Use of Academic Social Networking Sites among Lecturers in State Universities

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Abstract: The study investigated the use of Academic Social Networking Sites among Lecturers in State Universities in South East, Nigeria. The study adopted the descriptive survey design. Four (4) research questions guided the study. The population of the study comprised 200 Lecturers in the five State Universities spread across the five States of South-East, Nigeria. The entire 200 questionnaires were administered to the respondents; all were filled, returned and used for the study because the entire population size was manageable. The major findings of the study were that Google Scholar and ResearchGate were mostly used by the Lecturer. Findings showed that the purpose of using Academic Social Networking Sites is for Knowledge Sharing and Downloading of Articles. The reason Lecturers upload publications in the Academic Social Networking Sites are for Citations, Information sharing and increasing of Views/Reads. The finding also revealed that majority of Lecturers access Academic Social Networking Sites Multiple times a day and also daily. Based on the findings, it was recommended that Lecturers should explore other Academic Social Networking Sites due to their potentials in facilitating research activities, information sharing, collaboration among researchers, knowledge updates and so on.

Keywords: Academic Social Networking Sites, ASNS, Lecturers, Networking Sites, State Universities

1. INTRODUCTION

The digital revolution that brought transformation in social integration and communication has not only influenced business operations and socio-cultural relationships but also has a pull of influence on learning and research activities. With digital revolution in the world of academia, research output is no longer suffering a dead blow as it used to be swept under a shelf with limited visibility and access to scholars in research and learning. This also changed the information seeking pattern of researchers in institutions of higher learning.

The changing paradigm of information seeking pattern of research scholars introduced a ground breaking tools that offer new ways of scholarly communication, collaboration, synthesis of knowledge and information dissemination. Academic Social Networking Sites (ASNS) serve as the flexible Centre for exchange of ideas and open discussions. It also serves as the researchers' meeting point and brings researches together at one place for access by researchers across the globe. Academic Social Networking Sites help scholars in research and learning, find popular topic, collation of resources, collaborative and peer-to-peer learning.

The web technologies have brought profound changes on the ways people interact, with online social networks arguably playing an important role in changing or augmenting how we connect with others. However, uptake of online social networking by the academic community varies, and needs to be understood [1]. In the past few years, when academic social networking sites were new, many academic scholars seemed to be reluctant in using them but currently, the narrative has changed. As opined in [2], academic social-networking sites (ASNS) have become very popular among academics and other researchers. These sites allow uploading academic articles, abstracts, and links to published articles; track demand for published articles, and engage in professional interaction.

Social networking sites available for use are of different kinds connecting people professionally, socially and academically. It was reported in [3] that while social networking sites provide possibilities for collaboration among researchers, it also provides users opportunity for disseminating information across distance.

Hence, the study identifies few of the social networking sites that have evolved over the years which are gaining popularity day by day. They include but not limited to facebook, twitter, instagram, linkedln, mendeley, researchgate, academia.edu, google scholar citation, bibsonomy, zetero, CiteULike, etc.

Academia.edu and ResearchGate which offer professional and social networks to researchers, combining characteristics of social networks with the publication of studies, all adjusted to the needs and comportment of academic researchers [4]. Academic social networking sites also include reference sharing sites such as Mendeley, Bibsonomy, Zotero, and CiteULike which give scholars the ability to publicize their research outputs and connect to each other [5]. The choice of social networking site is based on the nature of communication need. Academic social networking sites (ASNS) such as Academia.edu, Mendeley and ResearchGate are mostly used by research scholars for several services they offer, which according to [6] include collaboration, online persona management, research dissemination, documents management, and impact measurement. Academic social networking sites serves as a vehicle for scholars to promote their research and communicate with other scholars in their field.

1.1 Objectives of the Study
The general objective of this study is to examine the use of academic social networking sites among academic staff in American Universities of Nigeria. Specifically, the study sought to investigate the:

1. Mostly used Academic Social Networking Site by the Lecturers in State Universities in South East, Nigeria.
2. Purpose for which Academic Social Networking Sites is used by the lecturers in

StateUniversities in South East, Nigeria.
3. Reason for uploading publication in ASNSs by the lecturers in State Universities in SouthEast, Nigeria.
4. Frequency of access to Academic Social Networking Sites among Lecturers in State Universities in South East, Nigeria.

1.2 Research Questions
The following research questions were formulated to guide the study:

1. What Academic Social Networking Site is the mostly used by the Lecturers in StateUniversities in South East, Nigeria?
2. What is the purpose of using Academic Social Networking Sites by the Lecturers in StateUniversities in South East, Nigeria?
3. What is the reason for uploading publication in ASNSs by the Lecturers in State Universities in South East, Nigeria?
4. What is the frequency of access to Academic Social Networking Sites among Lecturers inState Universities in South East, Nigeria?

Review of Literature
       Literature is reviewed in this section to unravel how lecturers in the universities utilizes social networking sites especially, those used by researchers for academic purposes. Therefore, literature is reviewed under the following sub-headings:
General Social Networking Sites Academic Social Networking Sites
Usefulness of Academic Social Networking Sites

General Social Networking Sites
       Social networking sites are virtual platforms that make communication between individuals easier and faster, and offer opportunities for collaboration among people without necessarily meeting in person. Since the advent of social networking sites, perspective of people on communication has changed significantly. This technology has broken the barrier imposed to communication by physical distance and has made socialization more interesting and cost-effective as it creates a feeling of physical presence due to its instant ‒send and receive‖ message' capability. Based on observation of certain features contained in different social networking sites, it could be rightly said that some are more academic in nature than others. Nevertheless, our society has seen various social networking sites that are being used by people of all classes and professions including facebook, whatsapp, Linkedln, Instagram, Twitter, Google scholar, Academic.edu, ResearchGate etc. Scholars have exploited social network sites to initiate and lead various types of communication [5]. Social media platforms such as facebook, whatsapp, twitter, badoo, messenger, Google, Instagram, Linkedin etc are not only used by the academics but also used by lawyers as evidence in the court of law [7].
       LinkedIn is one of the most thriving social networking sites being used by both academics and professionals. Although it is predominantly, a professional social network site that connects people from different works of life and facilitates mutual relationships. The aim of LinkedIn is to connect professionals via work relationships mostly through indirect connections [8]. Skeels and Grudin opined that LinkedIn lacks core academic substance, for

instance reference management which renders it little or no usefulness for academic networking due to the fact that disciplines are already defined and structured through conferences, web sites, and academic publications. The assertion above may not be total correct as LinkedIn has recently embraced somewhat academics features by availing patrons the opportunity of listing publications in their profile.

Facebook on the other hand, is a household name when it comes to social network site that is heavily utilized by both academics, professionals and unprofessional without barriers to age, race and socio-cultural affiliations. Facebook seemed to have targeted students as its main user initially before opened its door for everyone to join [9], [10]; [8]. Facebook gained popularity among social networking sites by its usefulness in information dissemination and Information sharing among users [11], [12]. Its Scholars utilize facebook not only to network with people but also to keep updates and create awareness of new articles via wall posts [13], [14].

Facebook also serves as a platform by which group of scholars form a consortium to discuss issues relating to academics and scholarship. Without empirical evidence as regards to the usage patterns of Facebook between faculty and students, it seems younger people tend to be the most predominant users of social network sites [15], [16], [17]. With casual observation, it seems students use social network sites as in Facebook more than faculty and other group of users.

Twitter is another channel of social communication. It seems to be used predominantly for recreational purposes [18], information dissemination [19]; [20]; [21] and also for conversational purposes [22]. Most people that are highly placed in the society seem to use twitter more often for the purpose of engaging their followers and updating them with information. Twitter hash tags provides academics the ability to communicate with colleagues and faculty members easily and quickly around a specific research interest, topic or conference [23]. With respect to information sharing strategy, tweeting published articles also seems to be an effective sharing strategy [24]; [25] and [26].

Academic Social Networking Sites (ASNS)

Academic social networking sites are media platforms that focus on scholarly communication, collaboration and diverse scholarship matters. The study might not be able to review all the academic social networking sites but seemingly popular ones in Nigeria. Among the academic social networking sites that are mostly used by the scholars in Nigeria universities include but not limited to Research Gate, Academia.edu, Google Scholar and Research Gate.

Academic Social Networking Site (ASNS) is defined as ‒an online service, tool, or platform that can help scholars to build their professional networks with other researchers and facilitate their various activities when conducting research [27]. Scholars also posit that Academic Social Networking Sites basically serves as current research information systems widely used to access accurate and up-to-date research information [28].

Focusing on three selected Academic Social Networking Sites, Academic.edu is the first to review. Academia.edu was founded by an Oxford University philosopher as an academic social network site, with the purpose of connecting authors to readers so that it would be easy to send a query on a paper that had just been read [29], [30]. On the side of Research Gate was opined to have similar features but seems to have targeted specific

communities of users in addition to individual academics [31].

Academia.edu

Academia.edu, established by Richard Price in 2008, is a networking site specifically meant for academics. With this site, users can create personal profiles, follow and exchange messages with other users, upload papers, request feedback and track measure papers' engagement/influence through analytics. Academia.edu users can connect with their colleagues from other social networking sites like Facebook, Twitter, Google, etc. through ‒import contact‖ feature [32]. There is also a notification feature that alerts users through email whenever a researcher on their follow list publishes a paper. Academia.edu was designed to encourage and stimulate the publication of studies [33]. The platform includes an analytics dashboard by which users may see the influence and diffusion of their studies in real time [34]. Academia.edu provides an alert service that sends account holders an e-mail whenever a researcher whom they are following publishes a new study, allows readers to tag articles and also alerts anyone who is following a certain topic. In this way the alert system is raising awareness to an article by potential citators [2]. Academia.edu sponsored team conducted a study and discovered that citations of published articles for which alerts were sent increased significantly in the recent time [35]. Despite the large difference between the networks in the number of declared users, the Alexa rank, produced by Alexa.com (www.alexa.com), a company that provides commercial web traffic data analytics, finds ResearchGate and google scholar a bit more popular than Academia.edu [2]. The role of Academia.edu is clearly seen in formal scholarly communication because authors can upload preprints and other documents to their profile. Although Academia.edu seemed to be patronized less when compared with ResearchGate and Google Scholar [36].

ResearchGate

ResearchGate was founded in 2008 by Ijad Madisch, Horst Fickenscher, and Sören Hofmayer. ResearchGate is described as an academic social networking site (ASNS) where researchers network, connect and share knowledge by uploading journal articles, conference papers, posters, data and code to an online repository [32]. ResearchGate, like its counterparts also has analytics feature that enables users to receive analytics on their paper including the number of times their papers have been read and cited by other users on the platform. The ResearchGate and Academia.edu, have similar features. They are basically established for research and academic activities such as sharing studies, articles, and information. Users can also track their publications, see how often they are viewed and cited, and facilitate information exchange. Both allow users to post public queries to the members of the platforms and organize researchers by their institutional affiliation.

Research Gate connects researchers across the globe and offers leveled communication medium where distance and time are no longer a barrier so far as there are computer or smartphone with Internet connectivity. The primary objective of ResearchGate is to create access to studies for purposes of peer review and exchange of ideas [4].

Google Scholar

Google Scholar is an accessible search engine that scholars use to find scholarly

resources. It provides users access to search a wide array of scholarly publications in the form of full-text journals, book chapters, technical reports, conference papers etc. After creating a Scholar profile, users can save their articles in Scholar Library and also import their citations. Google Scholar has Citation's feature which provides a simple way for authors to keep track of citations to their articles. It also contains Metrics feature which allow authors an easy way to quickly gauge the visibility and influence of recent articles in scholarly publications [32].

Google Scholar provides an easy way to conduct search for scholarly literature. It provides a medium to search across many disciplines and sources including articles, theses, books, abstracts and court opinions, from academic publishers, professional societies, online repositories, universities and other web sites. Google Scholar helps you find relevant work across the world of scholarly research. In addition to showing resources like journal articles in our subscription databases, Google Scholar also shows free ─open access‖ and gray literature items (like conference proceedings, organization white papers, etc.) found on the web. In Google Scholar, literature shows that the default sort for results is by relevance ranking, which means articles that are cited the most by others show up higher in the rankings. The relevance ranking in our subscription databases is often Determined by the number of times the search term(s) is found in the metadata. However, Google Scholar can be helpful in finding key or seminal authors on a topic because they will be the most cited. It shows who has cited each work so that you can trace patterns of research. If the older, original article is helpful, it is likely that at least some of the more recent articles that cite the older article will also be helpful in your research. If you are a published author (even in Digital Commons) you can trace those who cite your work. According to Miller, if you are looking for a particular article, but you only know partial information, Google Scholar might bring up what you are interested in by providing only incomplete details [37].

Usefulness of Academic Social Networking Sites

It is obvious that academic social networking sites have transformed the patterns of information publication and sharing in the academic world. The platforms have enhanced collaborations among scholars around the world and influenced the structure and dynamic of the research community. Social media networking platform connects millions of people daily who want to share and explore their activities and interests with others [38]. Official academic publishing is based on acceptance of articles by refereed academic journals - either in print or in online academic databases that are accessible mainly to those who are active in an academic establishment - for which a fee is usually charged. The time that passes between research and the publication of its findings in such a journal is lengthy and may exceed one year. Academic social networks challenge this model and circumvent the hurdles that impede exposure to the public. What is more, they do so easily and at no charge. They encourage authors to upload full-text articles that appeared in academic journals, lectures presented at conferences, and even drafts, and make them accessible to the public [39]. They also allow readers to respond to an article or ask the author about it, thereby encouraging interaction between readers and researchers [5]. The study conducted in [2] on academics' use and perceived utility of ASNSs revealed that ASNSs are primarily being used for information consumption. Similarly, in [40], study was conducted on how academics use social networks in the work-place for communication purposes and they discovered that academics utilize

more of Academia.edu and Mendeley to exchange scientific knowledge ASNSs are also used to achieve effective research collaboration and knowledge transfer both. It offers broad opportunities for establishing linkages among researchers [41]. A study was also conducted in [42] to determine how scholars use academic social networking services. The study revealed that the primary aims for using ASNS were for accessing scientific papers, introducing academic studies and Knowledge sharing. In their study, Bardakcı, Arslan and Unver discovered the most widely used ASNS which include Academia.edu, Google Scholar, and also that the most widely performed operation on ASNSs was ‒Downloading academic papers, Bookmarking, Uploading, commenting on academic papers and Sharing on social media accounts. Academic Social Networking Sites manage personal profile of the account holders, such as particulars such as name, photo, affiliation and other identifying information. Additionally, the platform provides a place where the researcher may present his or her professional experience, qualifications, specialization, and capabilities, including the number of citations and downloads of his or her articles, thereby cultivating an online identity and promoting his or her professional reputation [43]. The platform creates an avenue for account holders to upload articles to the cyberspace. It also provides direct e-mail alerts to interested users whenever a new article is published on the area that they define as of interest to them. It is either the members of the network choose to follow authors of their acquaintance or those whose research topics are of interest to them, or the network itself suggest new articles for the user to follow, either by authors associated with the user's area of interest or those who belong to a circle of direct contacts such as a shared institution or department. In this manner, knowledge about a new article rapidly reaches the community that takes an interest in its topic and, accordingly, may be read [44]. Academic Social Network has encouraged networking and collaboration of research among researchers. It has become obvious in the recent times that one-person research is rapidly diminishing [45]. With the advent of digital technology, the distance barriers are eliminated leading to effective cross-disciplinary and cross-border collaborations. Going by the argument of several scholars, that academic social networks replicate, and in certain cases even enhance the experience of social activity at a conference by helping to create and expand researchers' professional networks [46], [47]. Both the ResearchGate and Academic.edu provide tools (e-mail and internal messaging systems) for direct communication, question and presentation of details for the establishment of personal and professional relations among researchers.

Academic Social Networking Sites (ASNS) serve as a reservoir and digital hub for personal academic information storage and dissemination. It was posited in [45] that ASNS serve as a source for the collection and organization of personal academic information including ideas, drafts, and anything else that a researcher on the network gleans from articles, references, and citations. Based on the feature of ASNS, one might conclude that the platform is simply a collaborative information-management system [48]. To some scholars, while the networks under study (ResearchGate, Google Scholar and Academic.edu provide tools for publication and for the tracking and organization of publications; they are not designed for the management of citations [2]. Academic impact is measured in terms of the number of citations of an article and the quality of the journals in which the article appears. Users of ASNSs upload articles because they offer citation metrics including the number of persons who read or download an article [49] [4].

Research Elaborations

This study adopted a descriptive survey design. The population of the study consists of 200 lecturers selected in State Universities in South East, Nigeria. The sample size of this study consists of 200 lecturers in the university. No sampling was done because the entire population is considered manageable. The instrument for data collection was the questionnaire. Through the help of experienced research assistants, 40 copies of questionnaire were administered to the lecturers in each of the five State Universities, making a total of 200 questionnaires which were completed by the respondents with 100% return rate. Data collected from the respondents were analyzed using frequency counts and percentages.

2. RESULTS

The analyzed data is presented in table, followed by presentation and discussion

Academic Social Network Sites used by the Lecturers in State Universities

Table 1: Frequency and percentages of responses on the Academic Social Network Sites used by lecturers in State Universities (**n=200)**

ASNS	Research Gate		Google Scholar		Academia.edu	
Institution	No	%	No	%	No	%
ABSU	16	8.0	14	7.0	10	5.0
COOU	14	7.0	18	9.0	8	4.0
EBSUT	15	7.5	18	9.0	7	3.5
ESUT	15	7.5	15	7.5	10	5.0
IMSU	17	8.5	16	8.0	7	3.5
Total	77	38.5	81	40.5	42	21.0

Table 1 shows the frequency distribution of lecturers on the academic social networking sites mostly used by universities in south east, Nigeria. Result shows that most university lecturers use Google Scholar with (40.5%) followed by ResearchGate (38.5%) and Academic.edu (21.0%). The findings of this study are similar to that of [42] which showed that the most widely used ASNS which include Academia.edu and Google Scholar. The result tallied also with the findings reported in [40] which showed that Academia.edu is among the most widely used ASNSs by the academics for exchange of scientific knowledge.

Purpose of Using of Academic Social Networking Sites by the Lecturers in State Universities

Table 2: Frequency and percentages of responses on the purpose of using ASNS (**n =200)**

Purpose	Downloading Article		Knowledge Sharing		Collaboration		Staying up-to-date with latest research trend	
Institutions	No	%	No	%	No	%	No	%
ABSU	11	5.5	13	6.5	6	3.0	10	5.0
COOU	12	6.0	12	6.0	9	4.5	7	3.5
EBSUT	12	6.0	14	7.0	8	4.0	6	3.0

ESUT	14	7.0	13	6.5	6	3.0	7	3.5
IMSU	13	6.5	15	7.5	10	5.0	2	1.0
Total	**62**	**31**	**67**	**33.5**	**39**	**19.5**	**32**	**16**

Table 2 shows the purpose of use of Academic Social Networking Sites which ranks Knowledge Sharing highest with total score of 33.5% followed by Downloading Articles (31%); Collaboration (19.5%) and, staying up-to-date with latest research trend (16%). The result is similar with the findings reported in [2] which revealed that ASNSs are primarily being used for information consumption.   Similar to the findings of this study, ASNS was also discovered to be used by the researchers for the purpose of achieving effective research collaboration and knowledge transfer. It offers broad opportunities for establishing linkages among researchers [41]. The findings of a study reported in [42] also supported the findings of this study. Both discovered that the primary aims for using ASNS were for accessing scientific papers, introducing academic studies and Knowledge sharing.

Reason for Uploading Publications in Academic Social Networking Sites

Table 3: Frequency and percentage of responses on reasons for uploading of publications
(n=200)

Reason	Marketing/Publicizing		Downloads		Citations		Views/Reads		Information Sharing	
Institution	No	%	No	%	No	%	No	%	No	%
ABSU	5	2.5	5	2.5	10	5.0	10	5.0	10	5.5
COOU	4	2.0	7	3.5	10	5.0	11	5.5	8	4.0
EBSUT	3	1.5	6	3.0	12	6.0	7	3.5	12	6.0
ESUT	0	0	5	2.5	15	7.5	5	2.5	15	7.5
IMSU	2	1.0	6	3.0	11	5.5	9	4.5	12	6.0
Total	14	7.0	29	14.5	58	29	42	21	57	29

Table 3 shows the reason for uploading of publications in the Academic Social Networking Sites. The result shows that, Citations and Information sharing which rank highest with the total score of 29% are the major reasons for uploading publications into the sites. Other reasons include; Views/Reads (21%), Downloads (14.5%) and Marketing/Publicising (7.0%). In line with the findings in [42], users of ASNSs upload articles because they offer citation metrics including the number of persons who read or download an article.

Frequency of Access to Academic Social Network Sites by the Lecturers

Table 4: Frequency and percentage of responses on access to Academic Social Network Sites
(n=200)

Access	Multiple times a day		Daily		Weekly		Monthly	
Institutions	No	%	No	%	No	%	No	%
ABSU	15	7.5	12	6.0	5	2.5	8	4.0

COOU	12	6.0	10	5.0	10	5.0	8	4.0
EBSUT	13	6.5	12	6.0	10	5.0	5	2.5
ESUT	12	6.0	11	5.5	12	6.0	5	2.5
IMSU	14	7.0	13	6.5	7	3.5	6	3.0
Total	66	33	58	29	44	22	32	16

Table 4 shows the frequency of access to ASNS and findings revealed that lecturers access ASNS Multiple times a day with total score of 33% which is highest, followed by Daily (29%); Weekly (22%); Weekly (16%) and Monthly (13.0%). The finding is in line with the findings reported in [2], result showed that most ASNS account holders visit the sites infrequently (multiple times in a day), once per month, once per week, and the rest on daily basis.

From the result analysis, the major findings of the study are summarized as follows:
1. The result of the study revealed that Lecturers in South East, Nigeria mostly use Google Scholar and ResearchGate
2. The study showed that most Lecturers use Academic Social Networking Sites for the purpose of knowledge sharing, downloading of articles and collaboration.
3. The study discovered that the reasons Lecturers upload publications in Academic Social Networking Site are for citation, information sharing and increase of Read/View of their articles.
4. The study also discovered that Lecturers access Academic Social Networking Sites multiple time a day and also daily.

3. CONCLUSIONS

Academic Social Networking Sites (ASNSs) have made significant contributions in the world of academia. With each platform offering its own combination of tools and capabilities to support research activities, communication, collaboration, and networking; academic researchers seemed to focus attentions to several ASNSs more than others. In Nigeria, most notable sites being patronized by the academic researchers and lecturers include ResearchGate, Google Scholar and Academic.edu. That is not to say that other academic Social Networking Sites are not also in use by these group of users. From the findings of the study, researchers have different objectives of using the sites including the patterns in which they are used. Based on the findings of the study, the following recommendations are made:
1. The lecturers in State Universities in South East, Nigeria should endeavor to explore other Academic Social Networking Sites as these will further facilitate their research activities, information sharing, collaboration among researchers, information consumption and knowledge updates on the trend in academic disciplines.
2. Lecturers should also utilize Academic Social Networking Sites to market and publicize their research output.

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