The Use of Social Media Technologies (SMT) among Academic Librarians in South-West, Nigeria.

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ABSTRACT

The technological advancement that Social Media Technologies (SMT) has brought to librarianship as a discipline cannot be over emphasized. This study seeks to examine the use of SMT by academic librarians in South-West, Nigeria. The study takes into cognizance SMT use in the area of the Provision of Library and Information Service Delivery to library clienteles; and the Professional development of academic librarians. The study will be underpinned by Unified Theory of Acceptance and Use of Technology (UTAUT) and its constructs will be examined in relation to SMT use behaviour of academic librarians. Survey research method design will be adopted and the study takes complete enumeration of all academic librarians in the six-selected universities. Data will be collected using both questionnaires and interviews. University librarians of the six universities will be interviewed, while questionnaires will be administered to other academic librarians. Quantitative data will be analysed using IBM SPSS while qualitative data from the interview schedules will also be analysed using thematic content analysis. The outcome from the study is expected to improve practice, influence academic community, inform policy and extend theory in the field of SMT use in academic libraries based on a developing country context.

AUTHOR KEYWORDS

Social Media Technologies (SMT); Academic Librarians; Technology Adoption; Technological Innovation; UTAUT

INTRODUCTION

Libraries in developed countries have undergone significant evolution from providing information services through purely traditional manual systems to embrace dynamic technologically driven systems such as SMT [1]. Kai-Wah Chu and Du [2] posits that use of SMT by academic libraries has now become a mainstream in Asia, North America and Europe. Cordova and Vecchione [3] opines that the proliferation of SMT has changed how academic librarians deliver library services to library patrons in industrialized countries. Similarly, McCallum [4] maintains that SMT has afforded academic librarians in the UK, India and USA the opportunity of rendering library services in virtual spaces, opportunity to build a sense of community between the library and its clienteles, offer real-time customer services, enhances library promotion and resources. Furthermore, SMT use has provided support for co-development of library collections, building repositories of collaborative content specific to certain user groups

and help increase academic librarians' online visibility for effective collaboration and optimum research productivity. McCallum [4] affirms that SMT has become the voice of academic librarians within the university institution in developed countries and developing countries should take a cue from this. Thus, Witte [5] called this 'humanization' of libraries using SMT, which is seen as key to utilizing these technologies for the provision of information service delivery to clienteles.

Dalton [6] asserts that the contribution of SMT use for the provision of information service delivery to library patrons is immense and also its advantages for the professional development of academic librarians cannot be overemphasized [7]. Cullen [8] opines that there is a new logic of service innovation, a new understanding of library services and a shift in paradigm to professional development. In all profession, most especially in the library field, professional development is essential [9] where the working environment is rapidly changing due to technological innovations via SMT [10] [11]. Farkas [12] argues that academic librarians both in developed and developing countries should start using SMT to enhance the provision of information service delivery and their professional development. One benefit of SMT for the professional development of academic librarians is in the area of collaboration which has become a key to successful academic research achievement [13]. Which Bradley [11] affirms is been utilised well by academic librarians in developed countries thereby leading to high rate of global visibility of their research. Therefore, Zohoorian-Fooladi and Abrizah [14] emphasised that academic librarians in developing countries should also follow suite since it is now the norm in contemporary academic library setting in 21st-century academic libraries.

The term SMT is defined as computer based-mediated tools that allow people to create, share, or exchange information, career interests, ideas, videos, pictures in virtual communities and networks [15]. Kaplan and Haelein [16] categorised SMT into collaborative tools such as Wikipedia; blog and microblogs such as Twitter; content communities such as YouTube; social networking sites such as Facebook. Cheng, Hupter, Ross and Patterson [17] defined collaborative tools as software designed to facilitate work that involves more than one person. While, Blood [18] referred to blogs and microblogs as a discussion or informational site published on the World Wide Web consisting of discrete entries (posts) typically displayed in reverse chronological order.

Thomson [19] maintained that content communities are sites that organise shared contents and these contents provide the space where conversations between members occur. Blood [18] referred to blogs and microblogs as a discussion or informational site published on the World Wide Web consisting of discrete entries (posts) typically displayed in reverse chronological order. Thomson [19] maintained that content communities are sites that organise shared contents and these contents provide the space where conversations between members occur. While Boyd and Ellison [20] avows that social network site (SNS) is a "web-based service that allows individuals to construct a public or semi-public profile within a bounded system, articulate a list of other users with whom they share a connection, their views and traverse their list of connections and those made by others within the system".

Boyd and Ellison [20] suggests that academic librarians can use SMT to render variety of library services and communicate with 21st-century clienteles, which goes a long way in arousing their constituency's passion for the library and its offerings [21]. Collins and Quan-Haase [22] states that Blogs and Wiki's are used as ideal sources to disseminate news and information to library clienteles. Cooper and May [23] asserts that Flickr, Blogs and RSS feeds are tools for reaching out to students by academic librarians. Also, Draper and Turnage [24] discovered that blogs are used for marketing of library products and services. Similarly, McCallum [4] maintains that YouTube is unparalled in collection development, while Belden [25] affirms that Wikipedia and Myspace are instrumental in promoting digital collections. Furthermore, Matthews [26] states that academic librarians use Twitter to expand the reach of research assistance to users and [27] sustain that Facebook is used to create social media presence of academic libraries. Therefore, Mathews [28] suggest that academic librarians should make use of these technologies to deliver services that are more responsive and attuned to the changing needs of 21st-century library users. Kwanya, Stillwell and Underwood [29] sees SMT as promoting the provision of user-centric library and information services in a dynamic way from anywhere, anytime and in many ways due to the ubiquitous nature of these technologies. Okonedo, Azubuike and Adeyoyin [30] affirms that the use of SMT in academic libraries cover reference services, marketing, selective dissemination of information (SDI), library awareness, document delivery, information literacy, research and training, collaboration, and user services among others.

Furthermore, despite the fact that adoption and use of SMT in university libraries in developed countries such as USA, UK and Australia is pervasive [12], its presence has created a universal medium or pedestal where library users are linked within the shortest period of time in a global realm, thus leading to enhanced and effective provision of library and information service delivery [31]. But Baro, Joyce Ebiagbe and Zaccheaus Godfrey [32] maintains that there is paucity of SMT research in developing countries, most especially in Nigeria [1]. Accordingly, academic librarians in developing countries are lagging behind their counterparts in developed countries in the use of SMT for provision of library and information service delivery and professional development of academic librarians [33]. This may be attributed to a number of factors such as lack of awareness, poor infrastructure and lack of research on the use of SMT in academic libraries [34]. Baro and Godfrey [35] confirms that SMT use is still low in Africa and its impact on the provision of library and information service delivery pales into insignificance. Zohoorian-Fooladi and Abrizah [12] upholds that research is needed to make progress toward understanding SMT use in the provision of library and information service delivery.

Onuoha [36] from the Nigerian context also assert that use of SMT by academic librarians in rendering provision of library and information service delivery and professional development is still limited. This is in alignment with the findings of [37] who state that more than half of academic librarians in Nigeria are yet to have in-depth knowledge of SMT because there is dearth of SMT researches and its application for the provision of library and information service delivery [38] [39].

More also, Miller and Jensen [40] suggests that if academic librarians are to continue to be relevant and serve their users they must be ready to embrace SMT, otherwise users will bypass processes and institutions that they perceive to be slow, unresponsive, unappealing and irrelevant in favour of a more direct approach to services offered by others that just might be "good enough" for what they need to do. This implies that academic librarians have to be proactive in the provision of library and information service delivery via SMT [41], so as to meet the information needs of their 21st-century clienteles [4]. and significantly counter the current library ennui that pervades academic communities [21]. Therefore, this study seeks to investigate the use of SMT for the provision of library and information service delivery to clienteles and professional development of academic librarians in Nigeria.

PRELIMINARY LITERATURE REVIEW

Cuddy, Graham and Morton-Owens [42] states that it is imperative that academic librarians see themselves as technology leaders, quickly adopting and implementing new technologies thereby displaying high rate of awareness. McCallum [4] indicate a high level of awareness among 600 academic librarians based in India, UK and USA. The result indicates that 70% of academic libraries are using SMT, 60% have had a social media account for three years or longer and 30% of academic librarians are posting at least daily. Olajide and Oyeniran [37] in a survey of awareness, knowledge and use of SMT among Nigerian academic librarians using a quantitative method found that more than half of academic librarians were yet to be aware of SMT and in-depth knowledge of SMT is low. Furthermore, findings of the study reveal that Facebook was still the most common social network used. While Skype, Twitter, and LinkedIn were least and the common medium for accessing social media are phones and personal laptops. Also, the usual place of accessing SMT was the library or office, majority of academic librarians had two SMT accounts and they use SMT for social chatting, picture uploading, reading of blogs or postings.

Mabweazara [43] opines that since the introduction of SMT in academic libraries, scholars have been researching common SMT applications and the level of use of these technologies amongst library staff. Kai-Wah Chu and Du [2] in an exploratory study investigating the use of social networking tools in academic libraries, examining the extent of their use, library staff's perceptions of their usefulness, challenges, and factors influencing decisions to use or not to use such tools. Invitations to participate in a web-based survey were sent to 140 university libraries from Asia, North America and Europe and responses were received from 38 libraries (response rate: 27.1%). Twenty-seven libraries (71.1%) used social networking tools, five (13.1%) were potential users and six (15.8%) did not plan to use them at all. Facebook and Twitter were the most commonly adopted tools in university libraries. Most library staff had positive perceptions on the usefulness of social networking tools, but hesitancy among library staff and limited participation of users were perceived to be hindrances. The main aim of the study was to gain a deeper understanding of academic librarians' insights of SMT, and at the same time obtain a wider geographic perspective of SMT adoption and use.

Gupta, Gautam, and Khare [44] avows that SMT has emerged as a powerful tool for use in the provision of library and information service delivery. For example, patrons can receive answers to their reference questions by using Twitter or Instant Messaging (IM), and Chat that are very popular with both academic librarians and patrons [45] [35]. Using SMT, reference questions are answered immediately without the need to go to a reference desk [35] [46]. Stephens and Collins [47] maintains that every academic librarian in developed countries strives to utilize these new tools in innovative and creative ways to ensure delivery of quality services.

The advantages and benefits of using SMT for the provision of library and information service delivery and the professional development of academic librarians cannot be over emphasized [4] [6]. In McCallum [4] survey with international library community, 600 academic librarians were asked to rate a number of opportunities relating to use of SMT by the library, the most significant opportunity amongst those presented was seen to be, to raise the professional profile of the library (72%), followed by the freedom to connect regularly with users (64%) and the opportunity to collaborate with other departments within the organization (57%).

Bell [21] posits that SMT presents a good number of opportunities for academic librarians, but also many challenges. Challenges that McCallum [4] see are the considerable time that is required to maintain an active social media presence, the pressure to respond instantly to service queries, the variability of skills across library staff for using social media effectively. In the survey, when asked to rate a number of challenges relating to use of SMT by 600 academic librarians, the most significant challenge was seen to be time resource (67%), appropriate tone for communications (formal or informal; 64%), and making people aware of the library's SMT activities (61%). Sadeh [27] opines that since the mid-1990s, the expectations and behaviour of library users have been undergoing major changes. The emergence of SMT has reduced users' dependence on library support to fulfil their information needs. But Draper and Turnage [24] observes that the library is striving to meet the needs of redefined library patrons who are mostly digital natives. However, Collins and Quan-Haase [22] affirms that the there is a dichotomy between the perceived benefits of SMT in academic libraries and actual impressions of patrons. While academic librarians have viewed these tools as a method to connect with patrons and in particular students, their sentiments are not necessarily reciprocated by patrons [49] [50].

The recent trend in academic libraries is the use of SMT for the provision of library and information service [35] [51]. Charnigo and Barnett-Ellis [52] examines Facebook and its impact on the digital trend in academic libraries in the USA. They surveyed 126 academic librarians concerning their perspectives towards Facebook.com, an online social network. Part of their findings showed that librarians were overwhelmingly aware of the "Facebook phenomenon." Those who were most enthusiastic about the potential of online social networking suggested ideas for using Facebook to promote library services and events. Though a few respondents reported problems of distractions, majority were excited about the possibilities of Facebook. Chen, Chu and Xu [53] affirms that SMT is a major trend that has revolutionized library service delivery. They maintain that social networking sites (SNS) are helpful for stirring up interactions among users and academic librarians, and the number of academic libraries which adopt SNS is increasing.

It is therefore notable that SMT is revolutionizing the provision of library and information service delivery in developed countries [6] [4] but the reverse is the case in developing countries like Nigeria [54] [35]. Onuoha [36] observe that use of SMT for the provision of library and information service delivery to clienteles and enhancing the professional development of academic librarians is still limited in

Nigeria. Olajide and Oyeniran [37] affirms that more than half of academic librarians in Nigeria are yet to have in-depth knowledge of SMT indicating a challenge been faced in Nigerian academic libraries. Similarly, Collins and Quan-Haase [22] suggests that academic librarians should be interested in library patrons to whom they provide library services via SMT so as to know whether their needs are met. Therefore, the researcher believed that it is pertinent to investigate use of SMT in the provision of library service delivery to clienteles and the professional development of academic librarians in the developing country context, specifically Nigeria.

RESEARCH OBJECTIVE
The purpose of this study is to examine use of SMT in the provision of library service delivery and professional development of academic librarians in South-West, Nigeria. The study addresses the following two main research objectives:

1. To ascertain the extent of use of SMT in the provision of library service delivery and professional development of academic librarians in south-west, Nigeria

2. To identify factors influencing use of SMT in the provision of library service delivery to clienteles and professional development of academic librarians in south-west, Nigeria

In addition, the following broad areas around the research question will be addressed: emerging technologies, technology adoption, acceptance and use, academic libraries, current trend in the adoption and use of emerging technologies in academic libraries in Africa

RESEARCH PROBLEM
Information provision and library services to clienteles are getting richer with emerging technologies in developed countries [20]. This development is a sequel to the paradigm shift from traditional library services to 21st century user-centric library services via SMT [55] [56] that has significantly influenced provision of library and information services by academic librarians in these countries. The effect has brought to fore challenges faced by academic librarians in adding value to clienteles needs more than ever before and likewise in meeting their information needs [57]. McCallum [4] espouses that SMT have been embraced extensively by academic librarians in developed countries thereby changing the phase of library services to clienteles who are mostly digital savvies [48] and also, promoting real time SMT services which are crucial to support curriculum and research [58]. However, the reverse is the case in academic libraries in developing countries such as Nigeria [35].

Established empirical findings have shown that academic librarians in Nigeria are yet to embrace SMT in the provision of library services and professional development [30] [59] [36] [37]. This is maintained by [38] who observe that transition from the traditional library services to online environment for Nigerian academic librarians in the digital age is enormous, given the dynamic nature of SMT which requires continuous research to understand better this phenomenon.

Olasina [33] states that use of SMT in the provision of library service delivery needs to be addressed. Consequently, Akintunde [1] emphasized that until academic librarians in Nigeria embrace these technologies like their counterparts in developed countries, then the general assumption by [60] that academic librarians are inefficient, limited, and obsolete; and there is no relevance of them in the digital age will be correct about academic librarians in Nigeria. Nwezeh [61] Corroborates this by stating that 21st-century clienteles see academic librarians in south-west, Nigeria as incompetent in meeting their information needs and disappointed when their expectations are not met in a timely manner. Also, this raises the observation about lack of interest among clienteles in using academic libraries which has led to low turnout in user patronage [62]. The preceding raises a question about the current academic libraries and academic librarians that pervades academic community in Nigeria, which Adetola and Okeoghene [63] pointed to as not moving with the tide of technological innovations to serve her ever technological savvy clienteles. Baro, Edewor and Sunday [39] attributed this to lack of SMT use in the provision of library and information service delivery to clienteles whose vast majority are digital millennial.

This study will address all the aforementioned issues. It is expected to achieve increase user engagement and interaction with library patrons as libraries are being experienced in developed countries [12]. It will assist in gathering feedback to enhance user services, promote library services and disseminate news quickly by delivering this information more directly to library users anywhere, any how and in different ways. Promotion of library holdings via SMT will help increase usage of library content and will enhance communication both within the library and other departments. The professional profile of academic library and academic librarians will also be raised.

Moreover, it is expected that that it will achieve outreach activities through onward sharing, well beyond the institution itself by helping build connections and reputation more broadly. Hence, non-adoption and use of these technologies requires innovative solutions which this study intends to proffer with quantitative and qualitative data gathered, because the optimization of SMT in the provision of library and information services at this time is crucial if academic librarians want to remain relevance and avoid stagnancy [40]

Contemporary researchers like [64] challenged current and future research to therefore focus on how SMT can be effectively harnessed and used in the provision of library and information service delivery for the overall efficacy of 21st-century academic librarians in Nigeria. Thus, the present study seeks to investigate the use of SMT in the provision of library and information service delivery among academic librarians in South-West, Nigeria.

RESEARCH QUESTIONS

The following research questions will guide the study:
1. What are the SMT used in Nigerian Academic Libraries for provision of library and information service delivery and professional development?
2. How familiar are Academic Librarians with SMT and which one do they use most for provision of library and information service delivery and professional development?
3. What purpose do Academic Librarians use SMT?
4. What are the constraints on the SMT use for provision of library and information service delivery to clienteles and professional development among Academic Librarians?

5. How does UTAUT constructs (Performance Expectancy, Effort Expectancy, Social Influence, Behavioural Intention and Facilitating Conditions) influence SMT Use behaviour of Academic Librarians for provision of library and information service delivery and professional development?
6. What institutional policies guide SMT use in Academic Libraries for provision of library and information service delivery and professional development?

HYPOTHESIS

The following hypothesis will be tested at 0.05 significant levels.

H_{01}: There is no significant relationship between performance expectancy and SMT use behaviour of academic librarians for provision of library and information service delivery and professional development;

H_{02}: There is no significant relationship between effort expectancy and SMT use behaviour of academic librarians for provision of library and information service delivery and professional development;

H_{03}: There is no significant relationship between social influence and SMT use behaviour of academic librarians for provision of library and information service delivery and professional development;

H_{04}: There is no significant relationship between facilitating conditions and SMT use behaviour of academic librarians for provision of library and information service delivery and professional development;

H_{05}: There is no significant relationship between behavioural intention and SMT use behaviour of academic librarians for provision of library and information service delivery and professional development;

H_{06}: There is no significant relationship between voluntariness of use and SMT use behaviour of academic librarians for provision of library and information service delivery and professional development;

H_{07}: There is no significant relationship between age, gender, experience, academic qualification, type of university and SMT use behaviour of academic librarians for provision of library and information service delivery and professional development

RESEARCH METHODOLOGY

Post-positivist paradigm will be adopted for the study because it allows for the combination of quantitative and qualitative approaches, that is, mixed methods [65]. The strength of the mixed method approach lies in its ability to elaborate on the findings of one method with another method thereby allowing for a better understanding of the research problem [66]. Thus, the study will apply mixed methods with quantitative methods predominating over qualitative, to enhance the understanding of the use of SMT among academic librarian in South-West, Nigeria. This study takes on the post-positivist stance as characterized by the purpose of the research which is to investigate use of SMT among academic librarian in South-West, Nigeria (ontology) - that many social realities exist due to the varying human experience including people's knowledge, views, interpretations and experiences, epistemology- that these realities can be explored and constructed through human interactions and the methodology- using mixed methods. Adopting the deductive approach, this study will test theories and hypotheses against new data obtained. The study aims for objectivity by attempting to be non-manipulative and taking into

account the composed views of study participants. Caruth [67] applied mixed methods in studying ICT use among twenty–eight countries. Buabeng-Andoh [68] also in a study on factors influencing the integration of online learning in high schools in Sydney used both quantitative and qualitative methods in data collection and analysis. Quantitative method will be required to capture and represent data solicited from academic librarians numerically through the use of questionnaires while qualitative method will be required to solicit information from university librarians through the use of interview schedules.

The study will elucidate on the use of SMT among academic librarian in South-West, Nigeria. Greenwood [66] noted that this design is useful when not much has been written about the theme, topic or the population being studied, and the researcher seeks to listen to participants and build an understanding based on their perception. So, the design seems suitable for understanding the use of SMT among academic librarians and making recommendations for the integration of SMT policies in academic libraries in Nigeria. Survey method of data collection such as the structured questionnaire will be used to collect quantitative data and semi-structured interview to collect qualitative data on the use of SMT among academic librarian in south-west, Nigeria.

Unified Theory of Acceptance and Use of Technology (UTAUT) is a model of individual acceptance that is compiled from eight models and theories which are Theory of Reason Action, Technology Acceptance Model, Motivation Model, Theory of Planned Behaviour, Combination of –Technology Acceptance Model-Theory of Planned Behaviour, Model of Personal Computer Utilization, Innovation Diffusion Theory, and Social Cognitive Theory [69]. Each of the constructs mentioned in all these theories pertained to one of UTAUT's main constructs and measurement items. The purpose of formulating UTAUT was to integrate the fragmented theory and research on individual acceptance of information technology into a unified theoretical model [69]. To do so, the eight specific models of the determinants of intention and usage of information technology were compared and conceptual empirical similarities across these models were used to formulate UTAUT [69]. UTAUT advanced individual acceptance research by unifying the theoretical perspectives common in the literature and incorporating four moderators to account for dynamic influences, including age, gender, age, voluntariness and experience [69]. Therefore, it seems reasonable to assume that UTAUT could be used to study use of SMT among academic librarians. This study is therefore underpinned by UTAUT.

Since its inception, UTAUT has been used to explain user adoption of a variety of information technologies. Mpoeleng, Totolo and Jubril [70] In their study titled "Perception of University of Botswana Librarians on the potential of SMT tools". The mapping of the result of the survey was in UTAUT. It shows that Librarians' perceptions were investigated through the lens of UTAUT. According to UTAUT, four factors influences use of SMT among academic librarians: Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI).

OPERATIONALISATION OF CONSTRUCTS IN UTAUT

Ho1: There is no significant relationship between the degree to which an academic librarian believes that using SMT for the provision of library and information service delivery and professional development will help him/her attain gain in job performance to his/her use behaviour;

Ho2: There is no significant relationship between the degree of ease associated with the use of SMT by academic librarians for the provision of library and information service delivery and professional development to his/her use behaviour;

H03: there is no significant relationship between the degree to which academic librarians perceives that important others (colleagues, friends, family) believe he/she should use SMT for provision of library and information service delivery and professional development to his/her use behaviour

H04: there is no significant relationship between the degree to which academic librarians believes that an organizational and technical infrastructure exist to support use of SMT for the provision of library and information service delivery and professional development to his/her use behaviour;

H05: there is no significant relationship between the degree to which an academic librarian intends to use SMT for the provision of library and information service delivery and professional development to his/her use behaviour;

H06: there is no significant relationship between the degree to which an academic librarian voluntarily use SMT for the provision of library and information service delivery and professional development to his/her use behaviour;

H07: there is no significant relationship between academic librarian's age, gender, years of experience, academic qualification, type of university to his/her SMT use behaviour of academic librarians for provision of library and information service delivery and professional development.

The South-West geopolitical zone (consisting of Oyo state, Ogun State, Ondo state, Ekiti state, Osun state and Lagos state) was purposely selected because out of the six geopolitical zones in Nigeria, it is the hub of educational activities, thus the most educationally advanced. Six universities were purposively selected in each of the categories of universities, that is, Federal Universities, State Universities and Private Universities. University of Ibadan (UI) and (UNILAG) University of Lagos (Federal Universities), Ekiti State University (EKSU) and (LASU) Lagos State University (State Universities), Babcock University (BU) and (CU) Covenant University (Private Universities).

A study population is a whole group that constitutes the realm of applicability for the research results [71]. Therefore, the sample population will capture all academic librarians in the six universities under study. An academic librarian is a person who holds either a bachelors or master's degree in library studies [72]. The choice of this category of staff is based on the premise that they are the core information providers in the library and great onus lies on them in the provision of library and information service delivery to library clienteles.

A total of (31) academic librarians at UI, (20) at UNILAG, (12) at EKSU, (14) at LASU, (8) at Babcock University and (19) at Covenant University forms the 104-sample population. This population is described in Table 1.

Data in research can be collected using four main methods: questionnaire, interview, observation and examination of documented record [73]. The quantitative data will be sorted, coded and analysed using IBM SPSS because it is suitable for analysing data in the social sciences, allows for easy manipulation of

statistical data [33]. Descriptive statistical method and inferential statistics will be adopted to analyse research data relating to the research questions. However, stepwise multiple regressions will be used for testing hypotheses raised in the study at $\alpha = 0.05$ level of significance so as to provide a means for identifying best predictors of the dependent variable on the basis of statistical criteria.

Table 1: Number of Academic librarians by their designations

Design ation	U I	UNILAG	EKS U	LASU	BU	C U
UL	1	1	1	1	1	1
Deputy UL	3	-	2	1	-	1
PL	9	1	1	2	-	4
RL		1	-	-	-	-
SL	2	3	2	4	1	3
LI	12	5	2	3	2	3
LII	4	4	3	2	-	3
AL	-	5	1	1	3	3
GAL	-	-	-	-	1	1
	31	20	12	14	8	19

Note: PL=Principal Librarian, DUL=Deputy UL,
SL=senior librarian, LI=Librarian I, LII=Librarian II,
AL=Assistant librarian, GAL=Graduate AL

The qualitative data from the interview schedule will be analysed using thematic content analysis. Braun and Clarke [74] maintain that using thematic content analysis offers an accessible and theoretically-flexible approach to analysing qualitative data. Quantitative and qualitative data will be collected through the use of structured questionnaire and interview. The university librarians who are principal heads of the six universities would be interviewed, while questionnaires would be distributed to other academic librarians in the six university libraries.

Reliability and validity will be ensured by using a pilot study. Monette, Sullivan and Dejong [75] suggest that for surveys, 20 people should be contacted. For the purpose of this study, questionnaires will be pre-tested on 20 respondents at the Obafemi Awolowo University, Nigeria. This population for the pre-test was selected because they have similar characteristics with the population to be studied.
Cronbach's alpha coefficient will be used to determine the internal consistency and reliability of the items in the questionnaire. Where the value of the coefficient for the construct is greater than 0.70, it signifies acceptability [76]. Where the value is less than 0.70, the questionnaires will be modified and pretested again before administration to respondents.

An ethical clearance certificate will be obtained and the study will be conducted using the University of Kwazulu-Natal Ethics Policy protocol. Letters of approval has been granted by the researcher from the six universities under study. Participants will be properly informed and briefed on the purpose of the study before the questionnaires are administered and before the commencement of the interview schedules. The ethical requirement as set out by the University of KwaZulu-Natal research policy will be complied with.

EXPECTED CONTRIBUTION

This study is expected to contribute to academic librarians, universities, researchers and the society at large. It will help academic librarians embrace the new technological innovation brought to fore by the use of SMT for the provision of library service delivery to library clienteles. It will improve social interaction, collaboration and knowledge sharing to enhance effective flow of communication among them and enhance their professional development. It will give academic librarians insights to the fact that with the usage of SMT, all sections of the library (Circulation Section, Collection Development, Reference Section, Technical Section, Serial's Section and Automation Section) can work collaboratively to achieving a feat in Librarianship thereby making the profession the cynosure of all eyes. The outcome of this study will be a good roadmap for library schools and the digital library community to see the significance of including SMT into the library curriculum. This is because when academic librarians have inculcated the significance of SMT while in library schools, it will be difficult for them not to practicalise it in performing their professional duties when they get to the field. This is because, it would have become part and parcel of their library routines.

Also, Universities will experience an improved academic environment where researchers, staff and students have easy access to the needed information from academic librarians at the click of a button in the comfort of their offices and residences. It will also contribute to the intellectual development of academic librarians and help in building their online academic profile and global visibility which will put them in a better stead to collaborate with other colleagues globally. Furthermore, it will lead to an improved society as the wealth of information ruling the world is made easily accessible by academic librarians and members of the society do not need to visit the library to be able to access these materials. Basically, because these materials have been made available on the library website through the collaborative task carried out by academic librarians via SMT. So also, reference services are brought to the door steps of members of the society through SMT due to its ubiquitous nature. The study will also assist in creating a national policy framework on SMT use in academic libraries which could be integrated into academic library routines to facilitate library operations in Nigeria university libraries.
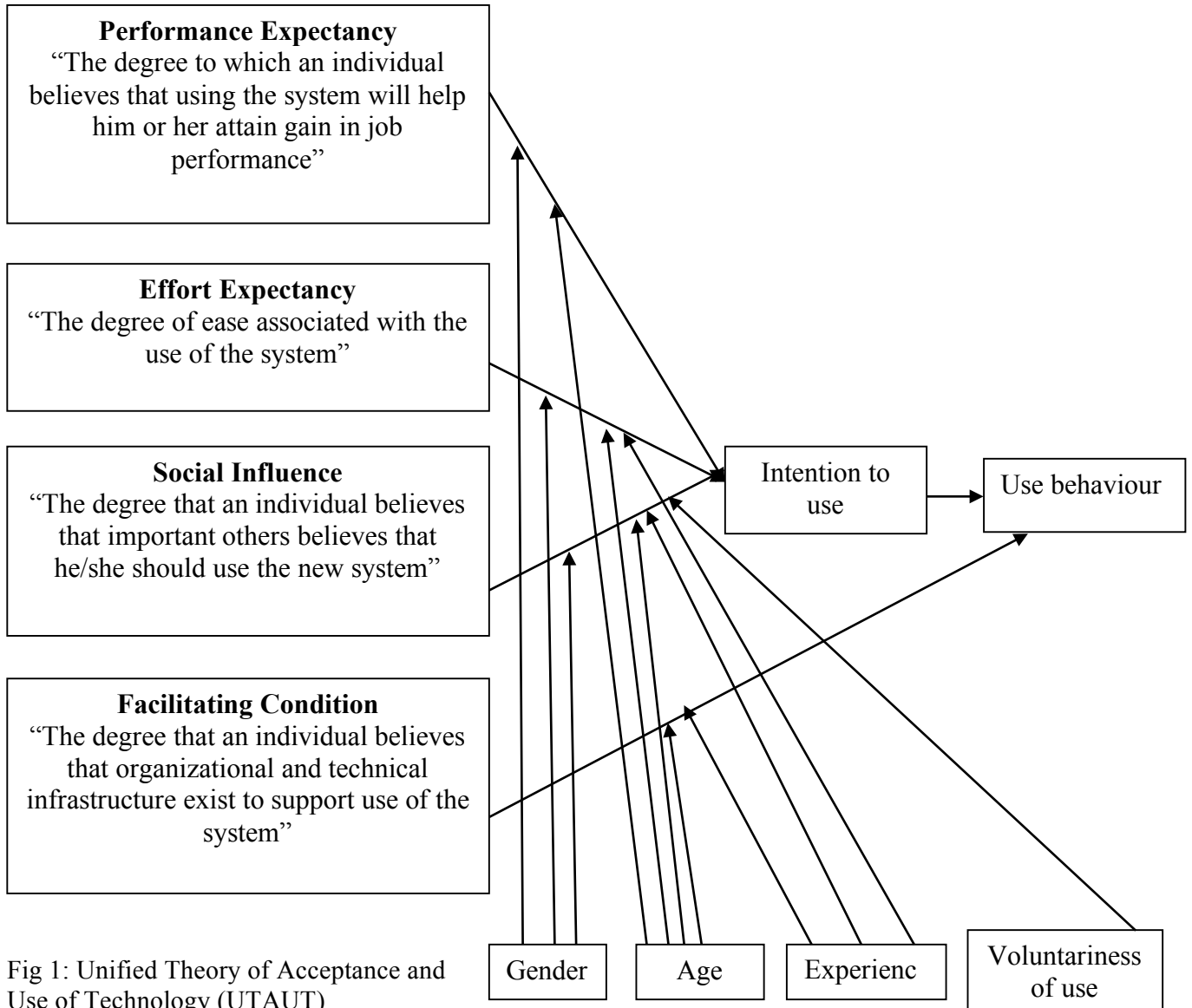
Furthermore, using UTAUT as the theory underpinning this study will extend the frontier of knowledge in the area of research that this study is situated, which is digital library community and librarianship as a whole.

UTAUT will provide a basis for the management of academic libraries to assess the likelihood of success for SMT introduction to library routines and help them understand the drivers of acceptance i.e. training, targeted at academic librarians that maybe less inclined to adopt and use SMT for the provision of library service delivery and professional development. Consequently, the SMT-UTAUT conceptual model will serve as the foundation on which further study on SMT use among academic librarians in Nigeria is built; since it has been discovered from literatures that there is paucity of research in the application of UTAUT theory to the study of SMT use in Nigeria. The findings in this study will have positive implications for the digital native clienteles that the library is serving. These clienteles are said to have adopted SMT in large

numbers [37]; [38]; [39]; [40] and they are expecting that academic librarians should be able to meet all their information needs, anytime and anywhere.

CONCLUSION
The importance of SMT for the provision of library and information service delivery in academic libraries cannot be over emphasised. These technologies are factors of social revolution which is enhancing communication, interaction, have ushered in and steered unimaginable changes in the society at a massive scale. Therefore, it is high time academic librarians embraced these technologies so that it can migrate from providing library services in the traditional way to using SMT to provide a pervasive library service delivery to her clienteles whose vast majority are digital savvies and also improve their research visibility, globally. Great onus, therefore, lies on academic librarians to move from being collection specific to being user-specific which will go a long in redefining academic libraries in Nigeria to 21st-century academic library just like their counterparts in the developed world.

Performance Expectancy
"The degree to which an individual believes that using the system will help him or her attain gain in job performance"

Effort Expectancy
"The degree of ease associated with the use of the system"

Social Influence
"The degree that an individual believes that important others believes that he/she should use the new system"

Facilitating Condition
"The degree that an individual believes that organizational and technical infrastructure exist to support use of the system"

Intention to use

Use behaviour

Gender

Age

Experienc

Voluntariness of use

Fig 1: Unified Theory of Acceptance and Use of Technology (UTAUT)

Performance Expectancy
"The degree to which an AL believes that using the SMT will help him/her attain quality SD and PD in job performance"

Ho₁

Effort Expectancy
"The degree of ease associate with the use of SMT by Academic Librarian for SD and PD"

Ho₂

Social Influence
"The degree to which an AL perceives that important others believe he/she should use SMT for SD and PD"

Ho₃

Ho₄

Facilitating Condition
"The degree to which an AL believes that an organization and technical infrastructure exist to support use of SMT for SD and PD"

Ho₅

Behavioural Intention
"Academic Librarians' intention to use SMT for SD and PD"

Voluntariness of use
"Voluntary use of SMT by Academic Librarians for SD and PD without compulsion"

Use Behaviour
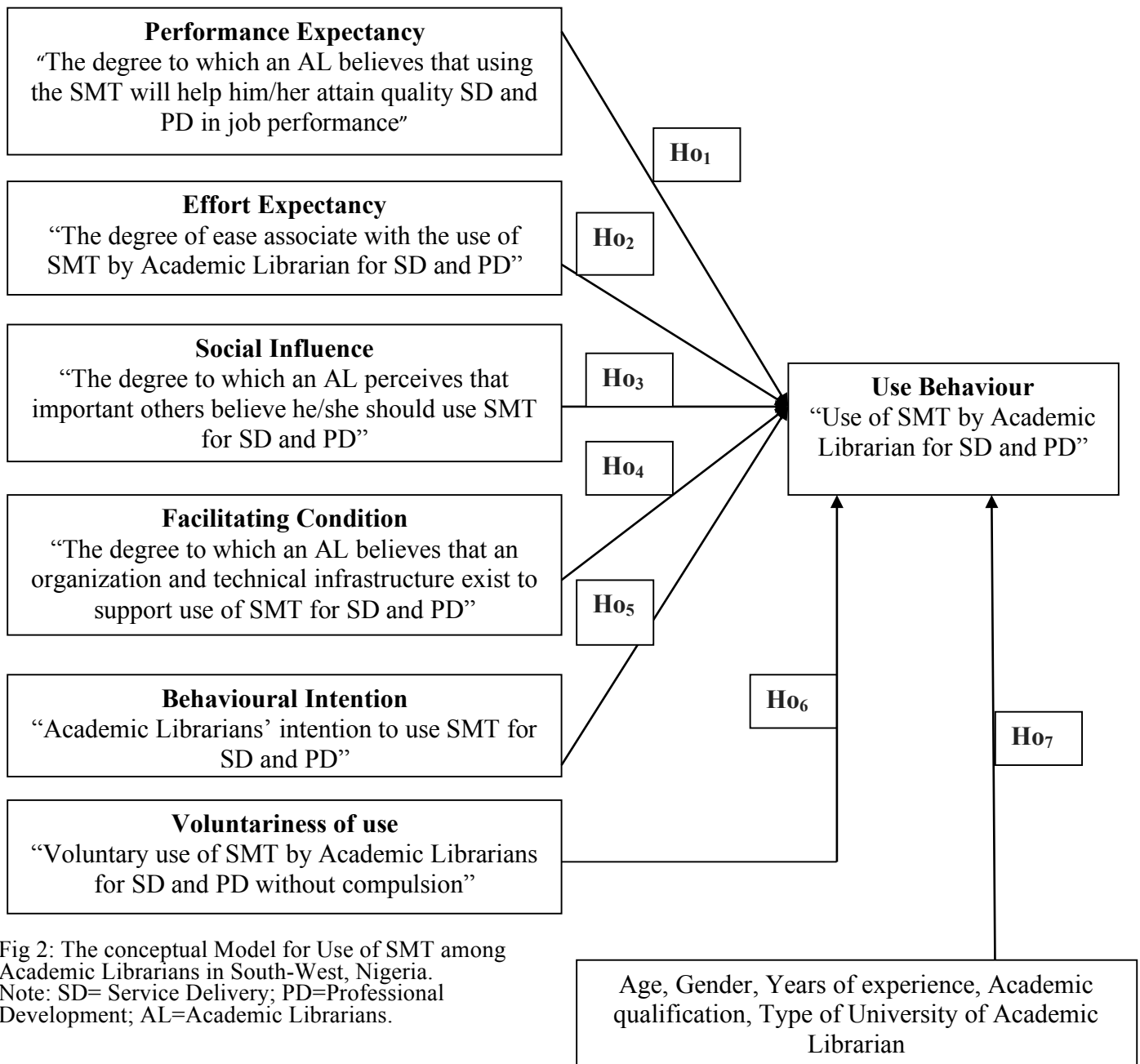"Use of SMT by Academic Librarian for SD and PD"

Ho₆

Ho₇

Fig 2: The conceptual Model for Use of SMT among Academic Librarians in South-West, Nigeria.
Note: SD= Service Delivery; PD=Professional Development; AL=Academic Librarians.

Age, Gender, Years of experience, Academic qualification, Type of University of Academic Librarian

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