student opinions about the library on Facebook; research on services provided on Facebook, and perceived usefulness of Facebook by librarians. These categories can conveniently be applied to other social media platforms. More recently, studies examining the content of social media posts alongside the evaluation of metrics such as followers, comments, shares, and likes have also appeared in the literature.

They are captioned as content/data evaluation research. These studies are not mutually exclusive; that is, some have elements of another category. Also, the studies reviewed are not exhaustive of all that have appeared in the literature. In the following subsections, these empirical studies are presented, highlighting key findings. The goal for doing this was to give an overview of the landscape of empirical studies on this subject matter that is not based on anecdotal evidence.

2.6.1 Best Practice-based Research

Under this category, studies relating to best practices and ideas for the use of social media are reviewed. One of the earliest studies was carried out by Chu and Meulemans (2008) who through a survey and a focus group, evaluated how students use MySpace and Facebook. In the study, students disclosed that these technologies have made connecting with people much easier. Their findings were discussed in line with the appropriate implementations of MySpace/Facebook in a university library setting, specifically on the pedagogical and practical feasibility of integrating social software in library instruction, reference, and outreach. Another study by Adams (2013) investigated the benefits and limitations of blogs within academic libraries by reviewing the evidence presented within the literature and the real world activity within a selection of relevant blogs. A sample of 36 blogs was identified to conduct a content analysis after which authors of these blogs were asked to complete an online survey to gain insights on the effectiveness of blogging. Across all blogs, there were 1,179 tags and few comments, with the highest recording 31 comments from 30 posts. The survey of bloggers revealed that despite the reduced response rate, they would continue to blog. Using this, the author recommended that for bloggers to achieve a good result, they should post regularly, set their blog posts in context and make their blogs more accessible. One commonality among these studies is that they concentrated more on individuals (librarians) instead of the institution (library) which this study considers.

Vanwynsberghe, Boudry, Vanderlinde and Verdegem (2014) studied the role of library staff acquainted with social media in motivating others to adopt the platform. Drawing upon social network and diffusion of innovation theories, it explored three public libraries in Belgium, emphasizing the central role of library staff with the required skill set to support or impede the implementation of social media in library contexts. It found that in libraries, there is little communication about social media and suggested that those who know about it should tell others to hasten the adoption rate. Once again, the focus of attention is on individual librarians.

From a different perspective, Agosto, Purcell, Magee and Forte (2015) conducted a multimethod study of how public and school libraries fit into teens' increasingly online information lives. Data was collected through individual interviews, focus groups, and surveys from a sample of 158 students of two US high schools. Their findings show that contrary to common belief, teens are not just wasting time when using social media. Often, they are seeking information and sharing what they know with others. Recognising this, the authors recommended that libraries develop policies that support teens' use of social media and consider providing informational content through these outlets. This study is an excellent example of research suggesting how libraries can make practical use of social media to reach out to a user group.

Van Beynen and Swenson (2016) performed a content analysis of a student-based Facebook group to determine reference made about the library. The group featured a total of 146 posts about the library during the fall of 2013 and spring of 2014 semesters with students asking and responding to reference questions by themselves among other library-related issues. Arguing that a library Facebook page is not enough to promote engagement, it recommends that librarians need to be at the native domain of these students to give a relevant response to questions especially during the period when students are most active in the group. However, the study did not consider students' need and willingness to interact with librarians in this capacity. It is worth mentioning that many of the works appearing in this category offered opinions which describe the how-to of social media, but often do not address the more valuable and challenging question of why it is used.

2.6.2 Case Study-based Research

This category presents reports of success stories of libraries who implemented social media to promote various services. Luo et al. (2013) reported the case of an award-winning library social media marketing campaign carried out in a Chinese university. The study examined different aspects of the library's online video marketing project known as "Falling in love with the library" and an evaluation of students' perception of this project via survey questionnaires. The video series was posted on Youku, the Chinese equivalent of YouTube and received 160,000 views in the first 20 days. Factors identified to have contributed to the success are: video content is based on real campus life; it reflects what students experience in their everyday activities; it conveys content in a humorous, light-hearted, and refreshing style; and it employs social media to share content and engage the target audience. Students surveyed showed their enthusiasm about the video with some recommending a sequel. Although the study did not

show the extent of interaction with the video by student audiences, it can be said to be a success story based on the engagement it generated on the library's Weibo account.

Brookbank (2015) reported the case of a campus-wide survey carried out by the Western Oregon University's Hamersly Library in recognition of the need for continuous evaluation and evolution when it comes to a library's presence on social media. Four hundred and twenty-five (425) students completed the online survey. Results show that Facebook was the most popular platform among students, followed by a tie between Pinterest and Instagram for second place. Twitter came fourth. The students surveyed replied that they would like to receive information from the library through Twitter, especially information on campus-wide information/events, research techniques and tips, and library logistics. This is one of the few case studies that sought to identify user social media needs and their preference for library posts on that platform. However, students reported opinions often do not correspond with the actual use of the platform when it comes to engaging with the library (Stvilia & Gibradze, 2017).

Young and Rossmann (2015) gave an account of the success achieved by Montana State University Library, which convened a social media group to guide their social media activity. This group developed a guide which featured components such as audience focus, goals, values, activity focus, tone and tenor, posting frequency, posting categories and posting personnel. The study was carried out in two phases to evaluate the followers, category of posts and the level of interaction on the library Twitter account. It was reported that the pre-guideline phase, the library lacked a social media presence and personality with more followers from the business community than among students. With the introduction of the guidelines, increased interaction was achieved with more student-based followers as the student user community grew by 366 per cent and the rate of communication with the community grew by 275 per cent (Young & Rossmann, 2015). This suggests that success in building a community on social media is achievable, especially when undertaken with a strategic direction. This can be tied to the strategic social media marketing framework adopted in this study which explains the pivotal role of scope and governance of social media for attaining marketing success on these platforms. This will be explained further in Chapter 3.

In a similar vein, Chatten and Roughley (2017) presented the case of social media for engaging and connecting at the University of Liverpool library. These activities were carried out by a social media group concerning a university-wide guideline. They reported the most successful activities were focused on Twitter due to the number of followers; 6,300 on Twitter as opposed

to 1,700 on Facebook. Hashtags were used to promote library reading list software and events. The focus of these activities seems to be on information dissemination, as evidence of engagement was not reported.

These case studies are peculiar to the circumstances of each library described above, suggesting that a measure adopted by a particular library may not work for another. This calls for a universal approach that can be adapted by different libraries, irrespective of the type or size. However, a useful take away is that some of these libraries conducted audience-based research to determine their needs and expectations from the library on social media.

2.6.3 Student-based Research

This category consists of studies seeking student opinions about the library on social media. Burhanna et al. (2009) explored the perception of students about Web 2.0 technologies in an academic library through focus groups with undergraduates at Kent State University. Results reveal that students are less sophisticated and expressive in their use of Web 2.0 than presumed. They set clear boundaries between educational and social spaces on the web. This may not be the case for other student users classified as millennials, who are said to be more technology savvy (Baggett & William, 2012). Also, Connell (2009) surveyed 366 Valparaiso University first-year students to discover their feelings about librarians using Facebook and MySpace as outreach tools. The vast majority of respondents had online social network profiles. Most indicated that they would accept library contact through those Web sites, but a sizable minority reacted negatively to the idea, expressing their concern about the breach of their privacy in these platforms.

Epperson, Leffler and Library (2009) conducted an electronic survey among 60 students at two college campuses located in the state of Colorado in the USA to discover the extent to which they use social software programs, namely Facebook, MySpace, Instant Messaging and Second Life. They also sought to determine students' level of desire for having a librarian or library presence within those spaces. The majority of respondents used social software programs with Facebook common among them but were apathetic about using these programmes for library questions or research. This seems to be contrary to the evidence presented in the previous two studies. But the sample studied is not representative of the population of the undergraduate students and may not reflect the accurate perception of the students in general. This may require confirmation through further studies.

Sachs, Eckel and Langan (2011) carried out an electronic survey of 123 student users at Western Michigan University to measure the effectiveness of Facebook as a marketing, reference and instructional tool. It also measured user comfort and satisfaction with a library's presence on Facebook. The majority of respondents found Facebook to be a useful and engaging medium for learning about library resources and services. When asked whether they felt that Facebook was a right way for the libraries to stay in touch with students, more than 90% of undergraduates said "yes" or "sort of" (Sachs et al., 2011, p.41).

Wu et al. (2014) in a survey, examined three facets of student use of technology to provide a better picture of patrons' technological habits: ownership of devices, awareness of new technologies, and willingness to use these technologies to interact with the library. Data were collected and combined from 1,513 respondents (out of 6,270 potential respondents) representing seven institutions. Regarding social media, it was reported that the majority of respondents were not interested in following the library on Twitter (31% unlikely, 46% extremely unlikely) or friending the library on Facebook (31% unlikely, 21% extremely unlikely). They concluded that there is little interest in using social media with the library.

Bhatt and Kumar (2014) explored students' opinion of Jawaharlal Nehru University, New Delhi, regarding the use of social networking sites/ tools by the library and their expectation of communication from the library through SNSs. This was a survey conducted using a questionnaire which was circulated among 200 students studying in JNU for the academic session 2011-2012 with 85% (170) return rate. Most of the students were reported to be in favour of libraries using the SNS/tools, and they expected services such as information about the collection, e-journal and e-book, library events, and help with assignment to be provided to them by libraries through SNS/tools as well. In the same vein, Stvilia and Gibradze (2017) reported findings of a survey of 104 undergraduate students in information technology courses at a large research university. Results of regression analysis indicated that students considered access to information and computer resources and study support services as the most crucial library services offered. Likewise, students perceived library social media postings related to operations updates, study support services, and events as the most useful. They concluded that academic libraries could effectively plan and market their services by identifying the value users perceive in their services and their social media communications about those services.

Evidence from these studies shows marked differences in students' opinion about their perception of the library on social media. While most explored students' need and expectations,

they are confined to specific universities which may limit their generalizability. Although many of the studies indicate student acceptance, it is also a known fact that perception or opinion do not always reflect the actual use (Jacobson, 2011). This could be a reason why some libraries are still recording low engagement (Jones & Harvey, 2019). This raises the question of attitude, which will be explored in this study.

2.6.4 Research on Services Offered Through Social Media

Elements of library services offered through social media are noticeable in some of the studies discussed above. Still, there are other studies with a particular focus on services, which this category considers. Abdullah and Chu (2015) investigated the use of social media tools to enhance inclusion and outreach activities in libraries. The study also examined the existence of policies that encouraged the use of social media and the challenges that libraries faced when integrating social media into their services. Invitations to participate in a survey were sent to 110 libraries in Greater China, Switzerland, United States, United Kingdom, Australia and New Zealand to investigate the use of social media tools in their inclusion/outreach programmes and librarians' perceptions of their usefulness. From the 110 libraries that were invited to participate in the survey, 28 responses were received and analysed. Among these, academic libraries made up 68% of the respondents, and the remaining 32% were from public libraries (Abdullah & Chu, 2015). The findings indicated that the libraries had already incorporated social media tools into their services, and to some extent, for inclusion/outreach activities. However, some challenges remained such as staff lack of skill, the difficulty of engaging the users, the time-consuming nature of social media engagement and non-existent policies.

Islam and Habiba (2015) conducted a study to uncover the use, purpose, importance, and problems faced by library and information professionals in Bangladesh in marketing through social media. Seventeen public universities, 24 private universities and 5 special libraries in Bangladesh were selected as a research sample. Out of the 46 libraries, 44 libraries were using social media. Findings also show that most of them used the platform for marketing library products and services, for sharing library news and events, video conferencing, advertising, and research purposes.

Akporhonor and Olise (2015) carried out a study to determine librarians' use of social media for promoting library and information resources and services in university libraries in South-South, Nigeria. Descriptive survey research design method was employed for this study. The sample comprised of 304 librarians in nine selected university libraries from three states of

South-South, Nigeria. The study revealed that blogs and Facebook are the most commonly used social media to promote library and information resources and services in the libraries. Findings also highlighted librarians' use of social media to improve two-way communication, making communication with library users more accessible, and providing a forum for feedback and increased library usage.

Similarly, Quadri and Idowu (2016) investigated social media use for information dissemination by librarians in federal university libraries in Southwest Nigeria. A descriptive survey method was adopted for the study, and the sample consisted of all 60 librarians in the selected universities. A questionnaire was the instrument used for data collection. The study established that there was a high level of awareness of social media tools like Facebook, Google+, Twitter, LinkedIn, Academia.edu, and the other social tools found in the study, but Facebook, Google+, and Twitter were the most used for disseminating information.

It can be seen from these studies that the focus of most libraries when using social media is still on information dissemination. However, the library world has moved on from this area to lay more emphasis on engagement with the user. It is also worth mentioning that many of the papers in this category are opinion-based.

2.6.5 Perceived Usefulness Research

In this category, studies on perceptions of librarians about social media are presented. Early on, Charnigo and Barnett-Ellis (2007) reported a survey of 126 academic librarians with respect to their attitude toward Facebook. Findings suggest that librarians are overwhelmingly aware of the "Facebook phenomenon." Those who are most enthusiastic about the potential of online social networking suggested ideas for using Facebook to promote library services and events. While some librarians were excited about the possibilities of Facebook, the majority surveyed appeared to consider Facebook outside the purview of professional librarianship. A similar finding to this was reported by Hendrix, Chiarella, Hasman, Murphy and Zafron (2009) who designed and distributed a survey to analyse academic health sciences libraries' use of Facebook. Seventy-two (72) librarians which consisted of department heads of reference or public services, outreach librarians, or library directors at member libraries of the Association of Academic Health Sciences Libraries responded to the online questionnaire. The vast majority of the respondents (85%, n= 61/72) reported that their library did not maintain a Facebook page. The two most-cited reasons why academic health sciences libraries did not have a presence on Facebook were the lack of time to set up and maintain a Facebook page

(36%, n= 22/61) and the belief that Facebook demonstrated little to no utility in an academic setting (28%, n= 17/61) (Hendrix et al., 2009).

Neo and Calvert (2012) carried out a survey of nine public libraries in New Zealand coded as PL1 to PL9. Drawing upon the Diffusion of Innovation Theory (Rogers, 2003), data were collected via interviews. The finding from the study showed that of the nine libraries studied, only three libraries, PL1, PL6 and PL7, had implemented a Facebook profile with a link on their websites. Meanwhile, PL2 and PL3 at the time of data gathering had placed Facebook on trial to test whether it was suitable for their libraries. PL4 rejected Facebook, saying it was not ideal for its needs. PL5, PL8 and PL9 had other social networking tools such as Twitter, Blogs, Flickr, YouTube, Myspace and Delicious on their websites. This is indicative of a shift in attitude inclined more to the positive compared with two previous studies above.

Chu and Du (2012) conducted a survey of 38 academic libraries from North America, Europe and Asia using an online questionnaire with closed and open-ended questions. Results revealed that 27 were using social media, 11 were not, but five planned to and six did not plan to. Overall perceived benefits were that it promotes library services, disseminates news quickly and enhances interaction with users. Also, challenges perceived relate to time requirements and human resources costs, demand and need for mastery and need to attract students to use different platforms. While indicating a significant shift in attitude, the study, however, lacks generalisability due to the limited scope of coverage of librarians whose perceptions may suggest biased nuances which may not be a general reflection of the entire library.

Ahenkorah-Marfo and Akussah (2016) investigated the readiness of librarians to adopt social media in the provision of reference and user services. The paper took a qualitative approach through the interview of librarians from a sample of e-resource heads in three public and three private universities in Ghana. Based on the perception of the participants, social media is beneficial in the library, but its uptake is typically among the younger generation of librarians. A policy-driven approach to the adoption of social media was recommended with a top to bottom institutional support. This approach suggests that managers at the top level should take the responsibility of driving social media adoption.

Cavanagh (2016) conducted an online survey of 71 public libraries and an analysis of Twitter followers of one library. The study adopted a closed and open questionnaire format to gain more in-depth insight into librarians' perspective about the public library on Twitter. The study found that one of the primary reasons for the uptake of Twitter is the population density of their

users and associated benefits of conversing or communicating with them, albeit with some challenges such as time management and the potentiality of controversy arising from inappropriate posts from users. The analysis of followers of the individual library is somewhat limited but give a clue about how public libraries and other libraries, in general, may wish to harmonise their Tweets to the benefit of varying customers.

These studies show that the attitude of librarians towards social media has gradually evolved from the uncertainty and apathy reported earlier to more comfort and confidence in using them to facilitate institutional services. As stated above, these categories are not mutually exclusive. With libraries firmly engaged in using social media to reach users, assessment of post contents has also become a valid area of interest. This forms another category of studies that have appeared in the literature termed “content evaluation” category in this study.

2.6.6 Content/ Data Evaluation Research

This category of research considers the content of social media posts and the level of interaction between the library and users. A reasonably early attempt at this category was made by Stuart (2010) who collected data from 433 institutional library accounts: academic, public, state and national libraries by searching for “library” on Twitter’s search facility. He found that only 30% of the libraries averaged one post per day for the duration of their time on Twitter and 59% of them were following fewer than a hundred other Twitter streams, which according to him suggested inactivity that may not encourage conversations with the users. This was a simple analysis that gave a tiny clue to the content of library posts and its implication for types of libraries mentioned above.

Aharony (2010) explored 15 academic and 15 public libraries’ Twitter accounts. The study was carried out in three phases- the discovery of library twitter account, descriptive analysis and content analysis. The research findings show that there are some differences between public and academic libraries, including the number of tweets, language and content. Public libraries had more tweets, but academic libraries posted with more formal language. The content analysis revealed that public libraries’ tweets are divided into six categories: library, information about, miscellaneous, general information, general recommendations, and technology. Academic libraries’ tweet content is divided into five: library, information about, miscellaneous, technology, and general information. Overall, public libraries seem more concerned with library issues in their tweets than academic ones are.

Phillips (2011) conducted a content analysis of status messages posted by academic libraries on 17 Facebook pages. A total of 439 status messages were coded for all 17 Facebook pages. To some extent, the Facebook pages varied in number, frequency, and content of status messages. However, when examined collectively, three domains for relationship building emerged from twelve content categories: the library, the library and students, and the mutual contexts of the university, local community, and broader society that they share. As might be expected, a significant portion of status messages is related to the library itself, including operations, what the library has to offer and to highlight library values. Within the library theme, messages contain announcements, and information about the collection and information resources, instructional sessions and other events (Phillips, 2011).

Stvilia and Gibradze (2014) explored Twitter use by six large academic libraries in the United States to identify factors that make library tweets useful. Seven hundred fifty-two (752) tweets were analysed by topic to develop a subject typology of library tweets. Also, tweets and Twitter user characteristics were analysed to explore what makes library tweets useful, as measured by the number of retweets and favourites received. Content analysis of the samples of library tweets revealed nine content types (event, resource, community building, operations update, study support, question and answer, survey, staff, and club) with the event and resource categories being the most frequent. In addition, the analysis showed that tweets related to study support services and building and maintaining connections with the library community were the most frequently retweeted and selected as favourites. The presence of a URL in the tweet was positively associated with the number of retweets, and users followed was positively related to the number of favourites received.

Al-Daihani and Alawadhi (2015) examined 17 academic libraries' Twitter content and presented a categorization framework for the study of their tweets. The categories are news and announcements (Library marketing and news, library facilities, lectures, exhibitions, library events and workshops), library services (answers and referrals, circulation and interlibrary loans), library collections (books, databases, digital collections, e-journals, references, e-books and special collections), content type (Links, text, images and videos), technology (applications and software, automation systems, Web2.0 and social networking), suggestions/satisfaction (suggestions, gratitude, greetings and encouragement) and interaction (mentions, followers' retweets, replies and library retweets). The findings show that "news and announcements" received the highest score as the type of information most often posted on Twitter by libraries, followed by "library collections" and "library services". The subcategories that received the

highest scores were “library marketing and news”, “answers and referrals” and “books”(Al-Daihani & Alawadhi, 2015). In another study, Al-Daihani & Abrahams (2016) conducted text mining of 10 US university library Twitter account based on the 2014 Shanghai University Global Ranking. The dataset comprised 23,707 tweets with 17,848 mentions, 7625 hashtags, and 5974 retweets. The most extensive individual collection of data was from John Hopkins University, with 3190 tweets, while the smallest collection of data was from Columbia University (1305 tweets). It also revealed that ‘resources’ was the most common category among the tweets. There seem to be a very little difference between this and the previous study.

Harrison, Burrell, Velasquez and Schreiner (2017) carried out an observation of social media posts of 6 public and private university libraries in the Midwest states of the United States. It adopted a phenomenological approach. The study found a high level of correspondence in the theme of SM posting in the six libraries in term of community connection, create an inviting environment and provision of contents. However, the posts examined do not reveal the level of engagement with the users. The ideas in Aharony’s (2010) and Harrison et al. (2017) studies will serve as a guide in the present study’s aim to investigate library posts contents and the universal language of expressing these posts.

The stream of research findings presented in this category seems to suggest that libraries are still using social media for promotion instead of emphasizing engagement with users. Some of them reported the case of a small number of followers and weak interaction with the users. This has become a concern which researchers have directed attention to, resulting in another category referred to here as user engagement research.

2.6.7 User Engagement Research

This category focuses on the conversations and exchanges between the library and users on social media. Smeaton and Davis (2014) explored how a range of social media platforms are used by libraries to consider what ‘best practice’ in participatory library service looks like. Two public libraries participated in case studies that involved interviews, document analysis, and social media observation. Findings show that these libraries achieved engagement with purposeful broadcast and information sharing focused on creating an image for the library. To contextualise the study, they observed 24 other public library social media but found minimal engagement compared to the previous two. They concluded that to create a participatory library, social media needs to be used strategically, and each library also needs to consider best practice for each channel and understand how to use it well.

To understand library-user social media engagement, Jones and Harvey (2019) performed an analysis of 20 Further Education (FE) Twitter account. They also administered a questionnaire to 50 FE libraries and students of 1 college. Findings reveal that of the 20 Twitter accounts, the library with the highest followership had 582 followers, and the lowest had 36, of which most were non-users (non-students). Library resource promotion garnered the most tweets. The results of a questionnaire to librarians revealed that Twitter is favoured, and that social media was perceived as beneficial for achieving a broader reach beyond the traditional library service and also being where users are. Students revealed that YouTube was their favourite social media, but they would prefer to receive information from the library via email. These findings confirm that libraries in the academic sector are indeed struggling to foster interest in their social media activities. The study makes a strong case that users may not be interested in interacting with the library on social media.

A study by Al-Daihani and Abrahams (2018) analysed Facebook posts of 100 English-speaking universities as listed by the 2014 Shanghai World University Ranking. It focused on the dataset from a 2-year posting history totalling 18,333 posts, 113,621 likes and 3401 comments. Findings reveal that posts with the most engagement were those featuring photos and the use of personal terms such as ‘congratulations’ and ‘thanks’ (Al-Daihani & Abrahams, 2018, p.224). However, the overall analysis of the data showed that engagement is low among the libraries. Similarly, a study by Peñaflor (2018) investigated whether there was a correlation between 10 Pilipino university libraries’ Facebook posts and the user engagement they generated. It found that while photo and event-related posts gathered a higher level of interaction, engagement was low for the majority of the libraries. The studies under this category are still growing. Hence, further studies are needed to ascertain the underlying factors that may contribute to a better librarian-user social media engagement.

2.7 Chapter Summary

The preceding subsections examined the streams of research which have appeared in the literature with emphasis on their key findings. These studies use the five categories from Jacobson (2011). However, this was further extended as literature searches reveal other types which in this study are classified as content evaluation and user engagement. This indicates that a significant number of studies have been undertaken about social media in libraries. However, none of these studies focused on factors that affect social media user engagement with the library. More so, most of them were conducted without a theoretical foundation to guide the understanding of the phenomenon of interest. Ideas in these atheoretical studies may

be described as descriptive and pragmatic, and often difficult to apply to other libraries. This is the gap in the literature which this study intends to fill as well as contributing to the concept of social media engagement underpinned by the theoretical foundation of the Elaboration Likelihood Model and the Strategic Social Media Marketing Framework.

Chapter 3- Theoretical Considerations

3.1 Introduction

In this chapter, the theoretical models that underpin this study are examined. Given that there is no generally accepted definition of theory in the field of information systems/studies, this study adopts the definition offered by Gregor (2006). She defined theory as abstract entities that aim to describe, explain, and enhance understanding of the world and, in some cases to provide predictions of what will happen in the future and to give a basis for intervention and action. Having reviewed several theories, the Elaboration Likelihood Model (ELM) of Persuasion and the Strategic Social Media Marketing Framework (SSMMF) are considered particularly appropriate for this study. Discussions around both are presented in the subsequent subsections with emphasis on their constituent elements, application and relevance to the current research.

3.2 The Elaboration Likelihood Model of Persuasion

The Elaboration Likelihood Model (ELM) of persuasion developed by Richard E. Petty and John T. Cacioppo provides a fairly general framework for organising, categorising, and understanding the fundamental processes underlying the effectiveness of persuasive communications (Petty & Cacioppo, 1986). Elaboration refers to the extent to which individuals think about the information provided (Zha, Li, Yan, Wang & Wang, 2016). Importantly, the ELM attempts to integrate the many seemingly conflicting research findings and theoretical orientations relating to persuasion in the area of social psychology under one conceptual umbrella. Before ELM, many of these empirical findings and theories in the field of psychology might profitably be viewed as emphasising only one of the two relatively distinct routes to persuasion (Petty & Cacioppo, 1986). The first route explained was of the type of persuasion that will likely result from a person's careful and thoughtful consideration of the true merits of information presented in support of an argument (central route). The other route highlighted the type of persuasion which is more likely to occur as a result of some simple cue in the persuasion context (e.g., an attractive source) that induces change without necessitating scrutiny of the true merits of the information presented (peripheral route) (Petty & Cacioppo, 1986). However, ELM combines these routes to explain communication-induced attitude change (see Figure 3.1). The two routes are detailed below.

3.2.1 The Central Route

When message recipients have both the motivation and the ability to consider detailed information in a given message, persuasion occurs via the central route. This route is taken when information processing is based on critical thinking, and the message is given due consideration (Tam & Ho, 2005).

On the one hand, an individual's motivation can be affected by a variety of factors, including whether or not the message has personal relevance, the degree of need for cognition (NFC), and argument quality (Kitchen, Kerr, Schultz, Mccoll, & Pals, 2014). On the other hand, variables influencing a person's ability to process a message argument include the presence of distracting stimuli, message repetitiveness, complexity and the amount of issue-relevant cues and prior experience the intended individuals have (Kitchen et al., 2014). For example, a university student, while listening to a speech is likely to pay attention if the topic resonates with an idea they are aware of but has not fully understood. Therefore, as they listen, the quality of the argument made by the presenter is likely to cause them to think about the topic more deeply. Motivation captures the attention of the receiver, whereas ability is the receiver's capacity to think about the message received.

The premise of ELM is that when elaboration likelihood is high, information processing will occur via the central route. Resultant attitude formation, change, or endurance is derived from extensive consideration of the message arguments and will be more persistent and predictive of an individual's subsequent behaviour (Kitchen et al., 2014). However, when an individual's elaboration is low, persuasion occurs through the peripheral route.

3.2.2 The Peripheral Route

According to the Elaboration Likelihood Model, one way to influence attitudes is by varying the quality of the arguments in a persuasive message. Another possibility, however, is that a simple cue in the persuasion context affects attitudes in the absence of argument processing (Petty & Cacioppo, 1986) and this is at the core of the peripheral route. The peripheral route to persuasion requires little cognitive effort, instead of relying upon peripheral cues such as source credibility and heuristics (Kitchen et al., 2014). As such, attitudes formed via the peripheral route are relatively unaffected by argument quality, are temporary, and are not as predictive of subsequent behaviour as those formed using the central route (Kitchen et al., 2014). For peripheral processing to take place, an associated decision rule has to be cognitively available, accessible and perceived as a reliable basis for judgment. For instance, a recipient may form a

more favourable attitude toward the message when a promotion e-mail is addressed to them personally (e.g., addressing the recipient using their first name) than when a generic message is received (Tam & Ho, 2005).

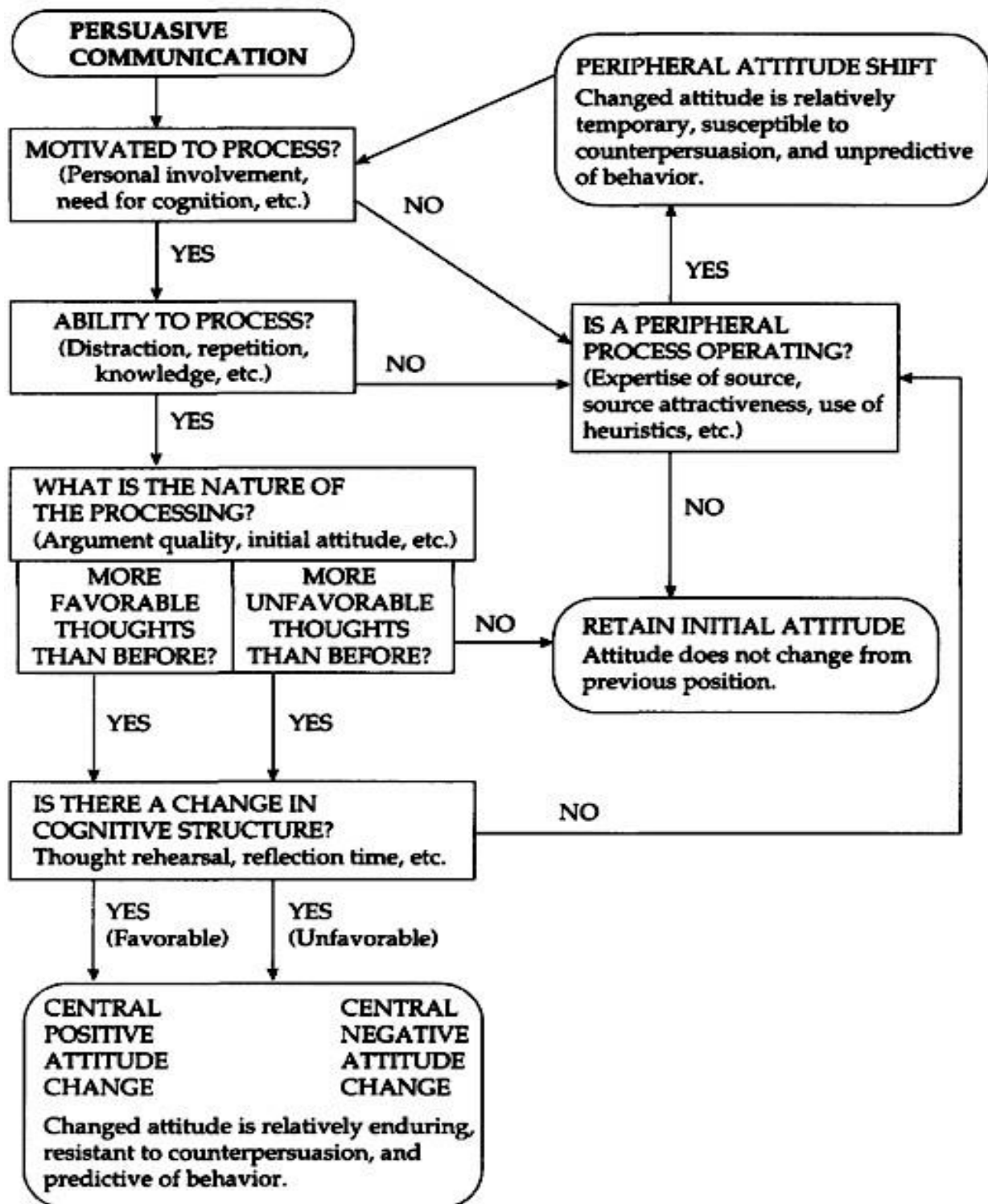


Figure 3.1 The Elaboration Likelihood Model
(Adapted from Petty & Wegener, 1999)

In support of the model, the original authors of ELM developed seven postulates that discussed situational and individual factors enhancing or limiting persuasion. These postulates explain the attitude of people, their likelihood to elaborate an argument, the possible route (either central or peripheral) they may take and the change that will ensue as a result of that route. In other words, these postulates encompass the fundamental attributes and explanation of the procedures to assess the extent of cognitive processing. Table 3.1 summarises the postulates.

Table 3.1 Postulates of the Elaboration Likelihood Model

Postulates of ELM	Description
Postulate 1: The correctness postulate	People are motivated to hold correct attitudes.
Postulate 2: The elaboration continuum postulate	Although people want to hold correct attitudes, the amount and nature of issue relevant elaboration in which they are willing or able to engage in evaluating a message vary with individual and situational factors.
Postulate 3: The multiple-roles postulate	Variables can affect the amount and direction of attitude change by serving as persuasive arguments; serving as peripheral cues; and/or affecting the extent or direction of issue and argument elaboration.
Postulate 4: The objective-processing postulate	Variables affecting motivation and ability to process a message in a relatively objective manner can do so by either enhancing or reducing argument scrutiny.
Postulate 5: The biased processing postulate	Variables affecting message processing in a relatively biased manner can produce either a positive (favourable) or negative (unfavourable) motivational and/or ability bias to the issue-relevant thoughts attempted.
Postulate 6: The trade-off postulate	As motivation and/or ability to process arguments is decreased, peripheral cues become relatively more important determinants of persuasion. Conversely, as argument scrutiny is increased, peripheral cues become relatively less important determinants of persuasion.
Postulate 7: The attitude strength postulate	Attitude changes that result mostly from processing issue-relevant arguments (central route) will show greater temporal persistence, greater prediction of behaviour and greater resistance to counter-persuasion than attitude changes that result mostly from peripheral cues.

Source: Adapted from Kitchen et al. (2014, p.2037)

All these postulates are important for understanding attitude change resulting from persuasion, but the focus in this study will be on postulates 3, 4 and 5, which highlight variables that are directly relevant to the present study. First, a brief explanation of these postulates is presented in the following paragraph.

Postulate 1 assumes that, at least at a conscious level, people want to hold opinions (and come to judgments) that are correct. That is, in the absence of other competing motives, the correctness motive is presumed to be the default goal (Petty & Wegener, 1999). This opinion is formed irrespective of any form of bias in it. For example, a man may prefer a male manager to a female one based on either what people say or his personal experience. Postulate 2 describes the elaboration continuum. Elaboration in the persuasion context means the extent to

which a person thinks about the issue-relevant arguments contained in a message. On the continuum, elaboration can be either high, moderate or low. When it is high, it is postulated that a person will likely follow the central route and the reverse (peripheral route) is the case when elaboration is moderate and/or low. Postulate 3 holds that people's likelihood of elaboration is influenced by either personal or situational factors or the combination of both. Some of these factors/variables are argument/message quality, need for cognition, personal relevance, source credibility, message repetition and message attractiveness. An important feature of postulate 3 is that it introduces multiple roles for persuasion variables (Petty & Wegener, 1999). This implies that a variable can influence attitude change in four ways: (1) by serving as an argument (2) by serving as a cue (3) by determining the extent of elaboration and (4) by producing a bias in elaboration (Petty & Wegener, 1999). Later in this chapter, descriptions of these factors are presented along with their relevance to the study.

Postulate 4 notes that some variables influence the extent of information scrutiny in a relatively objective manner by invoking various motivational factors (encompassing a person's intentions and goals) and ability factors (covering a person's capabilities and opportunities) (Petty & Wegener, 1999). These factors are distraction, repetition, personal relevance, personal responsibility and need for cognition. Postulate 5 also recognises that thinking can also be biased by certain motivation and ability factors such as distraction and need for cognition. This manifests itself when an individual is inclined to be selective or preferential in his/her thinking.

Postulate 6 articulates a trade-off between the impact of central and peripheral mechanisms on the elaboration likelihood continuum (Petty & Wegener, 1999). It states that along the continuum, low elaboration judgement mechanisms and strategies have a high likelihood for a greater impact on attitude than they do at high levels of scrutiny and vice versa. In other words, as the impact of central-route processes on judgement increases, the impact of peripheral-route mechanism on judgment decreases. Lastly, postulate 7 suggests that basing one's attitude on considerable issue-relevant thinking (high elaboration) leads to stronger attitudes than basing one's attitude on little issue-relevant thinking (low elaboration) such as occurs when attitudes are changed by the peripheral route (Petty & Wegener, 1999).

ELM is considered as one of the most useful models in the theory of persuasion and the most commonly used to understand the role of information processing in attitude change (Teng, Khong, & Goh, 2014). In the next subsection, a review of some studies that have adopted it as a theoretical basis is presented.

3.3 Applications of the ELM

The ELM was initially developed to understand the processing of persuasive messages from a social psychology perspective (Tam and Ho, 2005), but studies in other disciplines such as information systems (Angst & Agarwal, 2009; Ho & Bodoff, 2014), marketing (Mcalister & Bargh, 2016; Tafesse, 2016) and library and information studies (Zha et al., 2016) have relied on the model as a theoretical underpinning. Tam and Ho (2005) studied web personalisation as a persuasion strategy using an ELM perspective. They categorised the level of preference matching as the central route variable, which explains how web personalisation content fits users' tastes and preferences; noting that users are more likely to elaborate the information (Tam & Ho 2005). They categorised sorting cues and recommendation set size as the peripheral route variables. Web content with a sorting cue is more likely to result in the higher elaboration of the persuasive message (Tam & Ho 2005). Along similar lines, Fu and Chen (2012) found that informational appeal strategy generates high involvement of consumers in attitudinal change toward purchase intention. In contrast, emotional appeal acts as a peripheral cue and leads to low involvement from consumers in the blog advertising environment. For instance, negative blog reviews of a product generate unfavourable customer attitudes toward it (Fu & Chen 2012). Also, Tang, Jang and Morrison (2012) studied the dual-route information processing in the context of destination websites. They confirmed that people are more likely to elaborate the persuasive messages through the central route when they are relatively involved; however, people are more likely to go through the peripheral route if they can make less cognitive efforts following the heuristic rules (Tang et al., 2012).

More recently, ELM studies have been carried out in the social media context following the introduction of these communication channels. Atwood and Morosan (2015) explored the effective use of Facebook within the hotel industry with an emphasis on Facebook practices that are effective/persuasive using the ELM as the main theoretical foundation. The results showed that consumer attitudes are affected by source credibility, but not by the level of elaboration. Also, intentions to stay at the hotel and intentions to engage with the hotel brand via social media were not affected by the level of elaboration or source credibility (Atwood & Morosan, 2015). In a study underpinned by the ELM and Uses and Gratifications Theory (UGT), Hur, Kim, Karatepe and Lee (2017) investigated the interrelationships of argument quality, source credibility, and information seeking, entertainment, and relationship maintenance motives, and social media continuance usage and information sharing intentions. Their findings showed that argument quality leads to increased activity in information seeking

and entertainment motives, while source credibility positively influences information seeking, entertainment, and relationship maintenance motives. Information seeking, entertainment, and relationship maintenance motives trigger travellers' propensity to display higher social media continuance usage and information sharing intentions (Hur et al., 2017).

3.4 Relevance of the ELM to the Present Study

Despite the extensive use of ELM as a theoretical framework, as evidenced by the studies discussed above, its adoption for library-based studies has been surprisingly scarce. This study seeks to fill this gap as ELM has been identified as a suitable framework to explore research question 1 and research objective 1. Given the increase in the adoption of ELM for social media-related studies (Chung & Han, 2017; Cyr, Head, Lim, & Stibe, 2018; Zhang, Ito, & Liu, 2018), it is considered relevant for this study as a lens for the exploration of factors facilitating undergraduate students' social media engagement with the library. Numerous studies have drawn on technology acceptance model (TAM), unified theory of acceptance and use of technology (UTUAT) and UGT, but these were not considered sufficiently nuanced to explain the research questions posed in the study. However, ELM seems to be one of the most effective approaches to explain persuasion and behavioural changes of library customers on social media in this context. The ELM factors discussed above are pertinent for elaboration/ persuasion to happen. They focus attention on the receiver of the message, which in this study is the undergraduate student. ELM is therefore useful in the context of this study for considering the nature of messages that may likely elicit a response from the receiver (undergraduate student) and possibly the route (central- specifying the importance students attach to message from the library and the peripheral- specifying the attractiveness of the message) which they prefer for interaction. Based on these, a questionnaire was designed to investigate students' needs, expectations and preferences to interact with the library on social media. An observation of the social media posts of libraries was also carried out following the cues and factors suggested by the ELM.

A potential methodological issue with the use of ELM in this study cannot be overlooked. Many of the studies carried out with ELM as a theoretical underpinning were quantitative in nature, but the present study assumes a mixed-method approach as it seeks to uncover factors that facilitate social media engagement in the university library context. Against this background, ELM offers insights that this study can draw on in the design of an instrument for quantitative data collection. ELM is a user-centred model, but insights from librarians on the

use of social media increased the robustness of this study. This is why the strategic social media marketing framework discussed in the next section is also adopted in this study.

3.5 The Strategic Social Media Marketing Framework

The Strategic Social Media Marketing Framework (SSMMF) by Felix, Rauschnabel and Hinsch (2017) is a relatively new contribution to the literature of social media marketing. It suggests that four dimensions are central to the process of social media marketing, namely, scope, culture, structure and social media marketing governance as represented in Figure 3.2.

First, social media marketing scope addresses the question of whether companies use social media marketing predominantly for communication with one or a few stakeholders or comprehensively (both externally and internally) as a useful tool for collaboration (Felix et al., 2017). Second, social media marketing culture distinguishes between conservatism, which is represented by an encapsulated, traditional, mass-advertising approach to social media marketing, and modernism, which is characterised by a more permeable, open, and flexible social media marketing culture (Felix et al., 2017). Third, social media marketing structure addresses the organisation and departmentalisation of the social media marketing activity in the firm. Hierarchies stand for a centralised approach with a clearly defined social media marketing assignee. Networks represent an organisational structure in which all employees are responsible for social media marketing, and thus a dedicated social media marketing director is no longer necessary (Felix et al., 2017). Lastly, social media marketing governance refers to how the company establishes rules and guidelines and how social media marketing responsibilities are controlled in the company. The extreme position of autocracy describes a situation with precise regulations on who in the company is allowed to interact on social media platforms. Conversely, anarchy represents a situation without any such rules or guidelines.

These dimensions of social media marketing can be gainfully applied to the context of university libraries. The first dimension (scope) describes the place of social media in university libraries, especially with regards to their rates of adoption of such tools either as a main means of communication or as a surrogate which is looked to when other means have been exhausted. The second dimension (culture) mirrors the traditional/ modern marketing purposes of the library, either as one-way directional communication or a two-way conversation. In the third dimension (structure), the responsibility of librarians in social media marketing is highlighted with emphasis on either centralised or decentralised. The centralised function of librarians is typified in a situation where a team or an appointed group of people

within the library manage social media marketing, whereas the decentralised form manifests in a situation where there is no control, in that anyone can make a post. The last dimension illustrates the governance of social media platforms. An important variable in this dimension is policy. Policy-directed social media marketing has been reported in the literature as a factor yielding tangible results. I argue that these dimensions have potential benefit for social media engagement in two ways: as a direct influence and as a moderator. I elaborate on this below.

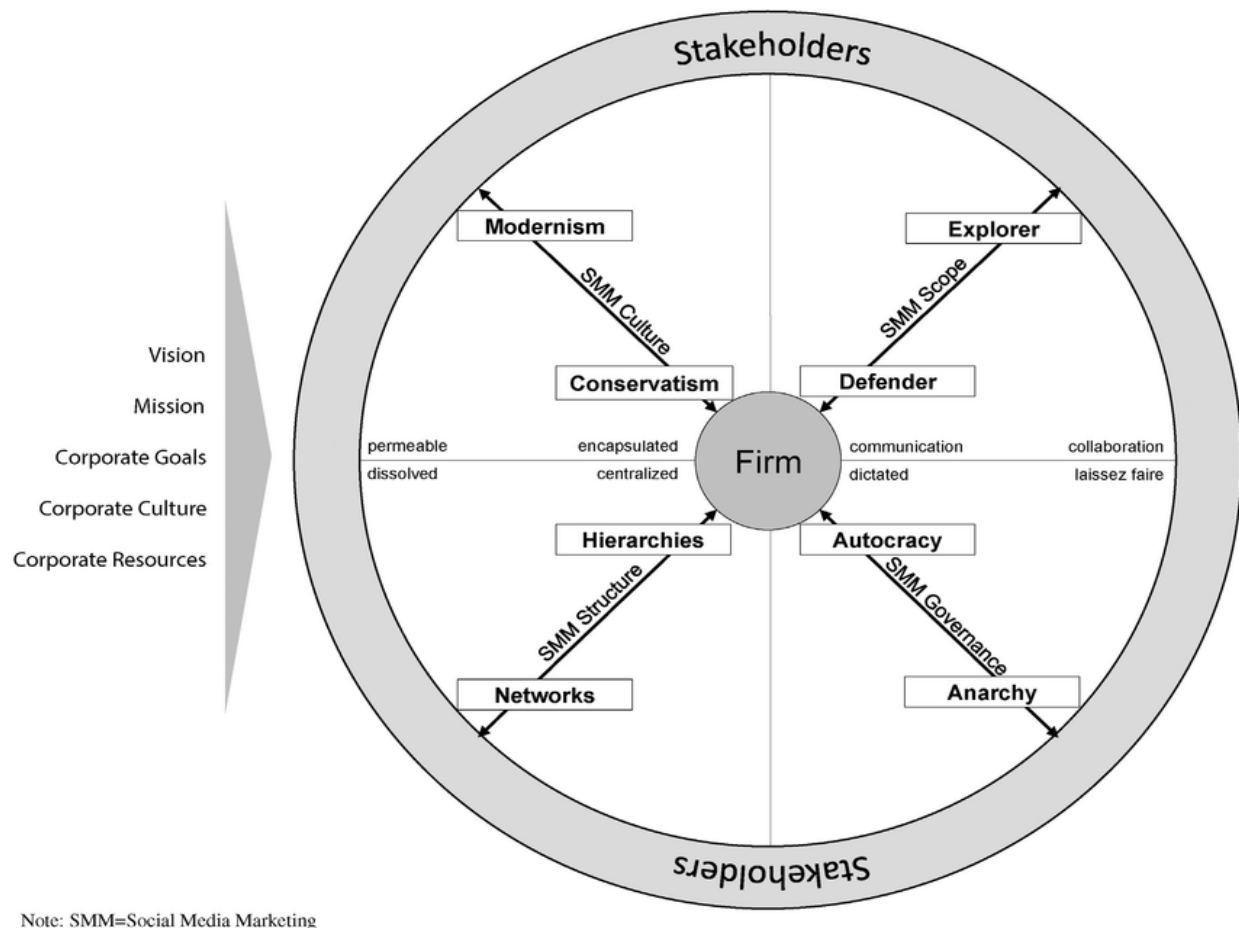


Figure 3.2 Strategic Social Media Marketing Framework
(Adapted from Felix et al., 2017)

3.5.1 Relevance of the SSMMF to the Present Study

Being a relatively new framework, the SSMMF has received little attention in the form of adoption or extension in the academic literature. As at the time of submitting this thesis (August 2020), a search on Google Scholar shows that the article has been cited 581 times. The framework offers insight into the institutional factors that facilitate successful social media marketing and was identified as a useful theory to examine research question 2 and research objective 2. These factors were drawn on for the interview guide that was designed to elicit

responses from librarians as to the scope, culture, structure and governance of social media in the university library. Under the review of empirical studies (section 2.6), categories of studies carried out on the subject of social media in libraries were presented. One of them was ‘case studies research’ which described the successes several libraries have achieved on social media platforms. Recurring themes identified in these studies are the role of institutional support, policies and governance mechanisms in promoting successful social media marketing. The SSMMF articulates these factors, and this study examines how their presence or absence influences sustainable social media engagement.

3.6 Linking the ELM and the SSMMF

The SSMMF describes the institutional factors that may contribute to successful social media marketing. Given that it is the posts that play a defining role in social media library marketing, this study argues that SSMMF shapes the way libraries articulate their social media marketing activities in areas of policy and management. In contrast, ELM contributes mostly to explain the nature of a library's posts that may influence the willingness or unwillingness of undergraduate students to engage with the library on social media platforms. Put differently, social media scope and the culture of university libraries may play a significant role in influencing the engagement of undergraduate customers. This is because it shapes the content of the posts, management patterns and the disposition of the university library to a two-way interaction with their customers. Also, social media structure and the governance of university libraries may influence how users perceive the quality of argument in the post emanating from the library, and the attractiveness of posts.

The ELM outlines personal and situational factors that affect attitude change. In this context, personal factors encompass the intrinsic and behavioural dispositions of an undergraduate student, such as motivation, ability and skill. In contrast, situational factors explain the extrinsic conditions that exist to affect the perception of an undergraduate student, such as a better managed Facebook page, quick response time, attractive and interactive platforms, among others. In this study, attitude change is conceptualised as a shift from a negative attitude to that of acceptance, specifically the willingness of undergraduate students to engage with the library on social media platforms.

3.7 Research Hypothesis/ Literature Justification

Under this sub-section, an explanation is provided detailing the literature support and justification for the each of the study hypothesis.

3.7.1 Perceived Engagement Intention

One of the coveted goals of social media marketing is a sustained engagement with customers. However, there are two ways to determine such engagement: either through the observation of the actual (passive/ active) engagement activities in a social media account or the investigation of the intentions of prospective customers (Kujur & Singh, 2017). Engagement is viewed by Ihejirika, Goulding and Calvert (2021) as a behavioural activity manifesting either as an active or passive action of a user during the process of communication on social media. Along this lines, individuals deal with contents in three ways: consumption, participation and production (Khan, 2017). First, content consumption suggests when users watch a video, read comments and view likes/dislikes but do not respond. Second, participation include user-to-user and user-to-content interaction (commenting, sharing, liking, disliking). Lastly, production involves a greater degree of engagement that comprises actual publishing of content such as uploading a video on YouTube, status update on Facebook or tweets on Twitter (Khan, 2017). These actions can be observed and quantified.

Perceived engagement intention is simply the intentions of a user to engage in any of the forms described above. Therefore, this study argues that it is possible for a social media user to hold a perception about social media engagement motivated by certain factors that influence that engagement intentions. These factors are discussed below.

3.7.2 Student Social Media Preferences

Social media preferences differ from individual to individual and principally driven by choice, functionality and aesthetic purposes (Dhanesh, 2017; Khan, 2017; Kujur & Singh, 2017). It refers to the inclination to choose a particular social media platform over another. According to a Pew Research survey, Facebook and YouTube continued to be the most widely used online platforms among US adults (Perrin & Anderson, 2019). Though, it is beyond the scope of this research study to investigate the reasons surrounding this choice, it argues that platform preferences may or may not play a unique role in the social media engagement intentions of undergraduate student users with the university library. The study therefore proposes:

H₀₁: *The social media preference of students has no effect on their perceived engagement with the library on social media.*

3.7.3 Perceived Social Media Post Features (Argument Features)

Perceived social media post features or argument features in this study context (ELM perspective) reflect the perception of social media user about the argument quality, personal relevance and attractiveness of post made by the university library.

Argument quality refers to the persuasive strength of arguments embedded in an informational message (Bhattacharjee & Sanford, 2006). It is an essential factor in a recipient's perception that may lead to his/her attention (Chang, Yu, & Lu, 2015). Argument quality comprises strong and weak messages. A strong message is defined as one containing arguments (e.g., we should raise tuition fees so that more books can be purchased for the library) such that when a majority of the subjects are instructed to think about the message, the thoughts that they generate are predominantly favourable (Petty & Cacioppo, 1986). On the other hand, a weak message is defined as one containing arguments (e.g., we should raise tuition fees so that the school president can host an end of the year party) such that when a majority of the subjects are instructed to think about them, the thoughts that they generate are predominantly unfavourable (Petty & Cacioppo, 1986). This implies that following the central route, attitude change can be either favourable or unfavourable, depending on the strength of the message. Argument quality is a feature in the third postulate described above. With regards to this study, argument quality is embedded in social media posts that a university library makes to elicit conversation with undergraduate students. It is argued that when users perceive quality in the argument being transmitted via these posts, they are more likely to engage.

Personal relevance is defined as the extent to which a message has intrinsic importance or personal meaning (Petty & Cacioppo, 1986). This occurs when people expect a message to have a significant consequence for their lives; thus, they respond to it. Personal relevance varies from individual to individual, but in a setting like a university, it is possible that one may find common personal relevance that is shared by many. It is featured in both postulates 4 and 5 discussed above. Hence, this study argues that when social media posts are perceived by recipients as addressing their personal needs, they are likely to engage with it. A hypothetical case is when a student who is struggling to write an essay on a particular subject gets a social media post from the university library on either essay writing tips or information on essay writing workshop, s/he is likely to respond positively to the post.

Message/post attractiveness, an aspect of postulate 5, refers to the extent to which recipients perceive posts as admirable and appealing (Chang et al., 2015). Studies in social media

interaction among millennials show that they prefer to communicate on different platforms using informal or colloquial language. Therefore, university libraries seeking to increase social media interaction with their customers, such as undergraduate students may find value by using language that is common among them. Posts with matching pictures are also perceived to be very attractive (Peñaflor, 2018). Hence, this study argues that students are likely to engage with the university library on social media when the posts that they receive are perceived to be attractive:

H₀₂: *The perceived features of library social media posts by students does not affect their engagement with it.*

3.7.4 Information Preference of Students

The information preferences of students on social media often times may be tied to the purpose for which a particular platform is used. It refers to the kind and nature of information a user would like to see or consume on social media (Del Bosque et al., 2017). A logistic regression analysis by Stvilia and Gibradze (2017) showed that students considered social media postings related to operations updates, study support, and events as the most important. Similarly, Polger and Sich (2019) found that students preferred to read about news and current events, followed by announcements about new library services. Other information preferences could be entertainment, sports, politics, health to name a few (Fasae & Adegbilero-Iwari, 2016). The importance factor could influence the reception of messages from the library by the students and this study propose:

H₀₃: *The information preference of students has no effect on their engagement with library posts.*

3.7.5 Students Attitude about the Library

Despite the sustained effort of libraries to market to undergraduate students via social media, an important question to address is whether students want libraries on social media at all (Elkins et al., 2020). It would be costly for libraries to follow up on their marketing activities based on assumption. In a study, Chu and Meulemans (2008) found that students were uncomfortable using social media to connect with academic personnel, preferring email instead. Also in 2009, Burhanna, Seeholzer and Salem, believed an emphasis in social media would likely be a misallocation of resources. Similarly, Quan-Haase and Young (2010) pointed out that students used social media mostly for non-academic purposes and would rarely take that bold step of contacting/interacting with the library on social media (Collin & Quan-Haase, 2014). It is assumed that there may be an attitudinal barrier hindering university libraries from getting

through to this category of students (Ukachi et al., 2014; Brookbank, 2015). It is possible that this attitude could influence the nature of interaction between the library and the undergraduate students on social media. Against this background this study hypothesises that:

H₀₄: *Students attitude about the library has no effect on their perceived engagement with library posts on social media.*

3.7.6 Gender Differences

Gender and media have been topics of academic interest for over half a century. Social media production, content, and consumption have each given rise to vibrant fields of scholarly research on how to understand them in relation to gender (Krijnen, 2020). Gender differences, as well as some similarities, are apparent in social media site preferences and amount of use (Herring & Kapidzic, 2015). A Pew study conducted in the U.S. found that 80% of online teens use social network sites, Facebook being the most popular, with 93% of those teens reporting its use, however, girls on average spend more time on social network sites and use them more actively than boys do (Herring & Kapidzic, 2015). A study Chen, Sin, Theng, and Lee (2015) demonstrated that women had a higher prevalence of sharing and intention to share information on social media. Another study by Alnjadat, Hmaidi, Samha, Kilani, and Hasswan (2019) demonstrated a different result. They found that the average time spent on social media usage was reported as 2-3 hour per day. They also found that males were more addicted to social media than their female counterpart. These distinct results require further studies and the present study proposes:

H₀₅: *Gender difference has no positive effect on students' perceived engagement with library posts on social media.*

3.7.7 Course of Study

Recent studies conducted in regards to the use of social media by students and their course of study often focus on how it can impact their academic performance (Leyrer-Jackson & Wilson, 2018). However, the apparent dearth of research on the influence of undergraduate student's course of study on their use of social media and willingness to engage with the library has prompted the present study to propose:

H₀₆: *The course of study has no effect on students' interest in library social media posts.*

Table 3.2. Mapping of Research Questions, Objectives and Hypotheses

Research Questions	Research Objective	Hypothesis	Model	Survey	Interview
Main RQ: What are the factors affecting sustainable social media engagement between undergraduate students and the university library?					
Sub RQ1: What are undergraduate students' needs, motivations and preferences for engagement with the library on social media?	To investigate attitudinal barriers that impede undergraduate students' engagement with library on social media.	H ₀₁ , H ₀₂ , H ₀₃ , H ₀₄ , H ₀₅ , H ₀₆	Elaboration Likelihood Model (ELM)	Social media preferences, Attitudes and Perceived Social media engagement	
Sub RQ2: How do managerial factors in the university library impact undergraduate students' social media engagement?	To identify factors that affect sustainable social media engagement between undergraduate students and the university library.		Strategic Social Media Marketing Framework		Social media structure, culture, governance and scope
	To build a framework for sustainable social media engagement for university libraries		Ideas from models		Results from data

3.8 Chapter Summary

In the preceding subsections, the theoretical underpinnings for the present study are critically examined. The ELM and SSMMF are noted as particularly useful due to the factors that they outline, which can be drawn upon to address the central research question posed in this study.

The hypothesised relationships synthesising ELM factors and other factors were justified using evidence in the literature. Table 3.2 gives a summary of the relationships between the research question, objective and hypotheses.

Chapter 4- Research Methodology

4.1 Introduction

This chapter presents the research methodology that was used for this study. Research methodology specifies the tools, techniques, approach and design for doing research (Williman, 2011). At the heart of these techniques are certain philosophical assumptions or worldview undergirding researcher activities. This chapter is organised in this order: research paradigm, research methodology, research approach, research population, research methods, pilot study, methods of data analysis, and limitation of methods.

4.2 Research Paradigm

The word paradigm means different things to different people. Like every other discipline, research in the field of library and information studies is anchored on varying paradigms. This research focuses on issues related to the management of libraries. So, in this context, a paradigm is a general perspective or way of thinking that reflects fundamental beliefs and assumptions about the nature of organisations (Corley & Gioia, 2011; Gioia & Pitre, 1990). Debates in Organisational Studies are succinctly characterised according to different underlying assumptions about the nature of organisational phenomena (ontology), the nature of the knowledge about those phenomena (epistemology), and the nature of ways of studying those phenomena (methodology) (Gioia & Pitre, 1990). These are the principal foundations of a paradigm that enables research activity. Clarifying these, Pickard (2007) explained that 'ontology' is the nature of reality; 'epistemology' is the philosophy of how we can know that reality and 'methodology' is the practice of how we can know that reality. In this study, a paradigm is conceptualised based on Morgan (2007): "Systems of beliefs and practices that influence how researchers select both the questions they study and methods that they use to study them" (p. 49).

Paradigms also referred to as a philosophical worldview, were grouped into four by Creswell (2013). They are the post-positivism, constructivism, pragmatism and transformative worldview (Creswell, 2013). Similarly, Guba and Lincoln (1994) classified the four existing paradigms into positivism, post-positivism, critical theory and constructivism. These classifications are similar. The only difference is in the naming convention. Of the choices for a paradigm, the post-positivist worldview informs this study. An explanation of that choice now follows.

4.2.1 Post-Positivism

With a premise that there is an objective reality 'out there', post-positivism admits that an observer's angle of observation inevitably skews any observation. It emphasises setting aside a knower's subjective values through scientific methodologies (e.g. single-case evaluation or randomised controlled trial) to obtain an approximation of reality (Huang & Fang, 2016). It represents the philosophical assumption that emerged after positivism, challenging the absolute truth of knowledge. Post-positivists hold a deterministic philosophy in which causes (probably) determine effects or outcomes. Thus, the problems studied by post-positivists reflect the need to identify and assess the causes that influence outcomes, such as are found in experiments (Creswell, 2013). The knowledge developed through a post-positivist lens is based on careful observation and measurement of the objective reality that exists "out there" in the world (Creswell, 2013).

The ontology of this paradigm is critical realism, which assumes that reality exists but can only be imperfectly apprehended because of flawed human intellectual mechanisms and the fundamentally intractable nature of phenomena (Guba & Lincoln, 1994). Epistemology-wise, post-positivism attempts to reduce researcher contamination in the study of truth. Post-positivism accommodates mixed-methods research, and it was a useful anchor for this study because its deterministic philosophical view allowed the exploration of the research problem through multiple techniques. Also, its reductionist nature guided the formation of research questions and hypotheses.

4.3 Research Methodology

As explained above, research methodology specifies the techniques and tools for doing research. Creswell (2013) defined research methodology as a systematic process adopted in solving a research problem. However, not every research problem can be approached systematically. Some require a detailed analysis of the problem and a highly iterative approach to provide the solution, and qualitative study is an instance of this. Every study in the field of Information Studies adopts either/or a mix of quantitative and qualitative research approaches. Quantitative research is an approach for testing objective theories by examining the relationships among variables. These variables, in turn, can be measured, typically by instruments, so that numbered data can be analysed using statistical procedures (Creswell, 2013). Qualitative research is an approach for exploring and understanding the meaning of individuals or groups ascribe to a social or human problem. The process of research involves several components, including the emerging questions and procedures, data typically collected

in the participants' settings, data analysis inductively building from particulars to general themes, and the researcher making interpretations of the meaning of the data (Creswell, 2013). When these two are combined, the result is a mixed-methods study. Hence, mixed-methods research is the approach to an inquiry involving collecting both quantitative and qualitative data, integrating the two forms of data, and using distinct designs that may include philosophical assumptions and theoretical frameworks (Creswell, 2013).

Mixed-methods research is considered appropriate for this study. Precisely, it aligns with the choice of paradigm undergirding this research endeavour. It permits the exploration of factors from a more in-depth personal view of the participants as well as the testing of hypotheses. It is very supportive of subjective and objective enquiry. Mixed-methods research uses quantitative and qualitative research methods, either concurrently (i.e., independently of each other) or sequentially (e.g., findings from one approach inform the other), to understand a phenomenon of interest (Venkatesh, Brown, & Bala, 2013). In line with this thinking, mixed-methods were adopted in this study to take advantage of the structure of quantitative methods while leveraging the flexibility of the qualitative method. Mixed-methods were particularly useful for exploring study research questions that featured "how" and "what" questions. They offered the possibility of taking up multiple approaches that proved invaluable for addressing the research problem. A quantitative survey was used to explore the factors that facilitate social media engagement between the university libraries and undergraduate students. At this stage, the constructs from the ELM (see Chapter 3) guided the development of a questionnaire for students to understand the relationship between factors examined in the study. Alongside this, interviews were used to elicit responses from librarians to uncover institutional factors surrounding social media marketing in university libraries based on the elements of the SSMMF (see Chapter 3). Also, a content analysis of library posts on social media was conducted. The processes and procedures for all three stages are discussed in more detail below.

4.4 Research Approach

One of the research approaches considered most appropriate for this study is the survey design. A survey is the research approach used to structure the collection and analysis of standardised information from a defined population by using a representative sample of that population (Pickard, 2013). There are two main types of surveys, descriptive and explanatory. Descriptive surveys, as the name implies, tend to describe the characteristics and other demographic features of a given population to generalise it to another population and often apply descriptive

statistics such as a measure of central tendencies and frequencies. The purpose of a descriptive survey is to describe a situation and look for trends and patterns within the sample group that can be generalised to the defined population of the study (Pickard, 2013). Explanatory surveys seek to explore the relationship between variables. They apply inferential statistical techniques to numerical data to establish a relationship between these variables (Pickard, 2013). The purpose of this type of survey is to offer explanations for the relationships that exist between variables. It is possible to adopt both approaches in a single study. The present study adopted the explanatory version because it offers a unique opportunity to explore the hypothesised relationship between the variables of the ELM and that of the SSMMF. Surveys, essentially quantitative in nature, have been applied in previous studies of social media marketing (Van Beynen & Swenson, 2016; Jones & Harvey, 2019) where a mixed-methods approach was adopted, either preceding, concurrently conducted or following a qualitative research method. In this research, the survey was concurrently conducted with the interviews.

4.5 Research Population

The population of a study refers to the entire community under investigation (Pickard, 2007). This study population consists of two groups, namely library staff with responsibility for their libraries' social media accounts and undergraduate students. The library staff were selected based on their ability to recount social media experiences to gain insight into the managerial factors that facilitate social media marketing. In the same vein, the undergraduate students were chosen to explore their unique personal perspectives and meaning with regards to their use of social media and their expectations concerning engagement with the library. The websites of universities in Nigeria were examined, identifying those that have social media icons such as Twitter, Facebook and YouTube. Also, a search of the names of Nigerian universities using search options on Facebook and Twitter was conducted. The results showed that out of the 40 federal, 44 states, and 69 private universities, 10 were confirmed to be using social media as a medium for promotion and advertising. They were the University of Ilorin, University of Nigeria, University of Jos, University of Ibadan, University of Calabar, Federal University of Technology, Owerri (FUTO), Federal University, Lafia (federal universities), Ladoke Akintola University of Technology (LAUTECH) Benue State University (State Universities) and Adeleke University (Private University). From these universities, a selection was made of six who have had social media accounts for three years. This was a minimum timeframe considered appropriate for each library to have enough experience in the use of social media. Such experience was valuable in the process of data collection with the view of exploring contextual

factors around the use of social media in libraries. Table 4.1 presents an overview of the universities selected and their population distribution.

Table 4.1 Population Distribution of Research Participants

Name of the University	Year Established	Population	
		Library Staff	Undergraduate Students
University of Ibadan	1975	50	35,000
University of Nigeria	1960	57	36,000
University of Jos	1975	45	25,500
FUTO	1980	48	27,000
LAUTECH	1991	37	21,500
Federal University, Laffia	2010	18	5,600
Total		255	150,600

Source: University/ Library websites and personal contacts

4.6 Sampling

Given that the population of library staff and undergraduate students studied were beyond manageable sizes, it was appropriate to select a sample. Sampling is the process of selecting study units from the target population to carry out an empirical study (Pickard, 2007), especially when it is not feasible to study the whole population, or if it is unnecessary in the case of a qualitative study. This study employed two non-probability sampling techniques to generate the sample sizes for the population. They are purposive and convenience sampling techniques.

4.6.1 Purposive Sampling

Purposive sampling is a non-probability sampling technique, and as the name suggests, it is done with a purpose in mind and usually involves a deliberate selection of individuals and sites to understand the phenomenon (Creswell, 2013). These individuals are deemed to be familiar or knowledgeable about the phenomenon and possess the ability to discuss it effortlessly. Purposive sampling was used to identify interview participants; library staff who were directly involved with library marketing using social media formed the population sample. Two librarians from each university library were interviewed amounting to a sample size of 12. These librarians were identified through direct personal contacts. Before the data collection, telephone enquiries were made about the use of social media in selected university libraries. These enquiries revealed that most libraries had 2-4 staff with the responsibility of managing their social media, usually in a team set up. Among these staff, an effort was made to identify the coordinator and one other team member from each library, and request that they be interviewed.

4.6.2 Convenience Sampling

Due to the difficulty involved in obtaining a list of the sampling frame (students studying at the universities listed above), a convenience sampling approach was adopted. Convenience sampling is a type of nonprobability sampling where members of the target population that meet specific practical criteria, such as easy accessibility, geographical proximity, availability at a given time, or the willingness to participate are included for the study (Etikan, Musa, & Alkassim, 2016). A uniform sample size of 100 was allocated to each of the universities, thus totalling 600. Printed questionnaires were placed at strategic areas in the universities such as the student hub, library entrances and faculty meeting halls to increase the return rate.

4.7 Research Procedures

Research procedures, also known as research techniques, constitute an essential part of every empirical research endeavour. They are the practical techniques used to carry out research (Williman, 2011). In this section, the methods of data collection and analysis are described.

4.7.1 Data Collection Methods

Consistent with the adoption of a mixed-methods approach, this study adopted both qualitative and quantitative methods of data collection. There are varying qualitative data collection techniques, including observations, interviews and document analysis that can be used to understand and explain social phenomena (Myers, 1997; Yin, 2014). Its quantitative counterpart deploys techniques such as surveys, experiments, structured observation (Williman, 2011). Sometime, there could be an overlap in the technique adopted in either method, but the underlying difference is the degree of structure achieved (Creswell, 2013). For practicality, a survey questionnaire and a semi-structured interview were used in the first stage of data collection. These techniques were crucial for collecting quantitative data useful for analysing the hypothesised relationship between/among variables as well as obtaining rich details for understanding the management factors that facilitate sustainable social media engagement. They were concurrently carried out given the fast pace at which social media changes and the volatility of human behaviour on these platforms. However, in retrospect, it would have added value to the research to conduct the survey first before the interview, but practical limitation such as time and budget did not permit that. In the second stage, a content analysis was conducted to examine the social media posts of selected libraries.

4.7.1.1 Survey Questionnaire

A questionnaire is a typical instrument for survey methods, and it usually includes a collection of questions inquiring about specific behaviour and attributes (Green et al., 2015). It is a

flexible data collection tool that could be presented in a structured format for the ease and convenience of respondents. It can be distributed anonymously without any personal influence of the researcher (Williman, 2011). Given these benefits, a paper-based questionnaire was developed for undergraduate students. It was designed to be straightforward for an easy and quick response. Relevant items were adapted from ELM-related studies. Specifically, the keywords in measures describing argument quality were adapted from Chung, Han, and Koo (2015); Li (2015), personal relevance from Dijkstra and Ballast (2012), source credibility from Chung et al., (2015); Kim, Bonn and Lee (2017) and post attractiveness from Chang et al., (2015). These measures were combined to reflect the perceived argument/post feature in the questionnaire. In a similar vein, ideas for information and social media engagement preferences were obtained from Howard, Huber, Carter, and Moore (2018); Winn, Groenendyk, and Rivosecchi (2015). Insights for the items under perceived engagement likelihood and post response were obtained from Palmer (2014); Winn et al., (2017). Overall, the questionnaire was a list of 17 questions addressing types of social media, frequency of social media use, social media activities of students, information preferences on social media, perceived post/argument features, the kind of communication with the library, social media engagement preferences, perceived likelihood for engagement, students attitudes, alternative sources of information and perceived post response. These questions were uniquely designed with varying response modes such as a Likert scale (strongly agree, agree, undecided, disagree and strongly disagree) and multichoice responses (see Appendix A for the questionnaire).

As noted above, the questionnaires were widely and strategically distributed to increase the chances of representing the population while maintaining the anonymity of each respondent. During site visits for the interviews, two Masters students were identified from each university. These students assisted in the distribution of the questionnaire by proxy. They signed a confidentiality agreement form after an information session on the context of the research and the expectation from them. During the period of data collection, close contact was kept with a professional colleague (lecturer) in each university who helped to monitor the distribution of the questionnaires. After the data collection, the research assistants were duly remunerated, and the completed questionnaires were couriered back. To increase the response rate, students had the chance to enter a prize draw for mobile phone top-up vouchers by including their email addresses in a detachable part of the questionnaire so that the email would be unconnected with the data they have given. Of the 600 physical copies of questionnaires distributed within three

months, 563 were returned, which represents a 93% response rate. The survey was conducted between May – August 2018.

4.7.1.2 Semi-Structure Interview

A semi-structured interview contains both structured and unstructured sections and often has standardised and open type questions (Williman, 2011). This instrument was used to obtain information from librarians who are directly involved with social media in their libraries. The questions were articulated as a checklist of topics without predetermined answers covering the following areas: staff involvement with library social media, the content of library social media, patterns of the library's social media use, the librarian's perception of two-way social media communication, library social media policy, and library social media management. The SSMMF was used to devise the guide for library staff with questions that reflect current management strategies in the use of social media such as the presence or absence of purpose, structure and policy. Areas explored were designed to reveal limited or comprehensive use; institutionally directed or lack of it; one-way communication or conversation-oriented and policy-guided or lack of it. (see Appendix B for the interview guide).

Before the interviews, the consent of prospective participants was obtained through telephone calls. When they agreed, an information sheet describing the nature and objectives of the research, as well as a participant consent form, were sent to them via email. Before commencing each interview, the permission of interviewees was obtained to record each session with the research context well explained. To build rapport and earn the trust of the participants, an approach that views an interview as a conversation (Schultze & Avital, 2011) was adopted. During each session, the interviewer probed questions to uncover more or build upon the responses already offered by the respondents. The interviews were conducted in a relaxed atmosphere. While some of the interviewees preferred to chat in a meeting room to avoid noise and distractions, others preferred to be interviewed in their private offices. Eight participants agreed to be interviewed out of the 12 purposively selected. All six libraries were covered in the interview. Of this number, two librarians were interviewed in two universities (University of Jos and University of Nigeria) and one in others, totalling eight interviews. The interview was conducted by face-to-face in three universities and by telephone in the other three. Each session lasted between 30-40 minutes. Telephone interviews were used in occasions where the researchers could not get the interviewee to agree to a face-to-face interview. The interviewees include five males and three females. Some responded in their capacity as coordinators of teams assigned to manage the social media accounts of the library,

while some as social media champion (the person who introduced the use of social media in the library) and others as a member of a team responsible for managing library social media. The participants responded to the questions posed based on their experiences with managing social media in the library. They were referenced as P1-P8 in the report, to maintain anonymity. The interview was conducted between May – September 2018.

4.7.1.3 Content Analysis

Content analysis has been one of the more common techniques adopted recently to examine library social media posts (Gan, 2016; Shulman, Yep, & Tomé, 2015; Stvilia & Gibradze, 2014). It is one of the numerous research methods used to analyse text data (Zhang & Wildemuth, 2009). In this research, content analysis was employed to analyse the texts of library social media posts to determine the nature of these posts, such as posts about e-resources, library events, and academic success tips. Twitter and Facebook pages were chosen for analysis because the literature shows that these two platforms are widely used by academic libraries (Taylor and Francis Group, 2014). Initial enquiries also revealed that the selected libraries mostly have Twitter and Facebook accounts. The analysis was done in three stages: data extraction, cleaning, analysis, and tabulation. During the extraction stages, two software programs were used to extract social media data from six Facebook pages and five Twitter accounts of the selected libraries (one of the libraries has no Twitter account). Due to the strict privacy measures adopted by Facebook API, the social media data from this platform were extracted using *RStudio* and an independent open-source software program called *Facepager*. Facebook permits *RStudio* to extract only 25 posts per Facebook page. Therefore, this data was compared with and complemented by that obtained using *Facepager*. This exercise considered only the data posted from 1 January 2017 through 1 January 2018, a typical range chosen to reflect the academic sessions of the universities selected. It was expected that within this time, the libraries involved would have made sufficient posts that the data could use for analytical purposes. Subsequently, the data from *Facepager* was exported into a CSV file for analysis. For Twitter, a connection was established on Rstudio using Twitter app API. This enabled the extraction of tweets and the resulting engagement counts (favourites, retweets and replies). At the data cleaning stage, some unnecessary app IDs and redundant information such as special characters like #, @, \$ and abbreviations were removed from the data to facilitate analysis. The entire exercises (data crawling) were carried out between February – May, 2019.

4.7.2 Pilot Study

A pilot study was conducted to address any unforeseen anomaly in the choice of items in the survey and wordings in the questionnaire. One of the universities identified in the population (University of Nigeria) was chosen as a testing ground for the pilot study; this university has more students than other universities. Hence, 60 questionnaires were distributed to students at different locations on campus, representing 10% of the proposed sample size. Of the 60 questionnaires distributed, 21 were returned. The overall reliability test of the instrument reveals Cronbach's Alpha = .70. A closer look at each question reveals satisfactory Cronbach's Alpha except in question 4, as a result of which two items were removed to increase the reliability test score. These changes were reflected in the main instrument. Based on the comments by the respondents, some items were reworded to increase full comprehension. A decision to include a prize draw in the data collection was made following the low return rate of the pilot study instrument. This segment of the study was conducted in April 2018.

4.7.3 Methods of Data Analysis

In line with the mixed-methods approach that was adopted in this study, both qualitative and quantitative analyses were conducted. These were carried out in phases.

4.7.3.1 Quantitative Data Analysis

The returned questionnaires were scrutinised for any incomplete or missing data. Subsequently, the data were transferred into IBM SPSS version 25. Two forms of analysis were carried out on this data: descriptive and inferential statistical analysis. The descriptive statistical analysis was used to assess the features of the data and to determine their distinctiveness and commonality across the institution investigated. This was helpful in the choice of the inferential statistics performed on the data. The descriptive statistics in Chapter 6 are presented in the order questions were asked in the survey. The data are presented in charts and tables with brief interpretations, which aims to highlight the meaning and implication of the data.

The inferential statistics carried out were multiple regression, independent samples t-test and one-way analysis of variance (ANOVA). Multiple regression was considered suitable as it enabled the examination of the relationship between several independent variables and a dependent variable. It also reveals the relative influence of one or more predictor variables to the criterion value, making it possible to paint a more complete or holistic picture of the factors that potentially influence social media engagement. In the same vein, independent samples t-test was employed to test the distinct role of gender (male and female). It was used to assess

the mean of each group, the average distance between groups and the statistical significance of this distance. A one-way ANOVA was used to evaluate the course of study of each respondent and its effect on social media engagement. This method was adopted due to its capacity to provide the overall test of equality of group means. It also controls the overall type 1 error rate.

ANOVA and t-test were adopted in the study for the following reasons: The researcher was careful to separate nominal data and ratio data. The independent variables used in the multiple regression were converted into a composite mean from the original Likert scale format. This type of conversion is supported by Norman (2010). These composite mean scores formed the predictors. T-test was used to analyse the prediction of a categorical variable (gender) on the outcome variable. Similarly, ANOVA was used to test how different course offerings predict the outcome variable. This was considered useful to avoid lumping the categorical variables together with the ratio ones and risk missing the impact they have in the model.

Descriptive statistics analysis was also performed on the extracted social media data. This was conducted by determining the sum of social media engagement counts (likes, shares, comments and reactions for Facebook). Using these counts, the overall engagement score of each library social media page/account was calculated ($\sum \text{of } \alpha/n$)- α being engagement counts and n the total post for each library (Winn et al., 2017). Each score was converted into a percentage with 24% and below representing low engagement, 25-49 representing medium engagement and 50% and above representing high engagement. This approach is similar to the pattern used by Subirats et al. (2018) to categorise post engagement, making it possible to determine levels of engagement within the frame of percentages. There are four reasons why this descriptive approach was adopted for the social media data: 1) The use of descriptive statistics was enough for calculating the social media engagement (comments, shares and likes) rate in the selected library accounts; it was beyond the scope of the study to carry out a semantic analysis; 2) The social media data collected was quite small and conducting an in-depth analysis would reveal results that may not be generalised; 3) Other studies such as Al-Daihani and Alawadhi (2015) Vaughan and Gao (2016) and Penaflor (2018) have used a similar approach; 4) Social media data was used as a clarification data to bridge the connection between what the students have said in the questionnaire and what the librarians have said in the interview.

4.7.3.2 Qualitative Data Analysis

Qualitative data analysis includes numerous techniques (Seers, 2012) and at the heart of these techniques is the flexible process of transformation and interpretation (Richards & Morse 2007) that often involve subjective choices by the researcher(s). The first step to most qualitative data analysis is coding (Seers, 2012). "Coding is the process of analysing qualitative text data by taking them apart to see what they yield before putting the data back together in a meaningful way" (Creswell, 2015, p.156). They are labels attached to a piece of data (Elliott, 2018). The researcher may decide to (a) develop codes only based on the emerging information collected from participants, (b) use predetermined codes and then fit the data to them, or (c) use some combination of emerging and predetermined codes (Creswell, 2013). This study adopted the first approach. Text data are often dense, but coding provides a way for a researcher to make sense of them by essentially mapping or indexing to give an overview of the disparate data (Elliott, 2018).

Since the dataset was not large, the interviews were all transcribed and analysed manually by the researcher with the supervisory guidance of two supervisors. Using Microsoft Word, the transcripts were read several times, highlighting phrases, sentences and paragraphs that were particularly striking. These highlights were labelled accordingly. After several iterations, some labels were dropped, and similar ones were merged to identify ideas and pattern clusters. From these clusters, themes were formed to reflect the interpretation of the data. Also, quotations were used to illustrate these themes, keeping the analysis grounded in the data. Coding reliability was assessed in conference of the researcher and supervisors through multiple iterations as highlighted above. Findings are discussed in Chapter 5.

The data extracted from Facebook and Twitter pages of libraries were contextually analysed and categorised based on the codebook of Harrison, Burrell, Velasquez and Schreiner (2017). These authors undertook a comprehensive analysis of six university libraries' social media postings on Facebook, Twitter, YouTube, Instagram, Pinterest, and Flickr. In their study, they categorised the posts made by libraries on these media into the following themes and defined the codes:

- Archives: original historical photographs, papers, and artefacts.
- Collection: databases, books and audio-visuals.
- Events: these are event within the library, including book fairs, seminars and workshops.

- Exhibits: it includes current and historical university collection, liberal arts and science presentations.
- Facility: photographs of the actual building structure, library lighting and potential arrangement of new furniture
- Library Community: any mention of library-related activities external to the university library such as academic learning centres, and library ambassadors/ advocates.
- Sentiments: words of appreciation, congratulation, welcome messages, and memorials
- Services: orientation to the library, mobile library, library instruction, hours of operation.
- Site management: changing cover photographs to reflect activities occurring internal or external to the library structure.
- University community: includes non-library related activities that support the university, such as sports, academic achievements of faculty, staff and support personnel (Harrison et al., 2017).

A decision was made to use this codebook because the authors analysed a significant number of posts across several social media platforms and the themes they proposed fitted the context of posts made on social media by the selected libraries in this research. It has also since been used by other studies (Al-Daihani & Abrahams, 2018a). After three rounds of analysis, the Facebook posts (photos, links, videos and status update) and tweets were allocated to the following categories: Collection, Events, Exhibits, Facility, Library Community, Sentiments, Services and University Community. However, during the analysis, some of the posts could not be fitted into the existing categories referenced here. This prompted the creation of a new category called external information/news, which includes political and other news items emanating from outside the university.

4.8 Ethical Considerations

According to the Victory University of Wellington Human Ethics Policy, every research study involving human subjects or that affects the privacy of an individual or people is subject to ethical clearance. Privacy and confidentiality are essential criteria in ethical consideration. Two separate applications to the Human Ethics Committee were submitted for both the interview and survey. For the interview, an information sheet and a consent form were drafted for this purpose. The information sheet (see Appendix C) described the details participants ought to know about the interviews while the consent outlined the consent which was obtained from

each participant. For the survey, anonymity was assured, and it was clarified that the respondents had an opportunity to enter a prize draw when the questionnaire was completed.

After satisfying the requirements of the Human Ethics Committee, Victoria University of Wellington, approval was granted for the interview (0000025932) and the survey (0000025899).

4.9 Limitation of Methods

The methods adopted in this study are not without limitations. Chief among these limitations is the use of convenience sampling. First, it could be challenging to replicate the results of a convenience sample, especially if the participants have unique sets of priorities that the researcher may not be able to meet in the future. Second, convenience samples hardly provide representative results making it difficult to generalise the result to the broader population.

Another limitation concern is the student survey. The fact that it was a self-reported survey means the results unquestionably come with limitations. Students' reported opinions and perceptions of social media may not reflect their actual use, though the basic assumption is that they do. It is not guaranteed, therefore, whether the preferences and interests reported in this survey will translate into actual interest in and engagement with the library on social media platforms. Another limitation is the possibility of social desirability bias in response to the question which is not uncommon to surveys. This possibility may also be increased by the cultural disposition of the undergraduate students' respondents. These students may also have interpreted the questionnaire differently. The use of university libraries in only Nigeria could be a limitation. Although higher education in most Nigeria universities is modelled after the American and European pattern, there could be peculiar factors about Nigeria university libraries that may affect the generalisability of the study. The interview focused on only librarians and not senior library managers. Therefore, the opinion of these librarians may not precisely reflect those of the top managers. Also noteworthy is the extraction of social media data within a particular time frame. There could be other existential factors that could have inhibited the frequency of library social media posts within the period covered in the study.

4.10 Chapter Summary

This chapter set out to discuss the appropriate methodology for this study with particular emphasis on research paradigm, research approach and methods. These key methodological issues are critical for the validity of any research endeavour and offer the fundamental blueprint for its conduct and presentation.

Chapter 5- Interview Findings

5.1 Introduction

In this section, the findings related to the second research sub-question, how do managerial factors in the university library impact undergraduate students' social media engagement? are presented. The data from the interviews are presented, including a brief interpretation of managerial factors arising from the views offered by the respondents. The interviewees are referenced in this section as P1-P8, to maintain anonymity. The ideas expressed by them were analysed both deductively and inductively. The unit of analysis was the preselected librarians as they possess the requisite information for understanding and explaining the subject matter: social media marketing in university libraries.

5.2 Deductive Findings

These findings mirror the framework that the researcher used to frame the study. In other words, ideas from the elements of Strategic Social Media Marketing Framework are drawn on to underpin the discussion in this context.

5.2.1 Purpose of Social Media Use

The definition of purpose is central to strategy and instrumental in the effective use of technology. The purpose is, however, not independent of the main goal of the institution that wishes to adopt the technology. Regarding the SSMMF, purpose falls under the element of “scope”, which reflects the intention of an institution for using technology. The scope defines the behaviour of an institution using technology and also sets the pace for what the institution expects to achieve with it. The interviews conducted among librarians reveal that most libraries deployed social media tools with specific intentions and purposes, albeit not clearly defined in most cases. Evidence in the data suggests that most libraries commenced the use of social media owing to the interest of a champion who found a way to convince library top management of the need to use such tools. However, the same evidence shows that the senior managers allow the use of social media in the library but show limited interest or belief in it. This usually results in a lack of strategic alignment and goal for the use of such tools, clear evidence of a failure of planning. The evidence suggests that there is hardly any effort by staff members concerned to work with senior managers to develop a plan that aligns with the overall library plan. If a plan is never in place, then it puts a strain on the sustainability of the use of social media in the library.

In the interviews, a respondent (P3) reveals that the library's chief purpose in using social media is to publicise the library website to increase traffic flow:

We discovered that the traffic on the library website is low. The students don't usually go to the website to view our posts. We found that the best way to catch our users is to take the library, our website to where they are. As a result, we created a Facebook account, make posts which can direct them to the website. (P3)

Another common reason why participating libraries adopt social media is to reach a wider audience. Primarily, these audiences are current or potential customers within the university. Evidence also suggests that participating libraries considered reaching those beyond the university, such as members of the alumni association and host communities. This outlook will affect the tone and language of library social media posts. Social media is considered by interviewed librarians as the best medium to inform users about the resources within the collection and events unfolding in the library. Given the wide uptake of social media among different age groups, the participating libraries feel compelled to maximise this advantage to reach a wider audience, especially people who are not currently engaged with any library communication channel. Similarly, an effort was made to project the image of the library in a positive light among the student population who hardly see the need to visit the library. This idea suggesting an effort towards attitude change came through from a respondent who said:

When we found out that a lot of them are no longer coming very close to us, we decided to connect them back to library services. We started by using it as a means of marketing our products and services, current awareness of what the library can offer, especially when the students think the library has nothing to offer. (P1)

The purposes discussed above highlight the goals and intentions of university libraries in adopting and using social media which are mostly to promote and publicise their collections and services. There is also a hint of this in the literature (Brookbank, 2015; González-Fernández-Villavicencio, 2014; Quadri & Idowu, 2016; Sachs et al., 2011), which ultimately affects how other aspects of the management of the library's social media are decided. As indicated above, purpose mirrors the social media scope of an institution and viewed from the lens of the element of strategic social media marketing framework; it can be assumed that these libraries are Defenders. This is a disposition that seeks to broadcast information in a one-way model of communication primarily to inform. This goes against the grain of social media, which is built to stimulate or encourage interaction leading to relationship building, social cohesion and collective action (Kujur & Singh, 2017). It seems, however, that these libraries are using social media as a traditional form of marketing (promotion) and they have not

adjusted to the purpose of using social media to reflect the more modern approach to communication and customer engagement.

5.2.2 Governing Regulations

The sustainability of any venture hinges on defined goals and the processes for achieving these goals. It also depends upon having sufficient resources allocated to it, and most early library social media projects were given no resources (Alawadhi & Al-Daihani, 2019). Anything short of this may prove counterproductive. Interviews conducted reveal that internal governing regulations or policies for social media in the library are almost non-existent. Among all the participants, only one respondent indicated that policy was written for the management of social media in the library:

Initially, we had a policy, like a proposal which I developed, and I called the team and we made a contribution to it. This was a long time ago. We have not updated the document for a long time. In the policy, we identified the social media we ought to be using. We believed that it was not the best to use everything. We identified about 5 as I told you. We also decided to collapse various pages the library had on a single platform into one so that we can be coordinated. We decided on the kind of content to post. (P3)

Other libraries either see no need for a policy or are seemingly unaware of its importance in their social media marketing activities. Despite the effort taken by one library to articulate policy, it seemed that this effort was fruitless having been spearheaded by only an individual who received very minimal support from the management. This explains said policy in the view of the respondent was adopted only in paper and has not been updated for a long time. This affects the organisation, management and sustainable use of social media tools. Without a guiding policy, the use of social media will be lacking in direction and often punctuated by arbitrary usage. Challenges that arise with social media communications can be identified, and solutions proffered in a documented policy. Put differently; a policy is expected to address the challenges that arise in the process of using social media for marketing purposes. For example, a policy will articulate the manner a library should respond to customers who use abusive language on its social media page, how a library can manage comments to maintain engagement, to mention a few. But, when policy is absent, libraries may struggle to resolve the problems that will occur when these platforms are used. This reflects a state of “anarchy” under the element of governance in the SSMMF which suggests the use of social media without strategic direction and planning, affecting the quality of decisions made in the future.

The widespread uptake of social media among academic libraries is well documented in the literature (Collin & Quan-Haase, 2014; Phillips, 2011; Taylor and Francis Group, 2014).

However, it seems that some libraries in this study have lost interest in the use of social media as reflected in the frequency of the posts, notwithstanding initial enthusiasm (see Table 7.1). Also, some have abandoned their pages while others complain of lack of engagement with users, similar to development found in other studies (Chu & Meulemans, 2008; Jones & Harvey, 2019; Canty, 2013). These are issues that could have been easily identified during a careful process of policy formation. It appeared, however, that most libraries jumped at the prospect of using social media without carefully examining the pros and cons, and without appropriate documentation such as a policy.

5.2.3 Management Style

Management style describes the way social media is organised and administered in the library, and it aligns with the Structure element of the SSMMF. The approach to the management of social media differs from library to library, and this is in most cases defined by the library's purpose for using social media and its perception about the use of these platforms. The purpose is a powerful determinant of the management path an institution takes. An example will illustrate this. A library that seeks to use social media as a tool to build customer confidence in its staff and services will deliberately adopt a management style aimed at realising that purpose, i.e. it is likely to be democratic/consultative in its approach. Also, a library's perception of what social media is and should be used for also directly affects the way it organises it. Perception may also impact on management style. For instance, if a library perceives social media as a tool that can be leveraged because it merely wants to get the word about its resources and services out, it is most likely that this library may adopt a laissez-faire management style.

Insights from the interview suggest that management decisions revolve around personnel, training, and departmentalisation. First, the personnel involved with social media operate either as a team or through a solo effort. Two out of the six libraries investigated operate their social media activities as a team, while others have an individual who maintains the library's accounts. The excerpt below is the evidence:

There is no one specifically in charge. But as a team, we work together from time to time. We draft a post, or someone can make a post, and another person goes to check and see if the post can be modified within the shortest time it was made. (P8)

The implications for management are considerable because social media requires a constant presence, and this makes demands on staff time. Given that most librarians who are assigned to manage social media account(s) for the library will have other responsibilities, the time and energy required for this task may be lacking. It may also be challenging to deploy innovative

techniques for managing library social media, leading to a negative outcome contrary to the one the library aims to achieve. Social media marketing requires the dedication of time and effort if tangible results are to be realized. It is not a one-off activity. It requires constant monitoring and coordination (Chatten, 2017).

Second, training is also a key component of management. In relation to social media, training is instrumental for grasping the ever-changing behaviour and needs of users and the possible ways of relating to them. It is, however, striking to note that the libraries investigated seldom carry out any form of training for staff involved in social media marketing. This may be due to an erroneous view which was conveyed by one of the respondents:

Managing a social media platform, anybody who is interested in that line and has a good command of English Language can do that. It does not require anybody who has a specialised skill. (P5)

This view may be borne out of the perception that social media is simply a tool for “getting the word about us” out to the public. This is very conservative and also neglects the importance of skill for sustaining interaction with users who may visit the library’s social media page. Besides, technical knowledge of some functionalities of these platforms would help to manage it appropriately. This is something that can be gained through training.

Third, the departmentalisation of social media operations and management seemed to be the desired goal among librarians interviewed, but it has not materialised. From the views expressed, the creation of a social media unit in the library would help to channel the interest and efforts of those in charge in the direction that is uninterrupted by other responsibilities. Alternatively, a matrix structure featuring staff working in two units where one would be designated as a social media unit and the other as a reference unit may prove useful in addressing the concerns raised by this interviewee:

There is a great challenge that I am facing here. I have suggested to the library to create a social media unit. Now, I am in the reference section and other people are in different sections. The job we do in the library doesn’t allow us to do the social media thing. (P7)

The practice in some libraries is to assign those who work in the virtual or e-library the responsibility of managing social media as they are assumed to possess the requisite skill set for that role. A respondent narrated an incident where he created a unit, but his colleagues in other departments ridiculed and mocked him to an extent which discouraged him from pursuing his dreams of strategically managing the library social media. This is a challenge that will likely be addressed if the management has the will to develop a policy that clearly articulates the structure of library social media. This perspective reflects the social media marketing structure

in the elements of the SSMMF which addresses the organisation and departmentalisation of social media marketing in the library. It appears that the structure of this organisation is tilted towards the hierarchal dimension. This is because social media marketing is not the responsibility of all library staff, but some individuals are assigned the role. However, in some cases, role assignment is not clearly defined which affects the dedication and accountability of those entrusted. This probably explains why some libraries have either abandoned their social media accounts or use it solely as an avenue for occasionally posting promotional information which hardly entices the library customers.

5.2.4 Communication Patterns

The communication pattern of the library describes the manner of information exchange between the library and its customers or market audience. Communication is the principal reason and thrust for the uptake of social media by most libraries. Within the context of SSMMF, communication reflects the “culture” stance of an institution which determines the approach it adopts in interacting or reaching out to its customers. The interviews reveal a varying perspective on this. Suffice it to say that the communication approach of most of the libraries is tilted towards traditional mass advertising and one-way communication. This is reflective in the comments by the respondents as to what they do with social media. Most libraries adopt these tools for information dissemination:

As I said, we make posts on the use of the library or the issue of library registration. At the moment, we are in the exam period, but students still come in for library registration, so we have to do a post concerning that, asking students to come next session for another round of library registration. I know we had an awareness campaign on the use of e-resources. We needed to inform our patrons concerning that, so we did a post in that regard so that students can know that we have these databases. (P6)

This conventional approach is unlikely to encourage the extended use of social media for a two-way interaction executed through careful planning and implementation. This can be traced to the original purpose or intention for the adoption of social media. Hence, for many of the librarians in this study, there is a need to revisit this central purpose.

There were a few minimal efforts made by some libraries to facilitate customer engagement, but the interviews reveal that they were mainly attempting to respond to the inquiries from the customers and in some cases not given immediate attention owing to some challenges raised by the librarians. One librarian explaining why there was minimal interaction on their social media said:

Maybe because we don't respond on time. Okay, one person might be on leave and the other would not have all the time in the world. It's not all our fault though, data and internet connection contribute to it as well. (P7).

There were also occasions when the participating libraries solicited engagement from their customers through awareness creation aimed at letting them know that the library has a presence on social media. These efforts seemed to have yielded minimal results because they were not backed up with consistent actions such as making creative and attractive posts, quick responses to users and taking advantage of users' interests to foster engagement. Ultimately, this pattern is anchored on the culture of conservatism that relies on the traditional mass advertising approach to communication. This is antithetical to the idea and goal of engagement through social media.

5.2.5 Post Content

Post content is a direct outcome of the communication agenda or posture of the library. It is analysed separately here because the type of social media post is a major determinant of the reaction that a library stimulates in the users. Post types capture the message a library seeks to convey. It also reflects the intention of the library. Evidence from the interview shows that most post types were basically about library resources and services as well as information about the library's parent institution.

The main contents were about the daily activities of the library like workshops majorly. Workshops organised by the library and those organised by the university, then the institutional repository. Any entry we make, we put them up on Facebook and other accounts. (P7).

This type of post was perceived by the librarians in charge of social media as ineffective, as they failed to get the desired reaction and feedback from the users. This gave rise to the need to change the type of post or introduce elements that, it is hoped, will achieve far-reaching results:

More recently we have started posting video clips and also information on the new arrival of books. (P7)

Some librarians believed that making appealing posts could achieve better results. However, posting on social media is not a simple task. It is a matter that requires careful planning and deployment of appropriate skills. These points should be clearly outlined in a strategy, the absence of which may lead to the arbitrary use of social media by the library or over-reliance on external sources such as posts from other pages or accounts to populate the library account. This concern is expressed by one of the respondents:

As it is now, it seems we don't have a particular direction, but we are trying to strategize and see that things work more efficiently, especially when it comes to content generation. (P8)

The strategy should determine the most useful post contents, the person responsible for making the posts and the regularity of posting to achieve the best connection to the target audience.

5.2.6 Engagement Features

Engagement is a crucial part of social media communication. It creates and sustains the attribute of a two-way conversation. Engagement features in this context comprise the outlook of the parties involved in social media communication and the stimuli that are put in place to cultivate and ultimately drive engagement. Outlook is simply the attitude of either the library or the customer to interactive exchange on social media. The interviews reveal that some of the libraries are positive about this form of interaction. One respondent explicitly mentioned this:

I was looking at social media as a place that requires constant presence and engagement. You don't need to wait for things to happen. You can actually put up posts that can engage people and make them see the library. (P8)

The above quote is quite revealing. However, an investigation of the libraries' posts on social media will likely reveal more to either support or refute the claims made by the interview respondents (see Table 7.1). There are also a few instances where respondents alluded to the view that they do not care about engagement on social media.

The major focus was to advertise and showcase the library; to let people know that our library is in existence. I don't even bother about the response of students. (P4)

This reflects a conservative culture and approach to the use of social media for communication. This may be the unspoken stance of many libraries using social media that may hinder a sustainable use of these platforms as revealed by respondent P4 in the following comment:

The main contents generated within the library are information such as library news, new release and so forth. Over time, we have not been consistent about that. The main content now as you see is whenever something is posted on the university social media account, we repost it on our Facebook and also on our Twitter. We follow the Vice-Chancellor. He is very active on social media and whenever he posts something, we also repost it. We do not generate information as we used to. (P4).

Correspondingly, the attitude of students towards the library also matters in the process of social media engagement. Apathy is mentioned as a possible hindrance to student engagement.

This idea was conveyed by a respondent who said:

It has not been encouraging. Because I do not know if they see the library as something connected with their academic work. They still think it is a serious thing and would hardly engage. But, if it is more social, you will see 20,000 likes. (P1)

This view of apathy about library social media from students gives some credence to the concerns expressed by Jones and Harvey (2019) who alluded that their findings confirm that libraries in the education sector are indeed struggling to foster interest in their social media activities. It is, however, revealing, and it will be interesting to see the opinions of the students on this matter based on the survey conducted (see subsection 6.2). Nevertheless, institutions have in the past found a way to change the attitude of customers towards their products and

services through engagement on social media (Kujur & Singh, 2017). Going by the views of the respondents, it appears that very minimal effort has been made in this direction as the following quotes reveal:

To be sincere with you, there are some weeks I may make up to 4 or 5 posts and there are times I may make not even one. (P4)

The library has not done anything thus far and much depends on the person handling the social media account of the library to continue to make sure that the chain of communication is not broken. (P1)

I will still put it on a scale of 1 to 10. Averagely, it's just 5. Because I am the only person handling it at the moment and I have other things to do. I don't do a lot as at when I am supposed to. From last year, I have not really done much. (P5)

This study, therefore, aims in part to uncover management strategies that libraries could utilise to enhance customer engagement leading to leading to loyalty, trust and use of services.

Furthermore, on engagement features, the idea of stimuli came through in the specific efforts made by some libraries to motivate undergraduate students to engage with them on social media.

The library has done it through the use of things like hashtags or like I told you about images; the post with images getting more reactions. We use images where possible to try and get their attention. We use emojis also, which of course, help in engagement and make the post more attractive. (P7)

The target audience may respond to cues that seek to stimulate their interest. We can ascertain this from the data gained from the survey of undergraduate students (see subsection 6.1).

5.3 Inductive Findings

Inductive findings are ideas emanating from the data that are worthy of consideration. These ideas are not ingrained in the framework underpinning this study but reveal important management factors that could contribute to the sustainable use of social media in the library.

5.3.1 Impact Measurement

Most institutions get into social media spaces with aims and objectives that they seek to achieve using the platform(s). Impact measurement is the evaluation of the achievement of the library on social media going by the goals or objectives that it has set. The interview data, however, reveal that there is no formalized approach to this. Most libraries are happy with such thing as increased followership, an enquiry from students, increased library patronage, increased website visits, etc.

Yes. Because at a point, we had low patronage. So, the library usually "like" pages where students reside most and when we make posts, it kind of brings them back to the library. Some of them would say, I saw this post on social media. That way, people are coming back to the library and relying on the library, especially issues relating to Post-UTME. They want to check on our Facebook page to confirm the

authenticity of the information. There's been an increase in patronage. I can say that the social media platform is helping us. (P1)

The absence of a formal approach to the measurement of the impact on social media could be because of a non-existent plan and policy that ought to specify library social media goals. This affects the management process of these media. An evaluation of impact helps to keep track of social media goals and objectives and proffers the possible measure of achieving them.

5.3.2 External Influences

External influences are factors that are not under the immediate control of a library social media manager but play a huge role in the outcome of management activities. They shape the direction and manifestation of social media marketing.

It can be seen from the interviews that a very significant aspect of these factors is the role top management play in the process of social media marketing. Evidence shows that most social media champions in the library commenced its use after the support of the library management was obtained. A rare case of where the library top management is proactively involved or initiated the use of social media is also evident.

We started using social media in 2014. Our ICT-oriented University Librarian came in and made it a duty to champion the use of social media. (P1)

This support seemed to have diminished after the initial fanfare. This can be explained from the limited purpose and noticeable absence of a policy for social media marketing. These are vital ingredients that can be produced with adequate support from the top management. Library management also has to designate the responsibilities of those assigned to manage social media. This measure is necessary to avoid a conflict of roles, especially when these person(s) are expected to discharge duties in other sections of the library (a common problem when staff have multiple responsibilities and different line managers). The clamour for a social media unit is also a possibility that can be facilitated by library management.

Other significant points expressed by respondents are challenges that affect the use of social media in the library, such as internet downtime, staff shortages, a lack of team coordination and power outages. These factors negatively affect the response to users' queries, the regularity of postings, and engagement efforts. None-the-less, when carefully considered, these are factors that can be quickly addressed if the library management shows interest in sustaining the use of social media in the library.

5.4 Chapter Summary

The management factors are examined through the lens of the Strategic Social Media Marketing Framework with a focus on the sustainability of social media engagement with library users. To achieve this aim, content generation, as well as adequate managerial structure, are keys to the effective use of social media for marketing and engagement. However, it seems that this is not given its proper place and attention in these libraries. It also appears that the major kind of interaction between the library and the student users on social media are mainly inquiries about the collection and services of the library. This is superficial and focusses more on mundane things instead of a more profound interaction/connection which aims to build a relationship or that which seeks to learn how to serve them better.

Chapter 6- Result: Student Survey

6.1 Introduction

This section presents the result of the statistical analysis performed on the data collected from the student survey. It is presented in the following sequence: summary statistics and inferential statistics. The summary statistics were used to assess the nature of the data and how it may impact the result and conclusions drawn from the inferential statistics. Inferential statistics were used to test hypothesised relationships.

6.2 Summary Statistics

The descriptive statistical analysis of the data is presented to assess their features and to determine their distinctiveness and commonality across the institutions investigated. This approach will be helpful in the choice of the inferential statistics and the decision rules that will be adopted. The descriptive statistics are presented in the order questions were asked in the survey. The data are presented in charts and tables with a brief interpretation which aims to highlight their meaning and implication. All results in tables have been ordered by descending order for easy reading.

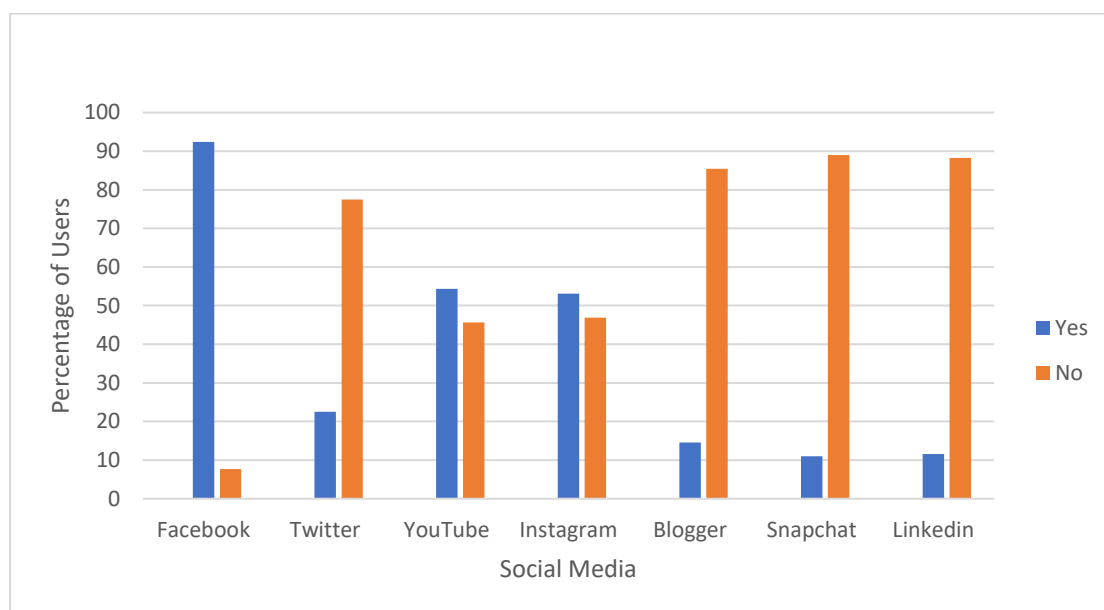


Figure 6.1 Distribution of Social Media Used by Students

The bar chart above presents a summary of the use of different social media platforms by students. Facebook is popular among them, with 92% of the respondents saying that they use it. This is followed by YouTube and Instagram recording 54% and 53% respectively. This is quite revealing as Twitter, recognised as the second most popular social media (Shulman et al., 2015) records only 23% use among the students. This is interesting because most libraries

market information on social media based on the assumption that Facebook and Twitter are popular among students. These results show that YouTube and Instagram are also popular among undergraduate students. This may explain to some extent why most of the responses suggested that the students do not see what the library is posting on social media. Are the libraries really where the students are?

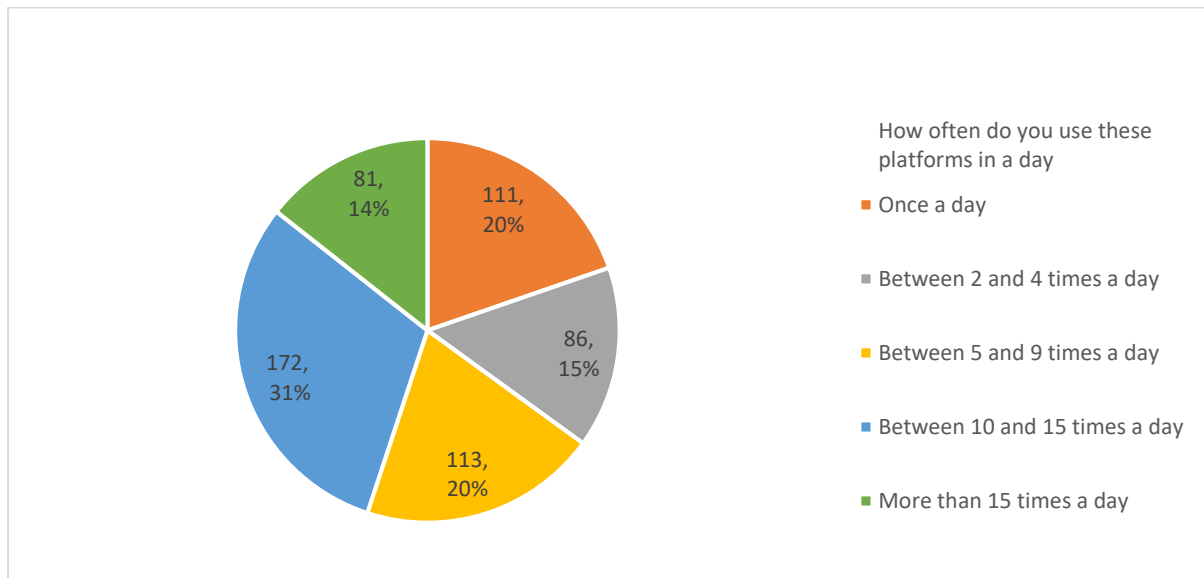


Figure 6.2 Social Media Use Time

The responses indicate that undergraduate students spend a lot of time on social media. 31% say that they use social media between 10 and 15 times a day. 20% say they use it once a day, and the same number says between 5 and 9 times a day. Overall, it can be deduced that students have a strong presence on social media. This may affect the way they like to interact and the timeliness of responses given to them if they decide to contact the library on social media.

Table 6.1 Social Media Habits

Items	<i>M</i>	<i>SD</i>
1. I use SM to communicate with family and friends	4.50	.751
2. I use SM to obtain useful academic information	4.41	.754
3. I use social media (SM) to read trending news	4.40	.690
4. I use SM to be entertained	4.21	.928
5. I use SM to participate in online community and groups	3.94	1.061
6. I use SM to follow and learn about government activities	3.83	1.047
7. I use SM to get update about celebrities I follow	3.65	1.278
8. I use SM to keep in touch with what is happening in the football club I follows	3.48	1.294
9. I use SM to connect with the library	3.32	1.197
10. I use SM to connect with my favourite church/mosque	2.94	1.422

Note: *M* stands for Mean; *SD* stands for Standard Deviation

The social media habits of students suggest that they use it mostly to connect with family and friends. This item recorded the highest mean (4.50). Understandably, this is one of the primary purposes for the use of social media by most people (Agosto et al., 2015). It suggests the need for social connection and interactive communication. This is what social media stands for. Interestingly, students also say that they would like to obtain useful academic information on social media which recorded the second-highest mean (4.41). Does the library key into this in their communication with the students?

Table 6.2 Information Preference of Students

Items	<i>M</i>	<i>SD</i>
1. I would like to receive information about happenings on campus	4.40	.735
2. I would like to receive information about important government projects	4.08	.921
3. I would like to receive information about NGOs that I follow	4.05	.859
4. I would like to receive information about library services and events	3.98	.920
5. I would like to receive information about church programmes	3.80	1.092
6. I would like to receive information about the latest movies	3.69	1.159
7. I would like to receive information about my favourite sports club news	3.64	1.224

Of all the items for this question, students alluded that they would like to receive information about happenings on campus. This has a mean of 4.40. This is potentially an area the library can take advantage of in its marketing strategies. How this is implemented will determine the result that is achieved.

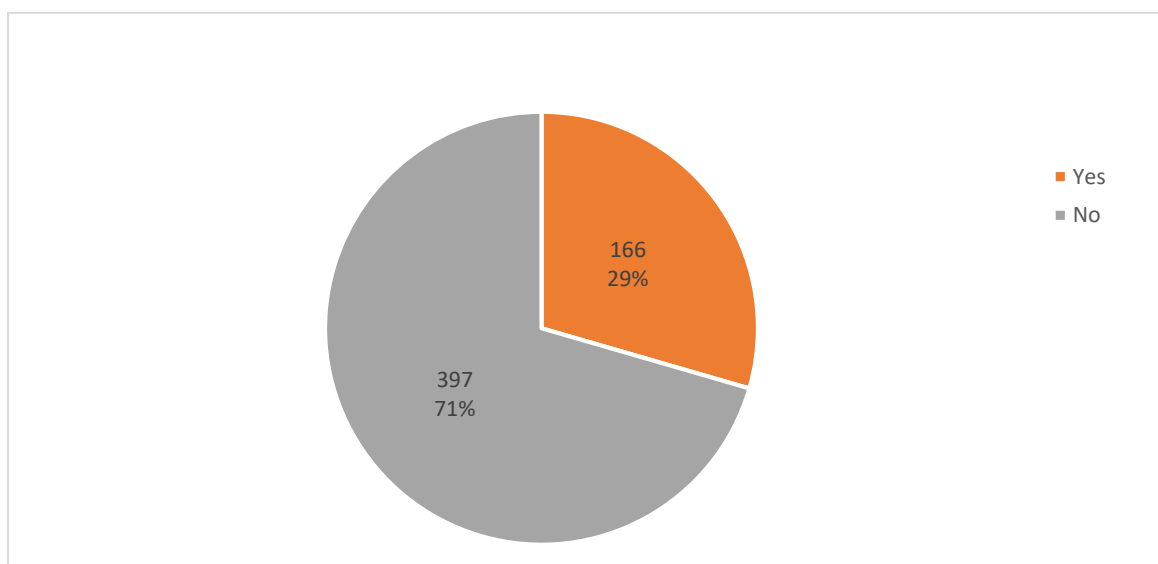


Figure 6.3 Percentage of students who have seen library post on social media

Interestingly, in response to the question, if they (the students) have seen any library posts on social media, only about 29% (n=166) said that they have. The rest, 71% said they have not.

This could either mean that the library has not been using the social media that is common among the students or that their strategy for a far-reaching social media marketing is not productive. It is surprising that despite the increased emphasis on the use of social media, libraries are yet to get through to their student populations.

Table 6.3 Perceived Posts/ Arguments Features

Items	<i>M</i>	<i>SD</i>
1. I consider the posts to be very informative	4.55	.618
2. I consider the posts valuable to my studies	4.47	.694
3. The posts are relevant to my immediate academic need	4.38	.761
4. I think whoever makes that post is knowledgeable	4.35	.670
5. The posts appear to be accurate	4.27	.766
6. I consider whoever makes the post to be reliable	4.21	.753
7. The posts contain persuasive word	4.03	.844
8. The post is made with aesthetically appealing photos	3.94	.874
9. The post always come with nice emoji	3.78	1.055
10. The post is made in informal language	3.60	1.229

This table reveals the perception of the undergraduate students about the content or features of the posts emanating from the university library that they have seen. The item with the highest mean suggests that they think that the library post they have seen is very informative (4.55). This is an important factor worthy of consideration by the library as they tailor content specific to the needs of these sets of customers. This offers a big opportunity that libraries can explore in a bid to stir in these students the desire to interact with them leading to positive outcomes.

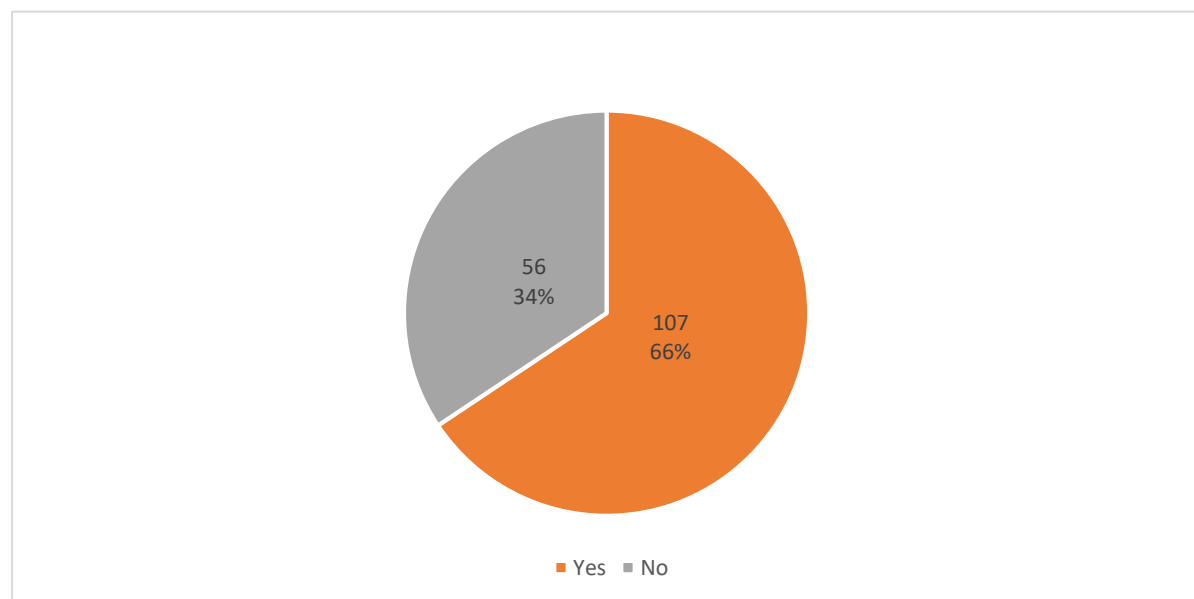


Figure 6.4 Direct Contact/ Interaction with Library on Social media

This chart reveals the response of students to whether they have interacted with the library on social media. The results expand the response on the number of students who acknowledged that they had seen a library post on social media. 66% say that they have either contacted or interacted with the library on social media. This suggests that students do take the step in communicating the library and are open to interacting with it on social media. The big question is: what is the academic library doing to harness/ explore these avenues?

Table 6.4 Nature of Social Media Interaction

Items	<i>M</i>	<i>SD</i>
1. Inquiry about a book, magazine, journal, etc	4.53	.618
2. Inquiry about a library event	4.33	.656
3. Inquiry about a trending news on campus	4.26	.858
4. Inquiry about library opening and closing hours	4.20	.851
5. Commendation of the effort of librarians	4.19	.855
6. Complaint about unsatisfactory library services	3.93	1.039

The above table reveals that students mostly inquire about books, magazines and journals and library events with a mean of 4.53 and 4.33 respectively. These key emphases echo the desire for the kind of information that the students would also like to receive from the library. This has implications for what and how academic libraries may wish to present contents to undergraduate students.

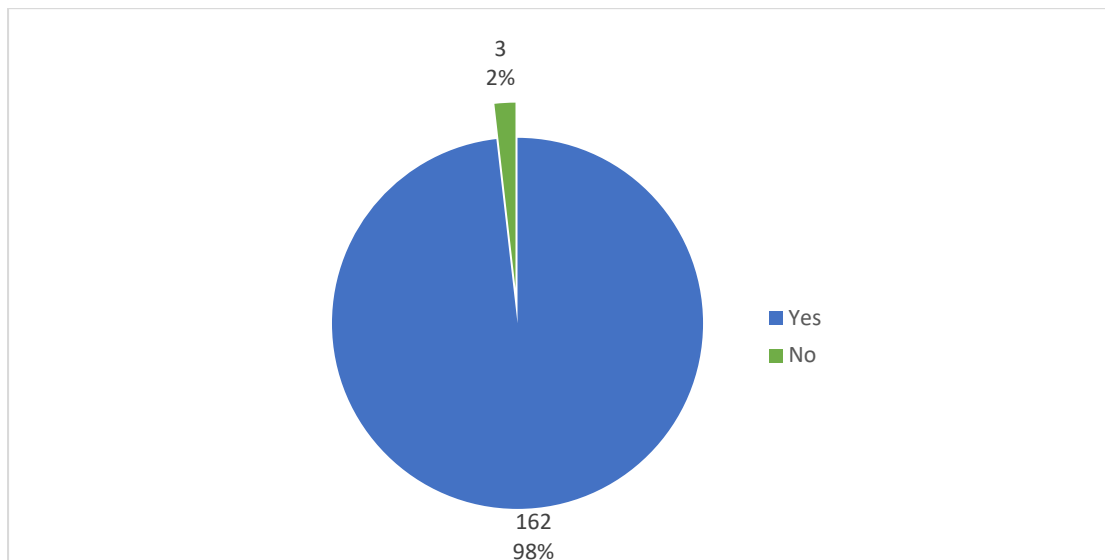


Figure 6.5 Students' Desire to Interact with Library on Social Media

The evidence in this pie chart shows that students are positively receptive to the idea of interacting with the library on social media. This is contrary to the assumption that students have negative attitudes towards the library (Collin & Quan-Haase, 2014; Burhanna, Seeholzer,

& Salem, 2009). This might be true for some traditional products and services which have seen a visible decline in patronage. However, we are yet to establish in concrete terms the assumed aversion of the undergraduate student in interacting with the library on social media. The data from the social media posts of libraries investigated will reveal more on this subject.

Table 6.5 Social Media Engagement Preferences

Items	<i>M</i>	<i>SD</i>
1. Library posts should be carefully worded to attract my attention	4.62	.534
2. I expect to see links to sites a library mentions in a post	4.58	.617
3. I expect to get a rapid response when I contact the library on social media	4.57	.617
4. Posts from the library should be academically interesting	4.56	.814
5. I expect the library to post with formal language used in the university	4.52	.712
6. Library should post on social media at least 5 times per week	4.31	.874
7. I expect library post to bear aesthetically appealing photos	4.23	.816
8. I expect to see library post with nice emoji	4.10	.977
9. I expect the library to post with colloquial and informal language that I can relate to	3.99	1.033

The results presented in Table 6.5 reveal the preferences of undergraduate students for a potential social media post that they would like to see from the library. In the ranking of responses, item 2 had the highest mean (4.62), which presupposes that students are concerned about the wordings of social media posts. Libraries must realise that how they word their posts leaves a great impression on the students and the possibility of stirring their interest in it, leading to some form of engagement or interaction. Another critical point that they draw attention to is the need to add the link to sites mentioned in posts. This makes access easy and reduces the time required to find the said site.

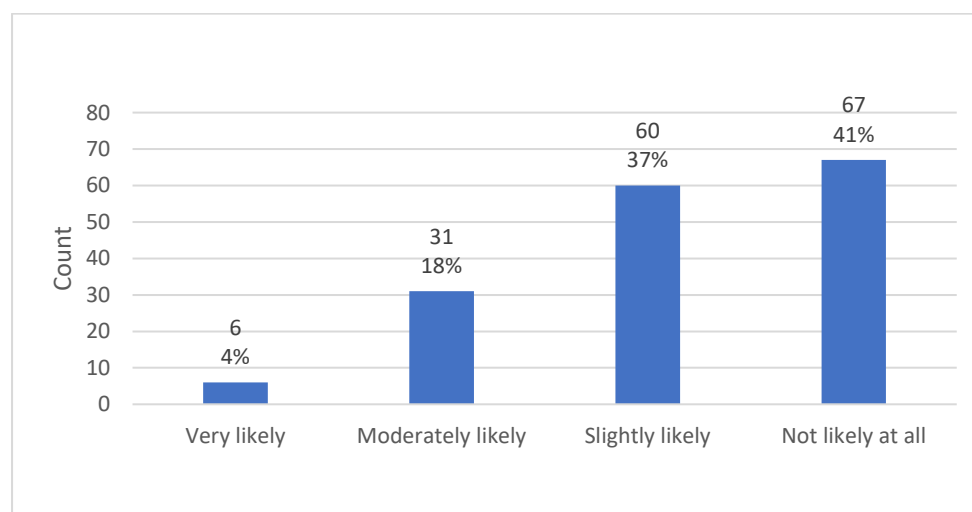


Figure 6.6 Perceived Active Engagement Likelihood

Interestingly, the chart above reveals the concealed apathy and potentially negative attitude that students may have about the library on social media. The students were asked if they would initiate a dialogue with the library based on the preferences that they have chosen. The results show that the majority (40%) are not willing to do that, while 37% said slightly likely. Considered independently, these results suggest that a higher percentage of the undergraduate students are unwilling to participate actively in a conversation that the library has initiated on its social media account(s). Those who have indicated ‘slightly’ could either be unwilling or have a form of willingness requiring an extra nudge. This implies that university libraries should be taking the initiative. Only a small number (4%) said they would willingly start a dialogue with the library. This can be interpreted in different ways. It could be as a result of students’ disinterest in the library or their cultural background. However, a dominant assumption is that they rarely take that bold step in contacting/interacting with the library on social media (Collin & Quan-Haase, 2014).

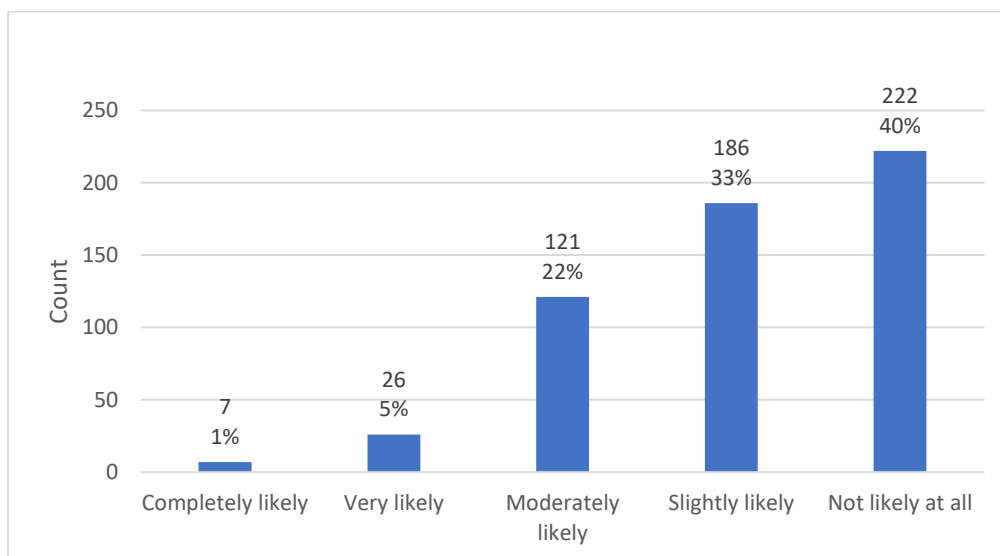


Figure 6.7 Perceived Likelihood of Response to Social Media Posts

Similarly, the result shown in this chart echoes what the previous chart reveals. In response to the question of whether students would respond to library posts received 40% (n=222) as “not likely at all”. This is consistent with the response in Figure 6.6, which is, however, different from Figure 6.5 response. This disparity could either reflect a desirability bias or that students’ attitude is revealed with a more nuanced questions represented in Figures 6.5 and 6.6. When the last two bars are added together, they reveal that 73% of the respondents do not see themselves responding to library posts on social media. This is a significant concern that requires administrative action. If the students do not see themselves responding to library posts

on social media, it may invariably hinder the prospects of user engagement. Any library that cares enough about a more profound interaction on social media beyond the conventional one-way model would be concerned. It then behoves university libraries to seek ways to change this attitude and orientation that the students have about them.

Table 6.6 Students' Attitude Towards the Library's Presence on Social Media

Items	<i>M</i>	<i>SD</i>
1. Library social media posts are poorly managed	2.93	1.171
2. The language used for library posts is too formal	2.90	1.166
3. The library makes too many posts in an already crowded SM	2.80	1.040
4. The library is boring	2.66	1.138
5. The library has no business on social media	2.39	1.086

The table above reveals the attitude and perception of students towards the library on social media. Against the popularly held opinion, the mean responses were all below 3.0, which is the threshold for average scores. An important fact revealed in these results is that library social media posts are poorly managed (2.93). This validates the ideas emerging from the interviews of librarians which suggested that a clear strategy is rarely devised by libraries in their social media marketing efforts.

Also, they (students) agreed that the library posts use formal academic language. This is likely to be a source of concern as it might cause students to be reluctant to interact with the library because they do not find the posts interesting or approachable. Informal language does not mean informal posts. It is simply a way to present posts with expressions that resonate with the students, something they are familiar with and can connect with. This is considered important as language conveys meaning and aesthetics. The choice of language in a social media post, as suggested in the table above may seem to contradict the idea in Table 6.5, number 5. However, this is a clear indication that the preference of students in the case does not entirely align with the choices that they make or the perception that they hold.

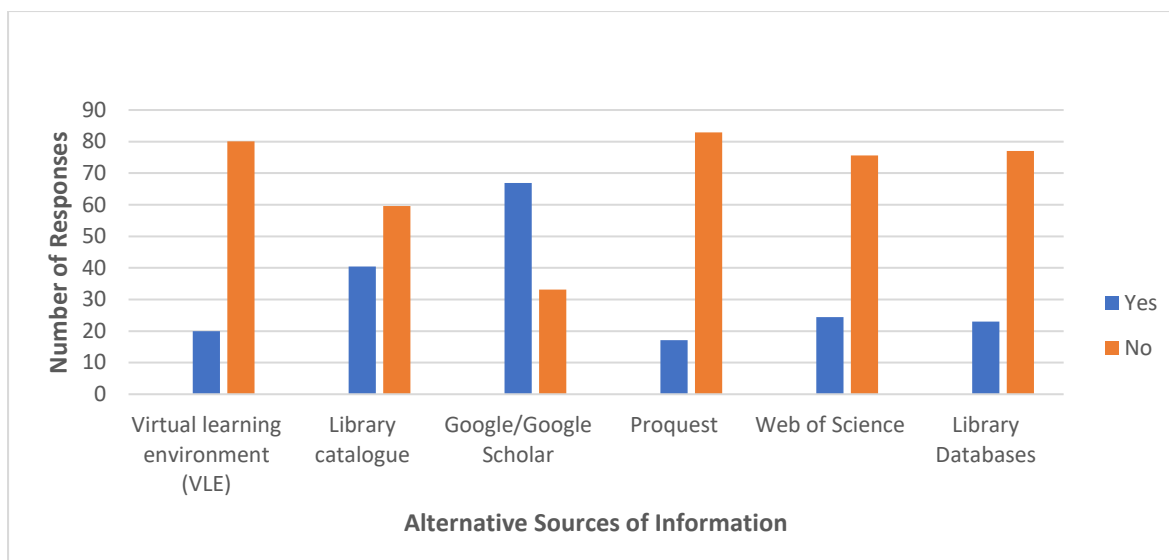


Figure 6.8 Alternative Sources of Information

Figure 6.8 is an aggregation of the alternative sources of information that students may consult besides the library. Google/Google Scholar recorded the highest response, which is a quick go-to for most students. Arguably, alternative sources are competing forces which may pose a barrier to the potential attempt by the library to reach these undergraduate customers in a bid to promote their resources and services. Although the library provides many of these services, this question sought to understand undergraduate student's awareness and willingness to use them despite the link to the library.

Table 6.7 Library Social Media Post Responses

Items	<i>M</i>	<i>SD</i>
1. I will "like" the post	4.22	.887
2. I will read and use the post to meet my needs	4.08	.909
3. I will "comment" on the post	3.91	.974
4. I will "share" the post	3.88	1.005
5. I will read and carry out actions indicated on a-f according to the platform they apply	3.69	1.060
6. I will click on the link attached	3.67	1.127
7. I will "favourite" the post	3.52	1.130
8. I will "retweet" the post	3.43	1.146
9. I will only read the post	2.89	1.232
10. I will ignore the post	2.19	1.214
11. I will delete the post	2.00	1.187

Table 6.7 shows that students are more satisfied to like the library posts (4.22) and that they will read and use it to meet their needs (4.08). This is a passive form of engagement with library

posts and may hinder the possibility of an actual interaction or a student-initiated active engagement.

6.3 Demographic Data

Demographic data generated with the questionnaire are presented here. They are emphasised separately due to the vital role that they play in the statistical analysis performed. The two main demographic data focused on are gender and course offerings of respondents. Course offerings were grouped into four based on the insights arising from the data. The groups are sciences, social science, humanities/ arts, and others. Those classified as others are too general for a specific group such as education, library and information science, copyright and publishing, etc. These will be subsequently used to evaluate the effect on some variables of the study.

Table 6.8 Students Demographics

Gender	Frequency	Per Cent
Male	354	63%
Female	209	37%
Course Offering		
Sciences	337	60%
Social Sciences	116	21%
Others	68	12%
Humanities/ Arts	42	7%

It can be seen from Table 6.8 that male (63%) respondents are higher than the female (37%) counterparts. The table also indicated that more than half of the respondents are science students. This raises the question of whether there is a possibility that science students may not care about spending so much time on social media and invariably about engaging with the library. Could there be any literature to substantiate the claim that science-based students have a poor attitude towards the library and the services that it offers? These are the issues that will be explored in the inferential statistics.

6.4 Inferential Statistics

Results of inferential statistics performed to test hypothesised relationships are presented in this subsection. First, the key variables are defined. Second, the test performed for each hypothesis are identified. And third, the results are reported with brief interpretations. The hypotheses tested are presented below.

H₀₁: The social media preference of students has no effect on their perceived engagement with the library on social media.

H₀2: The perceived features of library social media posts by students does not affect their engagement with it.

H₀3: The information preference of students has no effect on their engagement with library posts.

H₀4: Students attitude about the library has no effect on their perceived engagement with library posts on social media.

H₀5: Gender difference has no positive effect on students' perceived engagement with library posts on social media.

H₀6: The course of study has no effect on students' interest in library social media posts.

6.4.1 Multiple Regression

Table 6.9 below presents the variables used for the inferential statistical analysis and the functions that they served. Correlation is significant at the 0.05 level (2-tailed). Engagement as defined in the literature include responses to social media posts such as comments, likes and shares (Claussen, Kretschmer, & Mayrhofer, 2013; Jiang, Luo, & Kulemeka, 2016; Mostafa, 2015). Question 12 accurately captures this.

Table 6.9 Variables Description

No	Variable	Function	<i>P-value</i>	<i>M</i>	<i>SD</i>
v1.	Post/ argument features	Predictor	.00	4.15	.537
v2.	Students' social media engagement preferences	Predictor	.00	4.38	.442
v3.	Students' attitude towards the library on social media	Predictor	.83	2.52	.958
v4.	Students' Information preferences	Predictor	.00	4.20	.584
v5.	Students' Social media habits	Predictor	.00	4.15	.495
v6.	Perceived post engagement	Outcome	.00	3.60	.522

Using these variables, H₀1, 2, 3, 4 were tested by performing a multiple linear regression to predict participants perceived engagement with the library on social media based upon post/ argument features, students' social media engagement preferences, students' attitude towards the library on social media, information preferences, and social media habits. Preliminary analyses were performed to ensure that there was no violation of the assumption of normality, multicollinearity and homoscedasticity. These were met. The overall regression model was significant, $F(5, 159) = 10.21, p < .001, R^2 = .24$.

The model summary and the result of the analysis of variance (ANOVA) for the model are shown in Table 6.9

Table 6.10 Regression Result Summary

Element	Value (s)				
R Square (R^2)	.243				
Degree of Freedom (df)	Reg = 5	Res = 159			
F-test (F)	10.21				
Overall P -value	< .001				
Co-efficient (P -value)	V1 = .000	V2 = .183	V3 = .013	V4 = .132	V5 = .747

Note: V1 to V5 stands for variable 1 to variable 5 (predictors) according to the numbering in Table 7.2.1 (Variable Description)
Reg stands for regression and res stands for residual

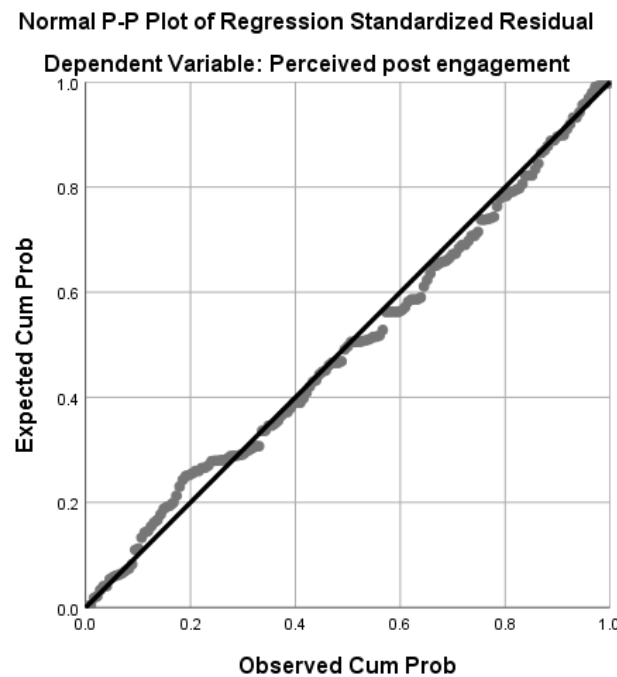


Figure 6.9. Normal P-P Plot of Regression Standardized Residual

As noted above, the overall model is significant. However, the coefficient of each independent variable (predictor) shows a marked difference. The P -value of variable 1 reveals that post/argument features have a major influence as a predictor in the regression model. It could mean that students value the content of the social media posts that they see and the overall feature of these contents. The P -value of other predictors were relatively high, but the highest among them is variable 5 (students social media habits). This could imply that despite the habits that

students adopt, librarians can still get through to them with the right platform and content (Carscaddon & Chapman, 2013).

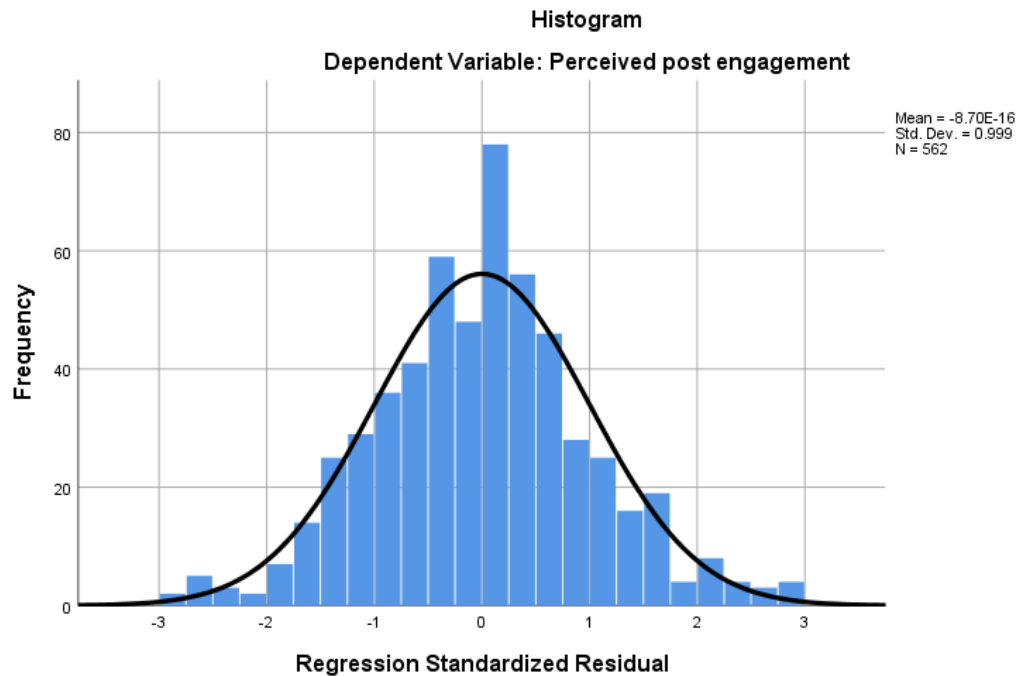


Figure 6.10. Distribution of Survey Response

6.4.2 Independent Samples *t*-Test

To test the hypothesis on the effect of gender difference on students' perceived engagement with the library on social media (H_{05}), an independent samples *t*-test was performed. First, the assumptions of homogeneity of variances were tested and satisfied with Levene's *F* test, $F = .708$, $p > 0.05$ (.401). Also, the male and female gender distributions were sufficiently normal for conducting a *t*-test.

In this context, the male group ($n = 354$) and the female group ($n = 209$) were compared as to how they affect perceived social media engagement. Results show that the mean difference between the two groups are similar ($M = 3.42$ $SD = .60$), ($M = 3.38$ $SD = .60$), $t(162) = .615$, $p > .05$ (.539), Cohens $d = 0.053$. We can be 95% confident that the true difference between these means is $CI = [.071, .136]$.

This can be interpreted to mean that gender has no significant effect on students' perceived social media engagement. Therefore, we accept the null hypothesis.

6.4.3 Analysis of Variance (ANOVA)

A one-way ANOVA was conducted to evaluate the null hypothesis that there is no significant difference in the course offerings of students ($n = 563$) and their perceived engagement with the library on social media (H_0). The independent variable, course offerings included four groups: Sciences ($M = 3.35$, $SD = .611$, $n = 337$), Social Sciences ($M = 3.57$, $SD = .525$, $n = 116$), Humanities/ Arts ($M = 3.36$, $SD = .617$, $n = 41$) and Others ($M = 3.41$, $SD = .620$, $n = 68$).

The assumption of normality was evaluated using a histogram. Also, the assumption of homogeneity of variance was assessed and satisfied using Levene's Test, $F(3, 558) = 1.29$, $p = .278$. The ANOVA was significant $F(3, 558) = 4.11$, $p = .007$ ($<.05$). Thus, there is significant evidence to reject the null hypothesis and conclude there is a significant difference in undergraduate students' course offerings and their perceived engagement with the library on social media.

Furthermore, using a Tukey HSD Post Hoc test, multiple comparisons were assessed, and it was found that the mean difference ($MD = -.223$) between Sciences and Social Sciences is significant at the .05 level, $p = .003$. However, the actual difference in the mean score between groups was quite small, based on Cohen's convention for interpreting effect size (Cohen's $d = .022$). All these can be construed to mean that course offerings do influence students' attitude to the library and how they perceive the library on social media. There could be other factors around this as depicted in the effect size, but it can be surmised that science-based students may not care about using of social media which may impede the marketing strategies targeted by the library to reach them.

6.5 Chapter Summary

The results show that there are multiple factors affecting students' perceived engagement with the library on social media. Significant among these factors are post/ argument features and course offerings. It will be interesting to see how the library is taking this on board in the management decisions that it is making.

Chapter 7- Library Social Media Analysis

7.1 Introduction

In this section, the results of an analysis of Library Facebook and Twitter posts created by surveyed libraries are presented. The results of these analyses are presented in tables. Table 7.1 presents the overall category of Facebook posts (C1 – C9) and frequency counts. For the purpose of anonymity, the selected libraries are labelled as Library A – F. Also, to show the engagement performance of each library, separate tables are presented with engagement counts and calculated scores. Examples of Facebook posts with the highest engagement count for the period studied are also presented. For the Twitter accounts, tweets are represented in a table with resulting engagement counts.

7.2 Facebook Results

The total number of posts extracted from six university libraries' accounts within a year is 312 (see Table 7.1). This is much fewer than might be expected. The frequency of these libraries' posts on social media is low, and this has enormous implications for the overall intent for using social media. Posts about the university community dominate (135) and over half of these posts (59%) were made by Library E which has the most posts (144). While this may seem like a skew in the data, each library's social media postings, are independently analysed in view of the engagement that they have generated. Although the university libraries operate within a parent institution (the university), the idea of posting mostly items about the university may not further the goals of the library on social media. This is because most universities have official university social media accounts and this approach seems to be a repetition of information already broadcasted. Let us carefully examine the types of posts from each library studied and the engagement that they generated. These posts are categorised as photo, link, video and status. Photo represents posts that are made with pictures, videos are video posts, link represents posts with URL of external sites, and status are posts with only text descriptions.

Table 7.1 Frequency of Library Post Category (Facebook)

Library	C1- Collection	C2- Event	C3- Exhibition	C4- Facilities	C5- Library Community	C6- Sentiments	C7- Services	C8-University Community	C9-External News	Σf
Library A	3 (8.8%)	5 (14.7%)	0 (0%)	2 (5.9%)	6 (17.7%)	2 (5.9%)	3 (8.8%)	8 (23.5%)	5 (14.7%)	34
Library B	2 (22.2%)	1 (11.1%)	0 (0%)	1 (11.1%)	2 (22.2%)	0 (0%)	1 (11.1%)	2 (22.2%)	0 (0%)	9
Library C	1 (3.2%)	2 (6.5%)	3 (9.7%)	3 (9.7%)	4 (12.9%)	0 (0%)	3 (9.7%)	10 (32.2)	5 (16.1%)	31
Library D	4 (5.2%)	15 (19.5)	2 (2.6%)	7 (9.1%)	16 (20.8%)	4 (5.2%)	2 (2.6%)	23 (29.8%)	4 (5.2%)	77
Library E	5 (3.5%)	16 (11.1%)	2 (1.4%)	10 (6.9%)	14 (9.7%)	3 (2%)	4 (2.8%)	85 (59%)	5 (3.5%)	144
Library F	2 (11.8%)	1 (5.9%)	0 (0%)	2 (11.8%)	3 (17.6%)	1 (5.9%)	1 (5.9%)	7 (41.1%)	0 (0%)	17

Σf = Summation of Frequency of Posts

Table 7.2 Library Facebook Post Types

Post Type	Library A	Library B	Library C	Library D	Library E	Library F
Photo	2	2	6	16	28	3
Link	9	1	13	45	102	12
Video	0	0	2	2	2	0
Status	23	6	10	14	12	2
Total	34	9	31	77	144	17

We see that library E has the highest number of posts followed by library D. However, as earlier noted, this number of posts suggests a very minimal effort in the frequency of posting on Facebook. It will be interesting to see how this reality corresponds with the responses that were offered by librarians during the interviews and how it reflects the management strategy that each library adopts, as well as their vision for the library on social media.

Table 7.3 Library A Post Engagement

Post Type	Frequency	Comment	Likes	Shares	Reactions	Engagement
Photo	2	0	1	0	0	
Link	9	2	39	2	4	
Video	0	0	0	0	0	
Status	23	11	69	1	8	
Total	34	13	109	3	12	4%



Figure 7.1 Library A post with the most engagement

Over one year, library A made 34 posts on Facebook averaging approximately three posts per month. Status updates were made 23 times, of which the majority were news about the university. While these updates reflect an effort to keep library customers informed about developments in and around the library, it would appear that this library adopts a Defender stance, an approach denoting an unwillingness to explore the potential of social media proactively. As can be seen in the table, the engagement score is low, which could also imply that either the library pays no attention to the subject of engagement or that its social media reach is limited. Among all the posts, one received moderate engagement. Figure 7.1 above illustrates this. The posts fall under the codebook category of sentiment. It would appear that the post that expressed appreciation from the library evoked an emotive response from the audience that saw it.

Table 7.4 Library B Post Engagement

Post Type	Frequency	Comment	Likes	Shares	Reactions	Engagement
Photo	2	0	23	0	3	
Link	1	0	1	0	0	
Video	0	0	0	0	0	
Status	6	0	25	0	0	
Total	9	0	49	0	3	5%

Library B made only nine posts in a year with an overall engagement score of 5%. This is more or less like a Facebook page abandonment. It may be a reflection of a lack of strategy and a clear plan for social media management. This approach to social media marketing is likely to be very unproductive if a library chooses to interact with their customers on these spaces. Customers who attempt to contact the library or librarians through this media may soon realise with disappointment that they have been largely ignored. This may have adverse ripple effects on how these customers use the library and indeed, whether they attempt to contact the library in the future.

Table 7.5 Library C Post Engagement

Post Type	Frequency	Comment	Likes	Shares	Reactions	Engagement
Photo	6	1	55	4	0	
Link	13	0	51	5	2	
Video	2	0	0	0	0	
Status	10	3	60	13	2	
Total	31	4	166	22	4	6%

Library C managed 31 posts in the period reviewed with external links featuring 13 times. Most of these links were shared posts from the Facebook pages of famous personalities. While this approach is better than nothing, it reflects a conventional approach to social media marketing which is unlikely to achieve the desired result; hence, the low engagement score. In view of the Sustainable Social Media Marketing Framework by Felix et al (2017), this is a more conservative approach to social media marketing which may not prove sustainable in the long run.

Table 7.6 Library D Post Engagement

Post Type	Frequency	Comment	Likes	Shares	Reactions	Engagement
Photo	16	4	107	5	4	
Link	45	29	224	22	3	
Video	2	6	15	2	0	
Status	14	0	59	2	1	
Total	77	39	405	31	8	6%

Library D has a total of 77 posts but the engagement counts fall within the threshold of low with 6%. A closer look at the data in this table reveals that external links account for over 50% of the posts made. These links were mostly news updates from the university website and the

videos of library events uploaded on the library YouTube channel. Simply posting links may not attract undergraduate students except if they are links to instructional videos and there is no other way students might discover them. Otherwise, this approach is not a reflection of creativity and innovation in the use of social media tools. Figure 7.2 illustrates an exemplar post with a reasonable engagement count. The post was an advertisement for a new library facility that could be predicted to be of great benefit to the student population.



Figure 7.2 Library D post with the highest engagement

Table 7.7 Library E Post Engagement

Post Type	Frequency	Comment	Likes	Shares	Reactions	Engagement
Photo	28	34	239	87	4	
Link	102	26	208	116	6	
Video	2	3	6	15	0	
Status	12	28	88	127	2	
Total	144	91	541	345	12	6%

Library E recorded an impressive 144 posts in one year compared to others. But like Library D, it made posts of links of mostly blog posts from the library blog. The blogposts were about events and services in the library and the entire university. This is another manifestation of a Defender stance to social media marketing which relies heavily on advertising and promotion

with little interest in prospects of engagement. Library D, however, recorded the highest number of shares with status updates shared the most. This is an engagement feature that is seldom seen in other libraries. Also, Figure 7.3 shows that posts advertising library facilities generated the most engagement. This reinforces the point that library-related posts attract engagement. This will be further explored in Chapter 8.



Figure 7.3 Library E post with the highest engagement

Table 7.8 Library F Post Engagement

Post Type	Frequency	Comment	Likes	Shares	Reactions	Engagement
Photo	3	0	6	0	0	
Link	12	2	32	5	0	
Video	0	0	0	0	0	
Status	2	16	22	14	0	
Total	17	18	60	19	0	5%

Library F produced a total of 17 posts suggesting a lack of frequency in posts made within a year. It had an engagement score of only 5%.

7.3 Twitter Results

Table 7.9 Frequency of Library Tweets

Category	Frequency	Percentage
C1- Collection	5	1.5
C2- Events	19	5.5
C3- Exhibits	10	2.9
C4- Facilities	5	1.5
C5- Library Community	27	7.9
C6- Sentiments	0	0
C7- Services	14	4.1
C8- University Community	72	21.1
C9- External information/ News	189	55.5
Total	341	100

Over one year, the selected libraries made 341 tweets. Over 50% of these tweets were mainly political/sports news which is twice the number of the second-highest category of posts featuring university community news. Only five tweets were made about library collections and facilities. This could be interpreted to mean that the libraries deploy the use of Twitter for mostly news updates. However, a high percentage of these news items had nothing to do with the library, implying that either these libraries are underutilising Twitter or feel no urgent need to interact with their customers about issues concerning the library.

Table 7.10 Library Tweets and Engagement

Libraries	Total Tweets	Favourite Count	Retweet Count	Replies Count
Library A	34	10	24	1
Library C	100	2	1	0
Library D	77	67	23	18
Library E	99	23	7	0
Library F	31	22	10	4
Total	341	124	65	23

In Table 7.10, Library C has the highest number of tweets, followed by Library E. Of the five libraries tweeting; Library D tweeted more about the library compared to other libraries. It tweeted about facilities and resources that students and staff could use to enhance their

academic experience. This probably explains why it had the most engagement of 67 favourites, 23 retweets and 18 replies. Again, this is interesting because it suggests that students are interested in learning about library facilities, etc., through social media. Other libraries had only a few tweets relating to the library and more on the news about political events in the country and around the globe. It would appear that these libraries are following certain news outlets on Twitter and using their posts to populate the Twitter feeds of the libraries. Overall, the evidence suggests that these libraries approach the use of Twitter as Defenders with a very conservative view, invariably impacting on the extent of engagement experienced and perhaps on how effective the platform has been for communicating and interacting with their customers.

7.4 Chapter Summary

A total of 312 Facebook posts were examined. Separate tables were presented with engagement counts and calculated scores to show the engagement performance of each library. These scores reveal that all the libraries had disappointingly low post engagement. In the same vein, 341 tweets were examined and presented. An examination of the number of favourites, retweets and replies show a low engagement. Although libraries have used social media as a medium for advertising their collection and facilities, compared with Facebook, it would appear that the use of Twitter is characterised as ad hoc and somewhat experimental. This is evident in the use of this platform for mostly news items having no relationship with either the library or the university. In the light of the Strategic Social Media Marketing Framework, these libraries seem to be Defenders in the approach to social media marketing on Facebook and Twitter. They seem to be comfortable with infrequent postings and in most cases focussing on promoting or advertising events outside the library. This is evidence of the lack of a strategy and a clear plan for the process of social media marketing. The full ramifications of these results will be discussed in Chapter 8.

Chapter 8- Discussion of Findings

8.1 Introduction

The low utilisation by undergraduate students of e-resources available in university libraries has renewed the emphasis on the prospects of marketing (Awwad & Al-Majali, 2015; Wang & Bai, 2016). It is suggested that the university library could use marketing as an instrument for creating awareness and building a relationship with undergraduate students that can result in attitude change (Lee, 2016; Yi, 2016). In line with this thinking, social media has been described as an essential marketing channel capable of extending the reach of traditional marketing while enhancing library-customer communication (Jones & Harvey, 2019; Li et al., 2017). It has the potential to build a relationship, establish a connection and increase the engagement between the library and the student population. A great deal of literature underlines the advantages of social media for university libraries under five significant themes: media sharing; professional/self-development; marketing and promotion of library services; social interaction; and communication (Magoi, Aspura, & Abrizah, 2019). The current study focused on the last 3 of these themes. From the marketing standpoint, library engagement with undergraduate students has also received attention (Lam, Au, & Chiu, 2019), especially given the interactive potentials of social media. However, with little known about the motivation of students to engage with librarians through social media platforms, two research questions were posed for this study: a) what are undergraduate students' needs, motivation and preferences for engagement with the university library on social media? b) how do managerial factors in the university library impact undergraduate students' social media engagement?

Underpinned by the Elaboration Likelihood Model and the Strategic Social Media Marketing Framework, this study sought to uncover key factors and relationships between factors affecting sustainable social media engagement between undergraduate students and the university library. The discussion below is presented in themes to weave together the findings from the multiple sources of data gathered (interviews, survey, and content analysis) and to discuss these data in the context of previous research in the area. This integration was achieved by progressively highlighting the results of one stream data and comparing with the other, discussion their implication and relevance to the body of knowledge. The discussion focuses on the main scope of the research questions posed in the study, namely, management and student factors. Other factors uncovered in the findings are also discussed. The logic is to give structure to the discussion to reflect a narrative pattern that is grounded in the findings.

8.2 Management Factors

The themes discussed under this heading are organisational decisions; library communication agenda; the culture of consultation; and the nexus between management, perception and engagement. They are a direct reflection of a university library's social media activities.

8.2.1 Organisational Decisions

The decisions around a university library's social media structure are crucial to its sustainability. They are central to the organisation and administration of identified social media platforms in line with existing library objectives (Young & Rossmann, 2015). Analysis of the research data indicates that the critical decisions related to social media management are goal definition, regulation, and structure.

Goal/purpose definition is essential for the integration of social media into the overall mission and vision of the university library. Without a well-defined purpose, inappropriate and poorly oriented use is almost inevitable, and that was the prevailing trend among the university libraries in the study. Purpose helps to align the daily use of social media to the overall library objectives. This arrangement establishes the necessary context enabling library staff buy-in to the idea of social media marketing. In other words, with adequate planning, library staff would see the point of social media and would be motivated to come on board. However, the experience was different as the interviews revealed that in some cases, other library staff would mock the librarian(s) responsible for social media in the library, wondering why they waste time on such frivolous activities. This evidence suggests that the purpose of social media in the university library is not clearly outlined or institutionalised, which invariably had a negative toll on the motivation of the librarians involved. The result is a poorly managed platform often characterised by infrequent and non-creative posts, as the analysis of the libraries' social media content shows (see Table 7.1). Previous studies have emphasised that a clear goal is vital for the successful implementation of social media technology (Adams, 2013; Brookbank, 2015; Ngai, Moon, Lam, Chin, & Tao, 2015; Peacemaker, Robinson, & Hurst, 2016; Zhang, Sheu, & Zhang, 2018). However, the interviews of librarians in the selected universities revealed that social media goals are not defined from the onset. A clear goal also needs to be supported and implemented through effective regulation and adequate communication to ensure that all staff understands the purpose of social media within the library and how to achieve it.

Regulations ought to be the natural results of an already determined and defined purpose. They are made manifest as policies or formal documents that guide the principles and structure

outlined to carry out the purpose. Policies play an influential role in the integration of general library goals with specific social media objectives. They specify the key players and important decision rules that should be followed during the technology adoption process. For instance, social media is widely acknowledged as a volatile space and policies are required to address some issues that may arise in the use of these spaces (Lappeman, Patel, & Appalraju, 2018). For instance, with a clear policy document, libraries can identify and address negative public relations or press that might arise from the use of social media, including dealing with negative comments, and fake or viral news. Young and Rossmann (2015) attributed a formal policy outlining eight principal components of social media activities as a gamechanger in Montana State University Library. In a similar view, Chatten and Roughley (2016) maintained that a policy offers a framework of reference for those establishing or monitoring social media accounts. These views validate the crucial role of policy in a library's social media set up. Because of its importance, it is the responsibility of senior library management to drive the articulation of strategic policy for its social media marketing, yet the interviews revealed that management support for social media is poor, confirming the findings of Alawadhi and Al-Daihani (2019).

Despite the vital role that policy plays in library social media marketing, the interview evidence suggests that none of the university libraries has a policy document outlining the structure and process of social media marketing. This could be a direct reflection of the lack of purpose in the universities' use of social media and its adoption on a mostly ad-hoc and experimental basis. This result confirms the survey findings of Peacemaker, Robinson and Hurst (2016) who found that most academic libraries have no formal policy dictating the tone of posts, purpose and audience of social media. In confirmation, the analysis of the libraries' social media data indicates that the content of most posts are not carefully crafted to facilitate engagement with the libraries' customers. It is not surprising that evidence from the survey examining students' attitudes towards the library's presence on social media reveals that library social media posts are poorly managed (see Table 6.6). This calls to mind the question posed by Glazer (2012): is social media clever outreach or a costly diversion? This question should be pondered by those involved as many libraries face the prospect of social media account redundancy judging by the infrequent posting revealed by social media data. A step in the right direction would be to clearly define the intention of using social media that would serve as a driver for policy drafting. Within the policy framework, however, individual freedom and creativity should not be stifled. This means that active structures will maintain strategic alignment yet allow

librarians to be creative in the way they try to engage with students; it is perhaps a delicate balance to achieve.

The implementation of an appropriate management structure consists of decisions around personnel and departmentalisation. The staff involved in library social media play a crucial role in its sustainable use. They are key figures in the process of integrating social media goals with the overall library objectives (Neill & Moody, 2015). The Strategic Social Media Marketing Framework (SSMMF) identified two personnel structures: Hierarchies and Networks (Felix et al., 2017). Hierarchies depict a situation in which social media accounts are centrally operated, whereas Networks describe an arrangement where social media management is the collective responsibility of all employees (Felix et al., 2017).

The libraries in the study favour the structure of hierarchies, albeit loosely organised. Interviews reveal that most of these libraries assign the management of social media to one or two people. These librarians often complain of lacking time to manage the library social media accounts adequately. What this means is that these accounts are hardly attended to, inhibiting a continued library presence on the media, which could jeopardise its engagement possibilities. Evidence of this is seen in the social media data from each library's account. It is difficult to exploit the potential of social media if the staff responsible for managing it hardly find the time for such activities. This prevailing situation prompted the idea of departmentalisation as a remedy for dealing with multiple responsibilities for staff managing library social media. This option is an opinion shared by some of the interview respondents. However, social media departmentalisation remains to be realised in libraries. Creating a social media unit would be direct evidence of purposeful use of social media, as would a policy document stipulating this provision. However, these seem to be lacking in the libraries participating in this study. Even if a social media unit is created, it will soon become moribund if the fundamental principles that should drive its operation, such as clear strategy and policies are missing.

8.2.2 Library Communication Agenda

Communication is a crucial element in libraries' marketing activity. It plays a critical role in the implementation of the marketing mix principles: product, promotion, place and price. For instance, through extensive communication, libraries can ascertain the type of physical or electronic resources that their customers want (product), while creating awareness of the ones that are already available (promotion). Also, through communication, libraries save customers the time they would have invested in information seeking (price) while gaining insights on the

appropriate place they (customers) would rather be or seek information (place). How communication is executed differs from library to library. Many scholars around the world have identified the enormous value and the ubiquity of social media, recognising its potential for widespread publicity and promotion, interaction, relationship and community building (Collin & Quan-Haase, 2014; Kujur & Singh, 2017; Meng, Stavros, & Westberg, 2015; A. Singh, 2017). These various potentials values can be realised through a carefully planned and executed chain of communication. This means that libraries wishing to accomplish tangible feats on social media would need to consider how to communicate on the platform effectively. Literature and study results suggest that some essential things to consider in this regard are library voice, post content, post frequency and the reach of social media.

Having a unique library voice could be a significant way of making a lasting impression on students. Early studies about library use of social media reported some apathy on the part of the students who see the library as unconnected with whom they would want to engage with on social media (Burhanna et al., 2009; Connell, 2009; Epperson et al., 2009; Hamade, 2013; Winn et al., 2015). Though this apathy has gradually shifted to more acceptance (Howard et al., 2018), the evidence from this research indicates that the university libraries in this study need to do more to create and maintain a wider acceptance by the student population. Creating a library voice should involve a social media team working collaboratively to establish a cohesive style and a consistent tone. Attention ought to be given to the use of creative, interactive and fun methods to cultivate the library's personality (Chatten, 2017). This measure could be of great value for winning the engagement of the library audience as demonstrated by the innovative approaches adopted by Montana State University Library (Young & Rossmann, 2015) and the University of Liverpool Library (Chatten & Roughley, 2016). However, the interview, survey, and social media results show that participating university libraries have not made a conscious effort to create a library voice. Specifically, interviews reveal that the communication approach of most of the libraries is tilted towards traditional mass advertising and one-way communication, which invariably reflects a conservative culture. Evidence from the social media data reinforces this view, as the library with the highest number of posts has links accounting for over 70% of the total posts made in one year. This result aligns with Lam et al. (2019), whose findings suggested that sharing links were not an effective way to attract attention from library patrons. While links may carry some value, depending on the content they convey, the action does not reflect a conscious and creative effort to develop a library

voice. It is also possible that students may not wish to follow the links especially if they can access them from other channels. This is a perspective that future research may need to explore.

Post contents are the right tools for creating a library voice. Content that is interesting and unique will have more likelihood of being shared, liked, commented on, favoured and retweeted (Rossmann & Young, 2015). It is the motivating factor driving engagement. With well-crafted posts, libraries can attract and maintain the attention of their audience. However, monotonous posts will have a negative impact and may prove counterproductive. This is the sad reality of most of the university libraries' posts in this study with interviews revealing that from the beginning of the libraries' adoption of social media, most post types were basically about library resources and services as well as information about the library's parent institution. This seems to reflect the traditional marketing view of largely unidirectional promotion formed through familiarity with mass advertising. The results of the social media analysis revealed that efforts to post about the library at all have dwindled, with library resources and services receiving very few mentions in the libraries' social media posts.

Interestingly, the student survey revealed that they consider posts made by the library to be informative and valuable to their studies. While this seems to contradict the views held by interview participants and evidence seen in the social media data, it could mean that these students valued the efforts and enthusiasm of librarians during the early days of adopting social media for communication. This goes to show that post contents have tangible value for establishing a connection and furthering engagement. This result agrees with the findings of Joo, Choi and Baek (2018) whose study demonstrated the importance of post content and user engagement.

Furthermore, the frequency of posting on social media is an essential facet of engagement that librarians cannot overlook. It can strengthen the chain of communication. Evidence from the survey revealed that students would like to see regular posts from the library. Nevertheless, instances from the interviews suggest that libraries have not been keeping up with the regularity of their posts. The analysis of social media data confirms this with a combined total of 312 posts on Facebook and 341 posts on Twitter over a year. Interview respondents cited time constraints and lack of motivation as significant factors contributing to the infrequency of social media posts. However, since the librarians seem to be managing social media from a Defender standpoint (Felix et al., 2017), it would be interesting to see them make extra efforts notwithstanding the barriers they face. Without regular posting, it is challenging to transform

social media into an invaluable communication channel that could be leveraged by the library to understand the motivation, preferences and needs of their target audience, which in this context is the undergraduate student population. Although higher frequency posting does not necessarily result in high engagement, its merit described above is shared by Peñaflor (2018), who confirms that the frequency of posting is proportional to the engagement rate.

In addition to post content and frequency, university librarians ought also to think about the reach of the posts that they make. The interviews revealed that some librarians take the active step of following or tagging some users to extend their reach; whether this approach was helpful remains to be seen judging by the number of students they reached. Of the 563 respondents to the student survey, only about 166 (29%) said that they have seen the library posts on social media. This result could either mean that the rest do not wish to interact with the library on social media or that the library has not carefully considered ways to extend its social media reach. Valuable comments by interview participants suggest that university libraries should take a proactive step in publicising their social media presence to members of the university community through workshops, billboards and personal interaction. These measures could extend their library social media reach and invariably create the opportunity for meaningful interaction with a specific audience.

8.2.3 Culture of Seeking Feedback

Two-way communication is one of the basic tenets of modern marketing. It promotes a feeling of inclusivity and a system of feedback loop (Howard et al., 2018; Levesque, 2016). It is difficult to ascertain what customers want without finding this out from them. Communication is the crux of marketing as opposed to promotion. Traditionally, university libraries have valued community engagement in the process of collection development (Boudewyns & Klug, 2014). They consult widely with faculties, students and staff to determine the wide variety of products such as journals, databases, electronic and physical resources required for academic teaching, research and learning before their acquisition (Chaputula, 2014). This culture seems not to be evident in the current social media marketing approach of the university libraries participating in this study. The widespread use of Facebook and Twitter as the leading social media for marketing illustrates this. While these two platforms are widely acclaimed to be popular, libraries cannot assume that they are also popular among undergraduate students. Evidence from the student survey revealed that Facebook is indeed widely used by the students, but instead of Twitter, they favour Instagram and YouTube. This result is slightly different from Shane-Simpson, Manago, Gaggi and Gillespie-Lynch (2018) whose findings highlighted

the popularity of Instagram among undergraduate students ahead of Facebook and Twitter. However, they clearly show that librarians need to engage in broader consultation to ascertain which social media platform their students would prefer for communication.

Another vital aspect of consultation would be to find out what students want to see on the library's social media channels. It would be a sheer act of presumption not to consider that most people go to social media for a specific kind of information. Undergraduate students are no exception. The survey revealed that students would prefer to receive information about happenings on campus as well as information about library resources and services. While this may seem to be an apparent preference, analysis of library posts reveal that 43% of the posts made were about the university community. Posts about library collections and services were 5.4% and 4.5% respectively. It is noteworthy that though posts about the university occurred most, these did not necessarily attract the most engagement. This evidence aligns with that of Brookbank (2015) who opined that students' reported interest in, and opinion of social media might not reflect their actual use. With posts about library resources and services occurring very few times across the libraries, one may wonder if the librarians are simply trying to avoid the idea of persistently broadcasting information or that they lack the creativity to engage customers with library resources and services effectively. However, by the decisions that they make, library personnel managing social media could create a favourable atmosphere for enhanced engagement. Consultation, notwithstanding differing opinions about its value, should constitute a significant aspect of this management decision.

8.2.4 Librarians' Perception of Engagement

Engagement is a crucial aspect of marketing and more so in social media channels. The subject has received significant attention in the literature in recent times (Al-Daihani & Abrahams, 2018a; Lam et al., 2019; Peñaflor, 2018; Winn et al., 2017) and forms the central focus of this study. Engagement is fundamental for the sustainability of social media marketing, and it creates a level playing field in which the benefits of two-way communication are harnessed for building and maintaining a relationship with library customers, which is unarguably the goal of relationship marketing. This relationship is capable of building loyalty to the library and its services and resources. While libraries benefit immensely from this loyalty, their customers also enjoy the privilege of satisfying their information need. Engagement is indicative of either excellent or poor social media marketing practice (Al-Daihani & Abrahams, 2018). While customers are the target, the planning and strategic decisions to make engagement happen ought to be a conscious effort that library personnel are driving forward. The interviews and

social media data underscored the perception that librarians hold about the subject of engagement and the corresponding action depicted by the content of social media posts.

The use of social media as a marketing tool in the library has become accepted over time. It began with some initial hesitation and apathy before gaining a more widespread acceptance (Ahenkorah-Marfo & Akussah, 2016; Hendrix et al., 2009; Philips, 2015). However, this acceptance seems to have had minimal influence on the extensive use of social media for more rewarding engagement with library users. Evidence from the interviews suggests that university librarians loosely perceive the importance of engagement. Typically, they would prefer to broadcast information to their target audience without much concern about the engagement that might be generated by such broadcasts. This stance shows that they are Defenders in their approach to social media marketing. Defenders stay in their safe zones, unwilling to leap into uncharted territories by consciously exploring the dialogic potential of social media (Felix et al., 2017). This approach largely influenced the kind of posts that they made with links accounting for over 50% of the total posts. While posting links may have its merits, mainly if they help gain access to crucial academic material such as journal articles, videos, it suggests a less than ambitious or creative approach to social media marketing to achieve engagement. Links would simply take an audience further away from the library social media page, perhaps not to return, and possibly cuts short the line of communication if that user had the intention of liking or commenting on the link. By contrast, two posts about new facilities in two separate libraries received a combined 93 likes, 13 comments and 28 shares. This evidence suggests that students and other people in the target audience want to hear about the library on social media and the merits of results such as these could be explored by the library to increase engagement. For instance, a library could leverage existing social media audience or page followership to learn about what they (students) think about its activity on social media and their thoughts on areas that could be improved. The results discussed under sub-section 8.2.2 reveal that these students have certain preferences. Therefore, the communication on social media presents an opportunity for the library to learn about these preferences and seek ways to meet them.

8.2.5 The Nexus between Management, Perception and Engagement

From the preceding discussion, it can be deduced that management plays a significant role in social media marketing. Its importance has been repeatedly underscored in the preceding paragraphs. Despite the current less-than-desirable management decisions about social media found in the university libraries in this study, some interview respondents recognised it as

essential, with some librarians suggesting a unit devoted to the holistic management of social media. The gains of an appropriate social media management structure are expected to pave the way for the acceptance and appreciation of library social media among the undergraduate student population, resulting in greater engagement. This view is shared by Benthaus, Risius and Beck (2016) who observed that social media management strategies affect the perception of social media users. They claimed that management strategies make it easier to provide a consistent image to the public and in this context would present a valuable opportunity to enhance library identity. It should also make it possible to apply consistent marketing strategies, either the use of the marketing mix or relationship marketing. This strategy would enhance a library's ability to make more effective use of social media. It would gain something from it, either information about customer needs and preferences, or enhanced loyalty. Managing social media accounts can often be complicated; when coupled with the task of choosing from multiple platforms, it becomes even more difficult. Given this dilemma, the library world needs to understand the tenets of modern marketing and apply them to the area of social media.

8.2.6 Summary of Section

The preceding discussion highlights the perceptions and decision of librarians involved with the library social media accounts. It identified the crucial management factors necessary for the sustainable use of social media for marketing purposes. These factors address the focus of the second sub-research question that sought to understand how managerial factors in the university library impact undergraduate students' social media engagement. The evidence discussed above suggests that the management decisions of participating libraries have not satisfactorily met the requirement for sustainable use of social media. Invariably, the impact of this decision on the student's engagement was less than far-reaching. It is, therefore, safe to conclude that the management factors associated with librarians' use of social media would impact how students perceive and use it for engagement with the library.

8.3 Student Factors

'Student factors' is a generic term used in this study to represent the underlying preferences, motivations and perceptions that undergraduate students have about the use of social media and their willingness to engage with the university library. Student engagement, their attitudes and preferences are discussed under student factors.

8.3.1 Comparing Library/ Student Engagement

The body of literature on student engagement with the library on social media has seen steady growth in recent times. The results of the study by Lam et al. (2019) indicated that user engagement with the social media pages of university libraries in Hong Kong was low. Though there was no direct mention of specific users, the study conveys the existing assumption that the target audience underutilises library social media. Similarly, in a survey of university libraries in the Philippines, Peñaflor (2018) argued that the majority of participating libraries had low engagement. He noted that the frequency of posts was directly proportional to the engagement rate.

However, the student survey data in this study reveal a somewhat mixed message on the issue of engagement. While the students showed signs of acceptance of the contents of social media from the library (to be discussed under subsection 8.3.2), a question about their willingness to initiate a conversation with the library revealed that 77% would rarely do so. A corresponding 73% said that they are unlikely to respond to library posts with active engagement behaviours such as likes, comments, retweets and shares. This finding echoes the results of Collin and Quan-Haase (2014) who found that students rarely take that bold step of contacting/interacting with the library on social media. This reality presents a dilemma for a library seeking to engage students actively. However, this is where management decision-making is essential to design a structure that promotes the effective use of social media. Beyond getting the student to engage, the library institution also has to build social media into its marketing framework, the culture of engagement which goes beyond the traditional marketing perspective (Felix et al., 2017; Ihejirika et al., 2021)

Conversely, a question about the perceived response to posts in the student survey reveals that the majority would “like” the posts. This is validated by the social media data with a combined 1,330 likes across all the libraries, and a combined 420 shares. Liking is considered one of the most common and pervasive engagement behaviour on social media (Khan, 2017) and may reflect a rather passive use of social media (Alnjadat et al., 2019). However, while customers are more inclined to like social media posts, libraries could seek ways to improve their post content in a way that resonates with the student population. This is likely to increase their interest and engagement far beyond likes and shares.

8.3.2 Understanding Students Attitudes and Preferences

Students' attitude and preferences are crucial factors worthy of consideration in a library social media marketing activity. They indicate existing perceptions and motivations underlying the uptake of social media among students as well as their willingness to engage with academic institutions such as university libraries on such platforms. Libraries can either take advantage of existing positive perceptions or seek ways to change the negative ones. Libraries must understand these values. In the opinion of librarians, as revealed in the interviews, students regard libraries as connected with their academic studies and unconnected with the social activities for which they utilise social media. This perception is an attitude that could hinder potential engagement with the library. It may also influence the position or perception of librarians on the subject. This view is supported by Al-Daihani and Abrahams (2016), who established that the engagement of students with the library's social media at 8% was lower than expected. However, this should not deter university libraries from making efforts to reverse it because even if students do not see the benefits now, this does not mean they will never come to see them.

This study carried out a multiple regression that identified five predictors to an outcome. These predictors were post/argument features, students' social media engagement preferences, students' attitude towards the library on social media, students' information preferences, and students' social media habits. The outcome variable was perceived as post engagement. While most of the predictors played a role in the overall model, the result showed that the post/argument feature was a significant predictor. What this means is that the content of the social media post contributes mostly to the willingness of students to engage with it. The value of post content is reinforced by Joo, Choi, and Baek (2018) whose empirical study affirmed that it inspires engagement in the context of library social media. While university libraries may wish to consider other factors explored in the multiple regression, a clear message is that closer attention should be paid to the quality and nature of post content. This apparent failure to focus on post content could explain the low engagement rate observed in the posts of all the libraries participating in this study, as evidenced by the social media data.

An independent samples t-test revealed that gender has no significant influence on the perceived post engagement of students. Gender difference and social media have been researched in the past, and it was plausible to assume that there could be gender a difference in the use of social media and perceived engagement with the library. Specifically, Khan (2017) found that gender was a factor that predicted participatory behaviours in terms of disliking,

commenting, and sharing. However, this was not the case in this study. It could be that cultural or geographical realities have a specific influence on gender orientation in the use of social media. This could be an area that could potentially be explored in the future.

Another test (one-way ANOVA) revealed that there was a significant difference in the course of study students were following and their perceived engagement with the library. To the best of the researcher's knowledge, previous studies have not attempted to establish this connection. The result of the ANOVA revealed that students enrolled in science courses were less inclined to participate in the libraries' social media. It is unclear if this disposition is as a result of learned experience, a preconceived attitude towards the library, or the nature of academic needs requiring less engagement with the library both physically or on social media. Perhaps further studies could be carried out to ascertain this. Meanwhile, university libraries ought to acknowledge the differences in the perceptions of students enrolled in various course offerings and work towards leveraging these differences to its benefit. This may require taking a measured approach tailored to reach undergraduate students in different disciplines, especially those taking science-based studies.

8.3.3 Summary of Section

An attempt to understand the disposition of the target audience is a crucial task that ought to be undertaken at the onset of social media adoption for marketing in the library. The first sub-research question sought to explore undergraduate students' needs, motivation and preferences for engagement with the library on social media. While the results present a somewhat mixed view of the attitudes, needs and preferences of students, there were specific things revealed (as discussed above) that librarians could leverage to get the conversation going on social media.

8.4 Theoretical Contribution

A growing number of research studies have addressed the use of social media for marketing in libraries. This study contributes to the existing body of knowledge in ways that are described in this section. First, it contributes to an understanding of library marketing in general and the specific application of social media in the context of marketing through the contextually relevant literature examined and the evidence of practice presented in the result sections (see chapters five and seven). It provides insights on theory-based guidance for library marketing practices and engagement. Using the SSMMF of Felix et al. (2017), the management decisions of librarians adopting social media were explored, providing evidence of management strategies within the library environment. This theoretical adoption is an exaptation (applying

knowledge from other fields) of the framework (Gregor & Hevner, 2013) to the field of library and information studies. Similarly, given that the literature explaining the motivation and preferences for social media posts responses through the lens of the Elaboration Likelihood Model (ELM) is scant, this study is a useful addition to the research literature on ELM.

Second, the study adds to the literature by outlining common pertinent factors that could deliver invaluable results for social media marketing management. It sheds light on the themes of university libraries' social media posts, highlighting the sort of posts that generate more engagement. It also contributes to a further understanding of the engagement behaviour of the library social media target audience.

Third, based on the results discussed, this study is proposing an original framework for managing social media marketing in the library context. Ideas from both the literature and the interview findings have contributed to this original framework titled Sustainable Library Social Media Marketing Management (SLSMM). The framework is a theoretical contribution as explicated in a widely cited work by Whetten (1989). It is explained below using the proposed structure of 'what', 'how' and 'why'. 'What' is a description of the factors in the framework, 'how' their relationships, and 'why' the underlying psychological, economic or social dynamic that justifies the elements selected (Whetten, 1989). These factors describe high-level management actions and not necessarily the day-to-day social media activities of librarians.

8.4.1 The 'What' (Factors)

8.4.1.1 Plan

Planning is essential in social media marketing management. It is a critical factor that shapes the tone and nature of other management actions in the social media marketing process. It helps create a valuable blueprint for aligning goals and strategies. Under 'plan', purpose definition and policy formulation are necessary attributes for successful practice.

a. Define Purpose

At the purpose definition stage, the library management aligns its proposed goals for social media to the corporate vision and mission of the library, and most significantly, with the parent institution. A technical understanding of the social media mechanism is crucial at this stage to achieve a conflict-free integration of existing marketing channels and the proposed adoption of social media. The management also determines the target audience. This is important because the nature of the audience influences the social media content and the voice that the library would like to project. However, consultation (see subsection 8.2.3) with the target audience is

required to understand their needs and preferences, such as choice of social media platform (Facebook, Twitter, Snapchat, Instagram, among others), the content of posts, types of posts (videos, images and texts), to mention a few. These considerations position the library to adopt social media from an informed standpoint rather than being based on experiments and assumptions. A clear purpose can be used as an inspirational tool by the library management to get other staff to accept and welcome the vision of social media marketing. It would also help deal with the initial barriers or negative experiences associated with social media marketing.

b. Policy

The planning dovetails into the policy for social media marketing. The policy is instrumental for stability, especially when considering the volatility of social media spaces that often can be characterised by firestorms (a backlash or negative feedback from social media users). The policy will specify the things to be done and who should do them. A typical policy would contain purpose and scope, target audience, disclaimer, privacy and confidentiality information, staff responsibilities, best practice guideline, clearly defined acceptable behaviour, clearly defined consequences, and possibly customer recourse (American Library Association, 2018). The policy is a critical tool in the management's decision-making process, offering limits and a choice of alternatives. It enables management to streamline internal processes and not leave social media marketing to chance. While the format or structure of policies may differ based on libraries' context and background, some of the contents already identified would be relevant in most settings. It should be noted that the purpose and the policy can be changed as a result of the evaluation, though not in the short term, but as the process completes its full cycle (see sub-section 8.4.1.3).

Steiner (2012) wrote extensively on the vital role of planning in social media marketing. This current study reaffirms Steiner's position and adds the component of policy that serves as the anchor for the entire marketing management process.

8.4.1.2 Organise

'Organise' is the second stage in the process of social media marketing. It consists of management decisions about social media personnel and the attribute of engagement. Within the scope of 'organise', structure and engagement are two essential attributes worthy of consideration.

a. Structure

Structure in this context refers to the organisational arrangement or staffing for the management of social media. There are two possible structures; Networks and Hierarchies. While Networks suggest a mechanism where all staff members are responsible for social media management, Hierarchies denote the assignment of such a task to one or more people in the library. The choice of the structure might be dependent on the size of the library. It would seem appropriate for a large library to assign the management of social media to a team that takes responsibility for how the library is presented to its customers. Otherwise, a smaller library with a few staff could prefer to share the burden of social media management among all the team, though all must be given the time to devote to social media work. Structure aligns with the stated purpose for using social media, with personnel trained to gain an excellent working knowledge of the digital world of social media and develop a flair for composing interesting content and exercising good judgement (Levesque, 2016). The structure sets the context for policy implementation, creating favourable conditions for customer engagement to thrive; roles within the structure are designed to create and manage posts that get better engagement.

b. Engage

Engagement is a crucial attribute of social media communication that is management driven. Its presence or absence is indicative of either excellent or poor social media marketing practice (Al-Daihani & Abrahams, 2018). Engagement consists of deliberate management efforts that seek to galvanise the dialogic potential in social media tools. It is realised by motivating a positive perception and the corresponding actions of the personnel involved in the library social media aimed at establishing two-way communication with the library customers that is characterised by interactions, collaboration and networking. Guided by policy, library management determines the reach of social media, content type, language, and frequency for posting content. By extending the social media reach, a community of networks that librarians can leverage for interaction and relationship building is established. Likewise, content attributes such as the language of posts, features of posts, and the frequency of posting can attract the attention and response of the intended audience. The language of social media posts could be formal or informal, depending on what appeals to the audience (which will be discovered by evaluation, see the next subsection).

Studies have shown that posts with multimedia contents have the potential to receive more user engagement (Al-Daihani & Abrahams, 2018; Joo et al., 2018), especially when strategically used. Management plays a vital role here in providing or approving the multimedia posts the library makes. Also, there are many opinions about the optimum regularity and timing of posts.

However, library management may decide its rule of thumb on timing depending on what works for it. These factors acclaimed in the literature to be game-changers (Alawadhi & Al-Daihani, 2019; Peñaflor, 2018; Ramsey & Vecchione, 2014) are designed and guided by the library management to maintain a consistent social media marketing approach in the library while delivering the value of engagement. It is noteworthy that Felix et al. (2017) elaborately described the structure of social media marketing, but less attention was given to the aspect of the engagement. This current study provides an extension of their work by revealing the centrality of engagement as a factor that potentially delivers value to both profit and non-profit organisations.

8.4.1.3 Evaluate

Fostering a culture of evaluation will help a library stay on top of its social media management game (Watson, 2017). At this stage, two key activities are carried out by the library management; evaluation of social media data and the social media marketing process.

a Data

Data is a crucial component of social media marketing. It contains the information generated by activities of the library or users on social media. Through data evaluation, insights are gained about trends, and social media use history and habits. In this context, data evaluation comprises activity metric, audience metric, and engagement metric. The activity metric is the number showing the amount and variety of posts made over a period such as the number of texts, videos and images. It enables the management to determine the optimum regularity of posts based on target-audience preferences, with the view of either consolidating or improving it. The audience metric showcases the pattern of audience growth in the library social media. Examples are Facebook followers, Twitter followers, YouTube subscribers, and many more depending on the platform the library has adopted. This kind of metric provides evidence of growth that enables library management to evaluate its social media reach and deal with areas where growth has slowed, either by putting in more resources to stimulate growth, or to withdraw resources to allow that part of its social media programme to wither.

The analysis of the engagement metric has recently gained more prominence due to the increasing emphasis on user engagement. It measures the activities of people on the library's social media channels, such as shares, likes, reactions and comments on a Facebook post, retweets on a tweet, Pinterest post repins, likes on a YouTube video, among others. There are a few methods proposed in the literature for determining engagement metrics. However, this study, which conducted a social media data analysis, has offered a technique for conducting it

(see subsection 4.7.3.2). These metrics are convenient for constantly evaluating areas in which the library needs to improve. This can be achieved by mapping posts that have generated the most engagement. Insights can also be gained into the responsive behaviour of the library target audience through the examination of the metric. For example, an analysis of the likes, comments, shares and reactions on a Facebook post about a popular event (e.g. a lecture to introduce a new display of rare books) in the library would reveal the expectations of the target audience, appreciation or outright disinterest. Information such as this could be valuable to the library for improving the content of the event, e.g. livestreaming it (but that has to depend upon the responses to posts about it), and highlight posts audience engage with the most. In addition, the insights gained from data evaluation when compared with external data could help a library to realise, as an example that it is on the wrong platform. For instance, if external data, such as national surveys of social media use, indicate that students mostly use Instagram, metrics evaluation compared with this data might suggest that Facebook is an ineffective platform to reach them.

b Process

The management process consists of other factors and attributes earlier discussed (purpose, policy, structure, engage, and data). The process is intrinsically linked, with its component parts flowing from one into the other, suggesting a cyclical progression of the management attributes. At this stage, the entire process of social media marketing is evaluated to decide the impact the management decisions made earlier have had on the goals outlined from the onset. It is a stage of reflection during which the experiences and lessons learned from other elements are carefully examined. This evaluation could potentially result in a redefinition of purpose and adjustment on other attributes. Process evaluation allows management to revisit the library goals on social media, underscoring the things that worked well and those that did not. They could potentially revise the Structure element and make deliberate adjustments in the policy to accommodate changes that would deliver better outcomes.

It is noteworthy that the ‘evaluate’ factor is a significant contribution in the framework representing an extension of the work of Felix et al. (2017) that identified the variable factors describing the state of social media management. However, the addition of ‘evaluate’ provides the opportunity for a library’s managers to consider the suitability of its current social media marketing activity and make necessary changes. For instance, if a library is given to unidirectional promotion, the insights gained from evaluating the responses of the target audience could spur it into adopting two-way communication to increase interaction.

8.4.2 The ‘How’ (Factor Relationships)

The relationship among these factors is represented in Figure 8.1, which illustrates how each factor is linked to the other. Within the framework are overarching factors namely, plan, organise and evaluate. Plan features attributes such as purpose and policy that are critical requirements at the onset of social media management. They can be described as the ideation stage that maps the strategy for the course of action. With the purpose clearly defined, and policy formulated, a solid foundation is established paving the way for the organising stage. Organise is divided into two attributes that are independently managed, yet intrinsically connected. The structure is decided based on already defined goals and established in line with the responsibilities detailed in the policy. It stipulates the nature and pattern of personnel formation for social media management. The personnel are then guided by management to take deliberate actions to engage with the target audience of the library’s social media marketing. The structure ultimately determines the administrative arrangement that could potentially promote thriving engagement, such as the personnel committed to engagement and teams collaborating to drive the management inspired goals.

More so, the extent and value of engagement are determined through constant evaluation. The evaluate factor features data and process. Day-to-day operational activities mean that data evaluation directly affects the engage attribute, but this association is not included in the framework, which is focused on high-level management. However, the process attribute suggests the evaluation of the whole cycle or stages of marketing, to make improvements or changes on the purpose, policy, structure as well as posts content designed to get engagement (more explanation below). These activities are iterative in a cyclical way.

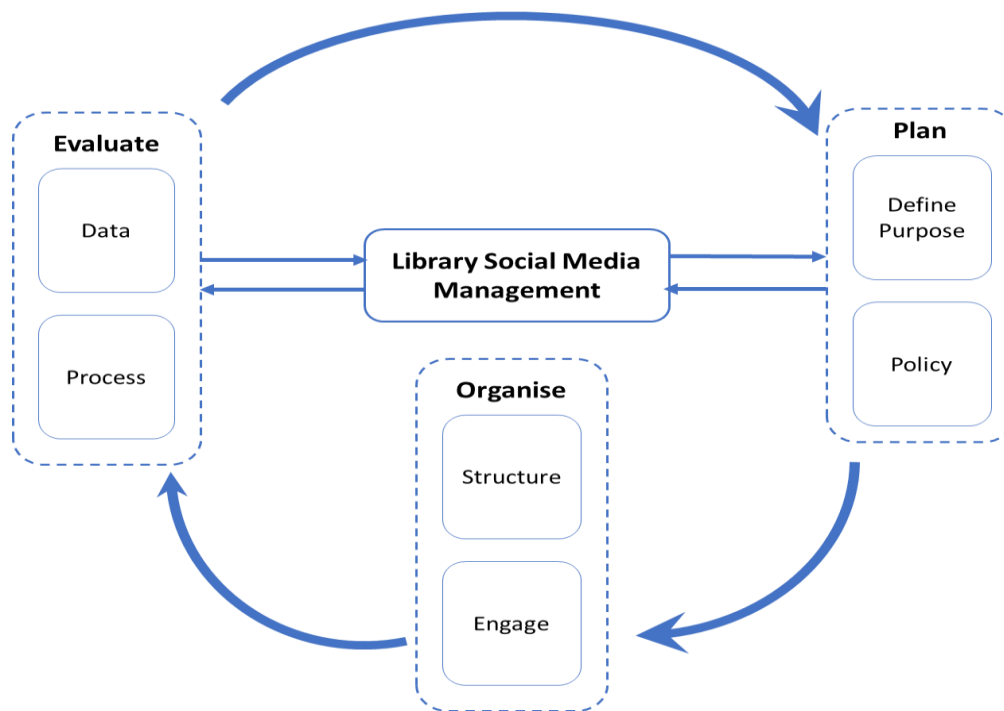


Figure 8.1 Sustainable Library Social Media Marketing Management

The logic of the connection loop in Figure 8.1 is that library social media management, being the defining factor, triggers the decision to plan, organise and evaluate. While the planning stage sets the groundwork for a solid foundation, the organising phase builds on this foundation with corresponding decisions and actions. Then, the evaluation stage is a review of the impact of all the entire stages. Given that ‘data’ is the tangible result of the other management decisions, it is evaluated to determine what could be changed or done differently. The lessons learned at this stage stimulate the evaluation of the entire process. This explains why ‘data’ is given a prime place under the ‘evaluate’ factor. The connection loop from the ‘evaluate’ factor to the ‘plan’ factor implies that purpose may be redefined, and policy updated. For instance, if the results of the data evaluation show a reasonable acceptance of the library’s presence on social media, it (the library) may decide to expand its audience to include users that the library did not originally intend to reach. Likewise, evidence of slow acceptance may prompt the library to revisit its goals on selected platforms. The evaluation of the experiences with the use of social media can also inform the addition of elements to the policy to guide smoother operation. This may also affect the structure, and ultimately, the engagement decision of the library. In other words, to realise sustainable social media engagement, the results of this study confirm that these linked factors would likely improve prevailing practices in libraries.

8.4.3 The ‘Why’ (Factor Selection)

Given that the proposed framework attempts to model the management factors for social media marketing, organisational requisites such as goal definition, policy formulation, structure and evaluation are crucial elements. As Figure 8.1 illustrates, library social media management is the defining factor that glues together the other factors. Therefore, purpose, policy, structure, engage, data, and process evaluation are aimed at delivering effective and seamless library social media marketing management.

The importance of these factors and attributes have been explained. However, a critical question to ask is; what happens if a factor or attribute is missing? In ideal circumstances, some libraries may well be able to implement all the factors discussed, but there could be others that may leave out a few attributes. Omitting some attributes may have a negative influence on the overall effectiveness of management efforts. At the planning stage, the absence of purpose would immediately impact on other management activities as there will be no basis to formulate guidelines or implement structures that facilitate social media marketing. In the same vein, if a policy is missing, then the library could risk an erratic and unregulated use of social media. This implies that they could adopt or abandon social media platforms at will. Staff resources will be used for ineffective activities. Customers may gain a negative perception of the library.

On the organise factor, the absence of the structure attribute would imply that anyone in the library could create a social media page and post contents randomly without any form of supervision. This is a recipe for chaos and would be counterproductive to the marketing objective of the library as the target audience may perceive the contents they see as lacking unity of voice and form. On the other hand, the absence of an ‘engage’ attribute would defeat the overall communication aim of the library on social media. More so, the value of such communication cannot be appreciated by the library.

On the evaluate factor, the absence of the data attribute robs the library of the opportunity to understand how its post contents were generally received, primarily based on the rate of engagement and direct comments. Similarly, the absence of the process attribute would imply that there would not be a process evaluation. Consequently, libraries may repeat past mistakes in the use of social media, weak spots in the process could be missed and this may ultimately lead to dysfunctional management. From the discussion above, it is noteworthy that the factors

and associated attributes are interconnected and complement each other for effective management.

8.5 Practical Contribution

This study's contribution to practice is threefold: management, analytics and policy formulation. First, as libraries increasingly adopt social media for marketing, the need to gain familiarity with best practices arises. Also, the need to engage users on social media platforms has received attention, as described in Chapter 2. Having explored managerial, situational and personal factors that enhance social media success and engagement, this study provides a blueprint for practising librarians and library managers who wish to understand the managerial factors and considerations for user engagement. Despite the attractiveness of social media outlets, libraries cannot claim to have understood how to utilise them effectively. This study provides insight into this. The study also reiterates the need for managers to correctly implement marketing in libraries, suggesting that current marketing arrangements in libraries fall short in ways that impede anticipated results. Library managers may explore the results of this study to decide how they can utilise social media for accomplishing the tenets of either relationship marketing or the marketing mix. It also suggests practical steps for librarians seeking to adopt social media for the first time. Instead of approaching it from an experimental perspective, these librarians can be guided by the insights of this study to plan and purposefully structure social media to deliver gainful results.

Second, this study also offered a technique for analysing the social media engagement of library users. With the constant evaluation of social media engagement metrics, a library will be in an informed position to rethink its social media marketing strategies, adjusting where necessary. The study will be useful to librarians seeking to understand the kind of posts that appeal to students in their quest for engagement. Third, this study reiterated the value of a social media policy in the marketing process, though it did not stop there. Insights on probable policy content were shared to give library managers a head start on policy formulation.

8.6 Chapter Summary

The discussion presented above highlight the existing gap in the participating university libraries' social media marketing. These libraries had little strategy or policy for social media. They tended to focus on disseminating information rather than trying to engage students in dialogues. This suggests that university librarians need to think more carefully about how to use social media for relationship marketing and the marketing mix. The insights from the

interview data as well as ideas from the literature were used to develop a framework for sustainable library social media marketing that can assist libraries in considering how they apply social media for engaging with their key stakeholders. This formed the basis for the study's theoretical contribution, including the Sustainable Library Social Media Marketing Management Framework. Practical contributions were also highlighted, such as the best practice guide for library manager and ideas for policy implementation.

Chapter 9- Conclusion

9.1 Introduction

In this chapter, a summary of key findings is presented to show how the research questions were answered. Lessons learned are drawn on to make recommendations for practising librarians, followed by a reflection on the study and some suggestions for future research. A concluding statement summarises the ideas and insights conveyed in the thesis.

9.2 Summary of Key Findings

The summary of key findings is discussed under the sub-research questions posed in the study.

Sub-question 1: what are undergraduate students' needs, motivation and preferences for engagement with the university library on social media?

The descriptive and inferential statistical analyses conducted in this study revealed some notable results. From the descriptive analysis, it was apparent that students would like to hear from the library based on their responses, especially about matters concerning their (students) studies and the university. However, while participating libraries were inclined to use Facebook and Twitter for social media marketing, the students revealed that they also value Instagram and YouTube. A majority of the students indicated that, for them, social media means a place for connecting with family and friends and probably for obtaining academic information. This result explains their use of YouTube that could serve as a go-to for some educational content such as explanations of equations, concepts, and specific subjects, especially ones with a visual element. Among the participating students, less than 30% affirmed that they had seen library posts, but those who had consider them informative and valuable to their studies. These students advised that carefully worded posts would get their attention. They, however, noted that library posts are poorly managed. Despite acknowledging that they would like to see posts from the library, a significant number among the students said that they are unlikely to start a conversation with the library by either posting on library social media page or commenting on library posts. They further revealed that they would mainly 'like' the posts. The analysis of social media posts confirmed this as 'likes' numbered more than the other forms of engagement (comments, shares and reactions).

Additional tests revealed that argument feature (post content, language, and type) is a significant influencer in the predictions of factors that motivate undergraduate students to engage with the library on social media. Further tests revealed that gender did not influence their motivations and preferences for engagement. However, another test indicated that course

offerings influence students' attitude to the library and how they perceive the library on social media. These findings were discussed in the previous chapter, with comments and reflection on insights from the literature.

Sub-question 2: how do managerial factors in the university library impact undergraduate students' social media engagement?

Interviews guided by the framework proposed by Felix et al. (2017) were conducted to explore managerial factors that impacted students' engagement. The overall result of these interviews revealed that participating libraries failed to plan the adoption and management of social media carefully. Specifically, the results showed that among the participating libraries, only a few commenced with a defined purpose, which often is not management-driven, but the solo activity of a social media champion. These purposes were focused on promoting library resources and services and getting traffic to the library website. Results also showed that participating libraries' social media marketing management was not guided by policy. Personnel managing social media were organised in a group of two or three people and had to eke out time for social media due to other library responsibilities.

The interview results reveal that the posts made by these personnel on social media were mostly unidirectional due to their narrow perception of engagement. Some held the opinion that students were apathetic about engagement and the librarians were not particularly concerned about the engagement rate that their posts generated. Results of analysed social media data confirmed this, revealing that posts were made infrequently, lacked creativity and generated low engagement rate. These findings were discussed, highlighting views in the literature, which then formed the basis for the theoretical and practical contributions. A foremost theoretical contribution is a framework titled Sustainable Library Social Media Marketing Management that explains high-level social media management in the library. Study findings and existing literature informed the choice of elements in the framework such as plan, organise and evaluate. Each of these elements captures attributes such as purpose, policy, structure, engage, data and process that are interconnected in the management process.

9.3 Recommendations

The exploration of factors contributing to the sustainable use of social media in the university library reveals that there are some barriers and enablers. These form the basis for the recommendations and suggestions.

- **Library Marketing**

Going by the study's findings, libraries need to rethink their approach to marketing, moving from a mass advertisement focus to a more modern interactive communication approach such as either relationship marketing or the marketing mix. Given that libraries are increasingly experiencing budgetary restrictions, relationship marketing would help build customer loyalty in their products and services. This loyalty could potentially create a favourable atmosphere for establishing a customer base and dealing with competition. Social media is a useful tool for building these relationships. Additionally, libraries could leverage social media for exploring the marketing mix, especially the product, price, and promotion components. At the product level, libraries can use social media to seek clarification from their customers on the products such as databases and online resources they would want to see while advocating for the use of existing products. Similarly, social media can be used to promote library events, resources and services to a broader audience. At the price level, the information conveyed to the library customers via social media could save them the time and stress involved in information seeking.

However, evidence from the interviews suggests that some participating librarians do not know enough about marketing, thinking it is all about promotion. This perception may well be accurate for many librarians. If they do not understand it, they may not use it properly, ultimately impacting on their use of social media. Therefore, librarians should realise that marketing is far more than promotion, but a deliberate two-way communication that is customer-focused. Some critical questions library marketers should be asking are: what can we find out about our customers' academic needs? Do they want the resources that we have? Are we making resources available in the way our customers want? Asking questions like these and discovering the answers by using social media will position librarians to rethink their current marketing approach.

- **Management Support**

Library stakeholders, particularly senior management, play a crucial role in the consolidation of social media use in the library. It is easy for a champion to motivate the adoption of social media in the library, but without the backing of top management, its sustainability cannot be guaranteed. Evidence in the study suggests that a lack of management support contributed immensely to the failed attempts at using social media by participating libraries. The buy-in to the idea of social media by senior

managers creates room for its resourcing. Without adequate resources, it is hard to maintain a viable social media platform.

- **Social Media Plan**

Planning is a necessity for a first-timer on social media. At the planning stage, libraries should define the purpose of using social media in line with existing library objectives. It should also decide its target audience and the type of platform it wishes to invest on. This plan would then serve as a reference for subsequent social media activities.

- **Seek customer feedback**

The choice of social media platform and the kind of post contents should not be independently decided but done in consultation with the students or other audience the library wants to reach. This could potentially affect the acceptance of the library on social media and ensure that their activities are based mainly on an informed position. Libraries, while canvassing for information on interest, preferences and needs of target audience regarding the type of social media they want, may choose to use existing traditional channels such as email, billboards, questionnaire or library blogs to get responses.

- **Adopt policy**

Evidence in the literature shows that many libraries using social media do not have a policy to guide their activities. Therefore, libraries adopting social media should consider drafting policies to support their day-to-day handling of social media. The policy would outline the measure libraries could take in dealing with problematic aspects of social media marketing. The policy identifies the ground rules for creating the structure for the management of social media by outlining the roles, responsibilities and day-to-day activities involved in the management.

- **Structure**

The structure of personnel handling social media should be given the proper attention it deserves. This can be decided based on the size of the library. It would seem appropriate for a large library to assign the management of social media to a team that takes responsibility for how the library is mirrored to the public. Otherwise, a smaller library with a few staff could prefer to share the burden of social media management among all the staff, though all must be given the time to devote to social media work. Whoever is involved should be allowed to be creative in the use of social media, especially with regards to the style and language of posts, while adhering to policy.

- Engage

Librarians using social media should make a deliberate effort to engage with their target audience. They can achieve this by building dialogues and conversation using techniques that have been proven to work. They may also confer with other libraries to see what they have done and modify it to suit their context and needs. By so doing, they will be fostering the values of modern marketing in addition to reaping the benefits of engagement.

9.4 Reflections on the Research

It is essential in a study of this magnitude to reflect, appreciating what worked well and what did not. This helps gain insights on the research process and aspects of it that could be improved. The first area of concern is the lack of research in the Information Studies domain using the ELM as a theoretical underpinning. This prompted the adaptation of measures of the construct from other studies in disciplines that are not library-based, so this adaptation may not entirely reflect the core nature of the library as a not-for-profit organisation. However, this should not deter future research from adopting ELM; it was used successfully in the current study. It allowed the examination of library social media acceptance by undergraduate students from two routes; central (quality of posts content) and peripheral (nature of contents) among other things. It was chosen ahead of other models such as Technology Acceptance Model (TAM), Uses and Gratification Theory (UGT) among others because it supported the examination of cues and inherent factors influencing user engagement and attitude change. ELM studies in the library domain are scant, and this attempt could push its visibility in the library and information studies field.

Similarly, the Sustainable Social Media Marketing Framework (SSMMF) by Felix et al. (2017) outlined vital management attributes developed for profit-making organisations. These management attributes have a universal application that can be gainfully employed to examine social media management in the library context. There are, however, new attributes in social media management that were not addressed in the model, such as engagement and evaluation. This may have limited the scope of interview questions and perhaps the findings. Nevertheless, future research could build on the SSMMF by leveraging on the elements specifying managements' perception, orientation, and governance of social media.

As the concept of social media marketing and its multidimensional facets grows, the mixed-methods approach seems to be most appropriate for researching this area. Given that the current

study sought to understand the variable factors underlying social media engagement, mixed-methods paved the way for the exploration of the concept with both qualitative and quantitative techniques. The qualitative method was useful for exploring the management factors in greater depth, ultimately providing insight into the framework proposed in the study. In the same vein, the quantitative approach allowed the coverage of greater breadth through the survey of students to understand their needs and preferences about social media.

However, the study could have possibly be undertaken by applying only a quantitative method with questionnaires administered to both students and librarians. A questionnaire survey of librarians would focus on the management theme emerging from reviewed literature that could have been distributed to librarians to consolidate the ideas identified in the literature. Similarly, a qualitative-only approach could also be carried out with the librarians interviewed and the students' responses obtained through focus group discussions. This type of research would enhance understanding of management factors and students' needs and preferences. Also, with the advancement in data analytics, a single study may focus on the data generated as a result of social media communications. The point being conveyed here is that future studies can adopt any other approach depending on scope, intent and the overall research objectives.

Some of the activities undertaken during the research process could have been done differently. First, the review of literature could have been conducted using a systematic technique that could be used to develop a conceptual framework outlining social media management patterns across different libraries and possibly other institutions. Similarly, the process of data collection and analysis could have been carried out simultaneously. This could have strengthened the reflexivity of the research with varying impacts on emerging findings. This route was, however, not taken as it would be a complex approach requiring a lot of resources.

9.5 Further Research

This study adopted a post-positivist approach to understanding managerial factors and student motivation for engagement with the library on social media. Further studies in the following areas would enhance and deepen our understanding of the use of social media in libraries.

- Further research could be conducted to examine the influence of planning, organising and evaluating on library social media goal outcomes. Planning, organising and evaluating are the critical factors in the framework proposed by the current study. Further research on these aspects will be useful to determine the value of the framework proposed in this research and its possible extension. The study will also

serve to improve the understanding of the management role in the planning and organising of social media marketing in the library. As research studies continue to explore contextual management factors around social media marketing, this would undoubtedly be a useful addition to the body of knowledge.

- In this study, it was unclear if the disposition of science-based students towards the library's social media was due to the nature of the discipline or a preconceived attitude about the library. Further research would help to ascertain this alongside other factors such as privacy concerns, age, gender and affordances of specific sites. The current study did not give these factors prime attention, but they were part of a broader topic investigated. However, further studies could individually examine them to determine how they play out mainly in the library context, especially with popular opinion suggesting that they exist. Also, the needs of social media users are constantly changing as tech companies develop new platforms. These changes would influence their social media habits, implying a need for regular empirical evaluation.
- Further studies could expand the selection of institutions to achieve greater diversity. Also, a questionnaire could be used to assess the extent themes uncovered in the findings play out across a broad spectrum of academic libraries. Reflecting on the interviews conducted, it would seem appropriate to recommend further studies that would expand either the number of institutions or the number of librarians participating. This will help to confirm if the managerial factors revealed by the interviews are widespread across several university libraries. Alternatively, survey questionnaires could be distributed as widely as possible to librarians in several institutions such as universities, polytechnics and colleges to examine the themes revealed by the interviews. This could be used for either an exploratory or a confirmatory analysis unveiling further related factors and additional insights beyond what the interviews have revealed.
- Further research may perform an in-depth quantitative analysis of social media data to identify patterns and function and how they influence engagement on social media. This study conducted a descriptive statistical analysis of social media data, but further studies would reveal more insights into social media data. Examples are the correlation between post types (multimedia and text) and levels of engagement, network dispersion and influencers in Twitter and perhaps other social media such as Instagram

and YouTube. This will present interesting findings which could be valuable for practising librarians.

- A comparative study may also be conducted to ascertain the level of acceptance, use and engagement on social media by university libraries in Africa, Asia, Europe and North America. This will uncover best practices and the management factors adopted in diverse geographical settings. There could be some geographical nuances in the level of acceptance and engagement with the library on social media. Some empirical, as well as anecdotal evidence in the literature, reveals that in countries such the United States, United Kingdom and Australia, there is a significant growth in the acceptance and use of social media by libraries. Therefore, cross-geographical research would help to examine these claims while providing evidence for generalising to broader contexts.

9.6 Conclusion

The adoption of social media in university libraries has gained wide acceptance over the years. While some libraries seems to have found a way to navigate these platforms, evidence suggests that many still struggle. This study set out to understand the factors that facilitate sustainable social media engagement. While results reveal that some attitudinal dispositions are prevalent among the student population, many of them are willing to hear from the library on social media albeit unwilling to initiate a conversation with the library on social media. Evidence in the study suggests that management decisions may play a key role in changing this attitude. However, results reveal relatively inadequate management effort and support based on predetermined factors. Evidence from the literature and study findings contributed to the proposed management framework. The attribute of engagement is a significant component of the framework that potentially delivers value to both profit and non-profit organisations. While some studies have focused on organisational structures in the management of social media, others evaluated the perception of social media managers on the subject of engagement. The current study extended this view of engagement. Also, the 'evaluate' factor in the framework represents an extension of the work of Felix et al. (2017), who dwelt more on structure and regulations. However, the management strategies suggested in the framework are an essential tool; librarians communicating via social media should remain open to change.

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Appendix A- Student Questionnaire



Student Questionnaire

1. Which of these social media (SM) platforms do you often use? You may tick more than one box.

- | | |
|---------------------------|--------------------------|
| a. Facebook | <input type="checkbox"/> |
| b. Twitter | <input type="checkbox"/> |
| c. YouTube | <input type="checkbox"/> |
| d. Instagram | <input type="checkbox"/> |
| e. Blogger | <input type="checkbox"/> |
| f. Snapchat | <input type="checkbox"/> |
| g. LinkedIn | <input type="checkbox"/> |
| h. Other (please specify) | |

2. How often do you use these platforms in a day?

- | | |
|----------------------------------|--------------------------|
| a. More than 15 times a day | <input type="checkbox"/> |
| b. Between 10 and 15 times a day | <input type="checkbox"/> |
| c. Between 5 and 9 times a day | <input type="checkbox"/> |
| d. Between 2 and 4 times a day | <input type="checkbox"/> |
| e. Once a day | <input type="checkbox"/> |

3. What do you do on social media platform? Tick according to your level of agreement.

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
a. I use social media (SM) to read trending news	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. I use SM to obtain useful academic information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. I use SM to be entertained	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. I use SM to communicate with family and friends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. I use SM to follow and learn about government activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. I use SM to connect with the library	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. I use SM to connect with my favourite church	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. I use SM to keep in touch with what is happening in the football club I follow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. I use SM to get update about celebrities I follow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. I use SM to participate in online community and groups	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k. Other (please specify)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. What kind of information would you like to receive on social media?

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
a. I would like to receive information about important government projects	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. I would like to receive information about my favourite football club news	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. I would like to receive information about latest movies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

d.	I would like to receive information about church programmes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e.	I would like to receive information about library services and events	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f.	I would like to receive information about happenings on campus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g.	I will like to receive information about NGOs that I follow.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h.	Other (please specify)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5. Have you ever seen posts from the library on social media?

a. Yes ☐

b. No ☐

If **Yes**, continue to the next question, if **No**, move to question 12

6. What do like about library posts you saw on social media?

		Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
a.	I consider the posts to be very informative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b.	The posts contain persuasive words	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c.	The posts appear to be accurate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d.	The posts are relevant to my immediate academic need	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e.	I consider the posts valuable to my studies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f.	I think whoever makes the post is knowledgeable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g.	I consider whoever makes the post to be reliable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h.	The post is made in informal language	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i.	The post is made with aesthetically appealing photos	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

j.	The post always come with nice emoji	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
----	--------------------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

7. Have you ever contacted or interacted with the library on social media?

a.	Yes	<input type="checkbox"/>
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b.	No	<input type="checkbox"/>
----	----	--------------------------

If **Yes**, continue to the next question, if **No**, move to question 9

8. What was the nature of such interaction (**tick as many as are relevant**):

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
a. Inquiry about a library event	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Inquiry about a book, magazine, journal, etc	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Inquiry about a trending news on campus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Inquiry about library opening and closing hours	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Complaint about unsatisfactory library services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Commendation of the effort of librarians	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Other (please specify)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. Do you consider interacting with the library on social media to be a good way of staying in touch?

a.	Yes	<input type="checkbox"/>
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b.	No	<input type="checkbox"/>
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10. Do you have specific **need/preferences** for interacting with the library on social media?

	Strongly Agree	Agree	Undecide d	Disagree	Strongly Disagree
a. Posts from the library should be academically interesting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Library posts should be carefully worded to attract my attention	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Library should post on social media at least 5 times per week	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. I expect to get a rapid response when I contact the library on social media	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. I expect to see links to sites a library mentions in a post	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. I expect library post to bear aesthetically appealing photos	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. I expect the library to post with formal language used in the university	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. I expect the library to post with colloquial and information language that I can relate to	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. I expect to see library post with nice emoji	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11. Based on your needs/preferences, how likely are you going to initiate a dialogue with the library on social media? **Tick only 1 that applies**

a. Completely likely	<input type="checkbox"/>
b. Very likely	<input type="checkbox"/>
c. Moderately likely	<input type="checkbox"/>
d. Slightly likely	<input type="checkbox"/>
e. Not likely at all	<input type="checkbox"/>

12. How likely are you going to respond (e.g. comment, share, like) to library posts on social media? **Tick only 1.**

a. Completely likely	<input type="checkbox"/>
----------------------	--------------------------

b.	Very likely	<input type="checkbox"/>
c.	Moderately likely	<input type="checkbox"/>
d.	Slightly likely	<input type="checkbox"/>
e.	Not likely at all	<input type="checkbox"/>

13. What do you **dislike** about library posts on social media?

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
a. The library is boring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. The library makes too many posts in an already crowded SM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. The library has no business on social media	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. The language used for library posts is too formal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Library social media posts are poorly managed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Other (please specify)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

14. How do you find materials for your course work?

a.	Virtual Learning Environment (VLE) e.g. Blackboard, Moodle	<input type="checkbox"/>
b.	Library catalogue	<input type="checkbox"/>
c.	Google/Google Scholar	<input type="checkbox"/>
d.	Proquest	<input type="checkbox"/>
e.	Web of Science	<input type="checkbox"/>
f.	Library Databases	<input type="checkbox"/>

g. Other (please specify)

15. How likely are you going to do any of these (perceived engagement) if you see social media posts from the library? CL

	Completely Likely	Very Likely	Moderately Likely	Slightly Likely	Not Likely at all
a. I will "like" the post	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. I will "share" the post	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. I will "comment" on the post	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. I will "retweet" the post	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. I will "favourite" the post	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. I will click on the link attached	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. I will ignore the post	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. I will delete the post	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. I will only read the post	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. I will read and carry out actions indicated on a-f according to the platform they apply	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k. I will read and use the post to meet my needs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The following questions are for statistical purposes only:

16. What is your gender?

a. Male	<input type="checkbox"/>
b. Female	<input type="checkbox"/>

17. Which is your course of study in the university?

Course:

Thank you for your time and consideration: your contribution to this research is greatly appreciated.

Would you like to receive feedback about this study? If yes, cut out the slip below and deposit it in another box provided for this purpose.

✂.....
.....

Email address:.....

Appendix B- Interview Guide

Interview Guide

Project Title: Social Media Strategies for Marketing in University Libraries: Undergraduate user attitudes and motivation for engagement

Principal Researcher: Kingsley Ihejirika, PhD Information Systems Student, School of Information Management

Introduction

Thank you for taking part in this research. As you know from the information sheet, as part of my PhD I am exploring how university libraries manage their social media activities and this interview will focus on practices and processes here at your University. I hope you don't mind if I record this conversation.

This research has been approved by the Human Ethics Committee of Victoria University of Wellington.

Interview Questions

- Can you kindly tell me how long you have been with the university library?
- Currently, how active is your library on social media?
 - Is it widely used for marketing and communication?
 - Is social media used mostly for internal communication or external communication or both?
- Tell me about your responsibilities or involvement with regard to the library's social media?
- When did your library start using social media as a mean of communication?
 - **Probes:** How did your library use it to begin with?
 - **Probes:** Who does your library select to make posts?
 - **Probes:** Is any training given?
- What was the main content of library social media posts when you started using it?
 - **Probes:** Has this content changed since then? How? What prompted your library to make a change?
 - **Probes:** Is there any editorial guidance on the kind of posts your library make on social media?
- How do you utilize social media in your library?

- Are they a means for only advertising/promotion or do you use them for communicating, collaborating and interacting?
- Tell me, does your library encourage two-way communication on social media?
 - **Probes:** How much two-way interaction have you had with students?
 - **Probes:** What kind of interaction have you had?
 - **Probes:** What is your perception of how students respond to your library posts?
 - **Probes:** Has your library done anything to improve this response? What is it?
- Do you have any official document or policy that support your library's social media marketing?
 - **Probes:** When was this policy formed?
 - **Probes:** What is the content of this policy?
 - **Probes:** How has this policy document informed your social media marketing activities?
- How does your manage your library social media account/s?
 - **Probes:** Is it/Are they managed by a team?
 - **Probes:** Is it/Are they managed by an individual or does every library staff contribute posts/content?
- Would you say that your library has been successful in the use of social media for marketing purposes?
- Have we missed something you think is important?

Thank you for participating in this interview. If you have any questions about the study, either now or in the future, please feel free to contact me.

Appendix C- Participant Information Sheet

Participant Information Sheet

Research Project Title: Social Media Strategies for Marketing in University Libraries: Undergraduate user attitudes and motivation for engagement

Researcher: Kingsley T. Ihejirika, School of Information Management, Victoria University of Wellington

As part of the completion of my PhD, this study is designed to explore factors affecting sustainable social media engagement between undergraduate students and the university library. Social media has dramatically revolutionized the way people communicate and interact in the 21st century. These tools have opened amazing marketing opportunities and benefits to government and corporate institutions. The academic/university libraries have also benefited immensely. With this in perspective, this research seeks to understand the motivation of undergraduate students to interact with the university library on social media or not, as well as how libraries can better use social media for marketing purposes. To do this, I plan to collect data using interviews alongside other means to investigate the research question posed in this study.

Victoria University requires, and has granted, approval from the School's Human Ethics Committee.

I am inviting librarians who are directly involved in social media activities of their libraries to participate in this research. Participants will be asked to take part in a **1 hour** interview at a time and location convenient to them. Permission will be asked to obtain an audio recording of the interview, and a transcript will subsequently be sent to participants for checking.

Participation is voluntary, and you and your library will not be identified personally in any written report produced as a result of this research, including possible publication in academic conferences and journals. All material collected will be kept confidential and will be viewed only by myself and my supervisors (Dr Philip Calvert and Prof Anne Goulding). The thesis will be submitted for marking to the School of Information Management, and subsequently deposited in the University Library.

Should you wish to withdraw from the project, you may do so within 3 weeks after the interview by notifying the principal investigator (Kingsley T. Ihejirika) via email (kingsley.ihejirika@vuw.ac.nz), and the information provided during the interview up to that point will be destroyed. Hence, the researcher will not send the interview transcript to the participant who wish to withdraw. Data collected from all participants will be destroyed within 5 years after the completion of the project.

If you have any questions or would like to receive further information about the project, please contact me at kingsley.ihejirika2015@gmail.com