Web Information Seeking Behaviour of Final Year Students at Babcock University, Nigeria

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Abstract

Purpose: This study was carried out to investigate the web information seeking behavior of final year students at Babcock University, Nigeria.

Design/Methodology/Approach: The descriptive survey research design was adopted for this study. Five objectives and research questions were formulated to guide the study. A multistage sampling technique was used to select a sample size of 303 final year students. A self-designed questionnaire was used for data collection. 303 copies of the questionnaire were distributed with a return rate of 96%. The study used frequency count, percentage and mean score as statistical measures for data analysis.

Findings: The findings revealed that scanning broadly diverse sources on the web/internet (mean=2.46); searching based on specific subject area (mean=2.29); identifying web sites containing information of interest (mean=2.29) are the information seeking strategies adopted. The result also revealed that both general and academic search engines and wikis/blogs were mostly utilized. Furthermore, majority of final year students spend considerably good duration of time web as well as use web information sources for academic purposes.

Implication: Undergraduates, particularly final year students now depend greatly on information sources available on the internet. This has implication for library and information service delivery to undergraduates as they are better engaged via web information services.

Originality/Value: It was recommended that Library and information service providers need to further educate undergraduates through instructional programs how to better source for information web to satisfy their information need. Also Management of universities should seek ways of improving the internet infrastructure in their institutions.

Keywords: Developing Countries; Babcock University; **I**nformation Seeking Behaviour; Nigeria; Undergraduate Students; Web information seeking.

Paper type: Empirical

Introduction

Information is a vital resource required by all people to successfully conduct their work. This prompts the need to indulge in information seeking. Information seeking is a basic activity indulged in by all people to successfully execute their work or decision activities. Information seeking is a process that requires an information seeker to search through various sources or channels in order to acquire or extract relevant information that satisfies the present needs (Ikoja-Odongo and Ocholla, 2004). Information seeking by undergraduate is prompted mostly by their academic activities such as assignment, research and examinations. In past decades, undergraduates depended on the library as an information source to satisfy their information needs, but 21st century which is characterized by advance in internet or web technology has changed the way they seek information. They have shown preference for web information sourcing rather than using other conventional sources such as libraries and other printed information sources. In addition, most undergraduates today spend a significant amount of time on the Internet for various purposes. Owolabi (2007) notes that undergraduates use the internet as the major source of information for their academic development other reasons for web or internet use by undergraduate includes but not limited to social interaction, gaining personal and development information and so on.

Statement of the Problem

Academic libraries now make huge investment in the provision of web information sources just to support the academic activities of their students and faculty. Evidences exist that the advent of internet has changed the way undergraduates interact as well as seek information; perhaps there are few empirical evidence on undergraduates' web information seeking behaviour to serve as a guide to web information provision as well as serve as a justification for this trend in the academic libraries. Consequently final year students' web information seeking behaviour was investigated.

Objectives

The main objective of this study is to examine the web information seeking behaviour of final year students at Babcock University. Specifically, the study ascertained the web information seeking strategies, extent to which web information sources are utilized, duration of time spent on the internet, purpose for using web information sources and barriers to web information seeking by final year students at Babcock University.

Literature review

Information Seeking Behaviour

Information seeking behavior is a broad term used for describing a set of activities indulged in by individual to express their information needs, seek information, evaluate and select information, and then use such information to satisfy their information needs. Information seeking is primarily the consequences of a felt information need by users who make demands or queries to either formal or informal information sources just to satisfy their information needs (Boadi and Letsolo, 2004).

The growth of internet and the World Wide Web has created a new scientific communication system with new facilities that are competing with the traditional sources of information such as humans, books, journals, libraries and the likes. According to Eynon and Malmberg (2012), information seeking is one of the most popular web activities for young people and can provide an additional information channel, which may enhance learning. Information seeking in the web environment differs from traditional information retrieval contexts in terms of interfaces, search models, and document collections (Jansen & Pooch, 2001). According to Agbonlahor (2005) a number of factors such as ease of use of system, and users' beliefs, perceptions and training, have been cited as contributing to user acceptance and effective usage of a computer – based information systems.

CIBER (2007) described the main characteristics of web information seeking behaviour in a virtual or digital environment as: horizontal information seeking - where people view just one or two pages from an academic site and then "bounce" out, perhaps never to return; navigation - spending a lot of time simply finding their way around, in fact they spend as much time finding their bearings as actually viewing what they find; viewers - an average user spend very short period of time on electronic book and electronic journal sites downloading especially when there are free offers. There are diverse information seekers in terms of geographical location, gender, type of university and status.

Hölscher and Strube (2000) conducted interviews on a small sample of 12 web users and described a small number of web search behaviours as: following hyperlinks, using search engines (opening a search engine, generating a query, examining results, select document or reformulating query) and going to a known website directly. Also, the study demonstrates the dominance of search engine use in web search behaviour. Similarly, Broder's (2002) categorized search strategies into three: navigational, where the user's goal is to reach a specific Web site; informational, where the user's goal is to find information thought to exist on some Web page; and transactional, where the user's goal is to perform a Web-based activity. It is noteworthy that each type of strategy is motivated by different goals, search engines must be able to support all strategies.

On the other hand, researches such as (Spink et al, 2001) has assessed the use of specific search engines. Such studies are particularly useful in describing what search strategies users of popular search engines are likely to use (e.g. Boolean search terms, single word search terms, multiple word search terms, whole sentences, etc.), how users change search terms (e.g. making them longer, making them shorter, changing altogether, etc.), as well as which results users choose.

Observational studies by CIBER have shown that young people scan web pages very rapidly (boys especially) and click extensively on hyperlinks – rather than reading sequentially. Users make very little use of advanced search facilities, assuming that search engines "understand" their queries. They tend to move

rapidly from page to page, spending little time reading or digesting information and they have difficulty making relevant judgments about the pages they retrieve.

In the digital era, web information searching increasingly serves as the first option for people who want to find information, especially students. Lenhart, Madden, & Hitlin (2005), they are more engaged in activities like communication, education, and entertainment purposes. Not only do students gain knowledge and information on the Internet, they also engage their friends in social conversation and participate in cyber communities (Ito, Horst, Bittanti, et al., 2008). The majority of adolescents today use the Internet intensely to communicate with existing friends (Gross, 2004) and to make new friends (Wolak, Mitchell, & Finkelhor, 2002).

It is noteworthy that Individuals can engage in information seeking using various strategies. Some people may plan and structure their searches, while others gather information in a more flexible and spontaneous fashion. This information seeking strategy may be because of the context to which information is used or the individual's inner processes and need (Heinström, 2003).

Factors affecting the students' information seeking behaviour

Selecting credible information from among the various available resources is a challenge for anyone. The kinds of challenges may, however, differ for adults and for young people. For instance, adult information seekers are likely to select information when they think it is accurate, current, novel, objective, reliable, authoritative, trustworthy, understandable, well written, comprehensive, easy to obtain, and on topic (Maglaughlin and Sonnenwald, 2000). Young people, on the other hand, often mainly consider whether information is related to the topic and whether it is new, interesting, and convenient, while showing less interest in authority, the readability of the language, and recency (Hirsh, 1999).

In general, students report the following barriers to obtaining information: lack of time, lack of access to information and lack of searching skills. Although a detailed analysis of the fact is beyond the scope of this review, demographics of the nursing workforce and the number of years' exposure to web resources are

undoubtedly factors in how comfortable a nurse is likely to feel with searching for web information. Other barriers reported include the perception that the library was only for physicians. Once the information is found, some students believe they do not have the necessary skills to appraise the information critically. Onuoha and Obiako (2013) identified inadequate time as one of the challenges to information seeking by first and final year students of Babcock University. But studies on internet use notes that undergradates spend considerable time period online via their internet capable handheld device engaging in activities communication, social interaction and knowledge update (Adetoro and Sodipe, 2013).

Without the Internet, users might not be able to access these web resources. On crucial factor in relation to the web information seeking and use among students is internet connectivity. Research has revealed that slow network speed and reliability are real barriers to using e-resources.

Methodology

The descriptive survey research design was used for the study. The study's population is made up of 2433 final year students at the undergraduate level of Babcock University Ilisah-Remo, Ogun State, Nigeria. Using a three stage random sampling technique (303) undergraduate final year students were selected and consequently participated in this study. A self- designed questionnaire titled "Web Information Seeking" was used for data gathering. The researchers were able to retrieve 290 copies of questionnaire administered representing 96% response rate. Data was analyzed using the descriptive statistics including frequency count, percentage, mean score and standard deviation.

Results

RQ 1: What are the web information seeking strategies adopted by final year students of Babcock University?

Respondents were asked to identify web information seeking strategies they use. The findings revealed that scanning broadly diverse sources on the web/internet (mean=2.46) was the topmost strategy used by final year students. Other strategies used in order of importance include searching based on specific topic or subject area (mean= 2.29); identifying web sites containing or pointing to information of interest (mean=2.29); following links on starting pages

to other content-related sites (mean=2.29). Other less notable strategies used by final year students were joining chat rooms for discussion on

related topics (mean=1.87) and following discussion threads on topic of interests (mean=1.99).

Table 1: Web information seeking strategies of final year students

S/N	Web information seeking strategies n=290	Very true	True	Not true	Mean	S.D
1.	Scanning broadly diverse sources on the web/internet	150 (51.7%)	122(42.1%)	18 (6.2%)	2.46	0.61
2.	Searching based on specific topic or subject area	126 (43.4%)	123(42.4%	41(14.1%)	2.29	0.70
3.	Identifying web sites containing or pointing to information of interest	113 (939.0%)	147(50.7%	30(10.3%)	2.29	0.64
4.	Following links on starting pages to other content-related sites	128 (944.1%)	117(40.3%)	45(15.5%)	2.29	0.72
5.	Browse in pre-selected sources on pre- specified topics of interest	95 (32.8%)	166(57.2%)	29(10.0%)	2.23	0.61
6.	Using links on a website	102 (35.2%)	145(50.0%)	43(14.8%)	2.20	0.68
7.	Systematically searches a local site to extract information of interest at that site	108 (37.2%)	130(44.8%)	52(17.9%)	2.19	0.72
8.	Systematic gathering of information about an issue, following some method or procedure	96(33.1%)	149(51.4%)	45(15.5%)	2.18	0.68
9.	Selecting useful pages by bookmarking, printing, copying etc	115 (39.7%)	113(39.0%)	62(21.4%)	2.18	0.76
10.	Subscription to e-mail alerts	120 (41.4%)	98(33.8%)	72(24.8%)	2.17	0.80
11.	Typing of URL in the address bar	96 (33.1%)	141(48.6%)	53(18.3%)	2.15	0.70
12.	Using the menu on a website	100 (34.5%)	132(45.5%)	58(20.0%)	2.14	0.73
13.	Scanning top-level pages: list, headings, site maps	98 (33.8%)	123(42.4%)	69(23.8%)	2.10	0.75
14.	Revisiting favorite or bookmarked sites	93(32.1%)	131(45.2%)	66(22.8%)	2.09	0.74
15.	Scanning text on a website (using keywords, headings)	79 (27.2%)	147(50.7%)	64(22.1%)	2.05	0.70
16.	Receiving site updates via alerts or subscriptions	98 (33.8%)	107(36.9%)	85(29.3%)	2.04	0.79
17.	Reading text on a website verbatim	86 (29.7%)	120(41.4%)	84(29.0%)	2.01	0.77
18.	Choosing differentiated, pre-selected site	80 (27.6%)	131(45.2%)	79(27.2%)	2.00	0.74
19.	Following discussion threads on topic of interests	78 (26.9%)	130(44.8%)	82(28.3%)	1.99	0.74
20.	Joining chat rooms for discussion on related topics	73 (25.2%)	105(36.2%)	112(38.6%)	1.87	0.79

RQ 2: To what extent do final year students use web information sources at Babcock University?

Respondents were asked to indicate the extent to which they use web information sources. The findings revealed that majority of the respondents, used the general search engines (mean=3.52). Other web sources used include academic search engines (mean=3.32); Wikis, e.g. Wikipedia/Blogs (mean=3.29); Web references e.g. encyclopedia (mean=3.12). other less notable web information sources used by the

final year students were Publishers' websites (mean=2.56) and academic web discussion forum (mean=2.41)

The above result showed that both general and academic search engines and wikis/blogs were mostly utilized by the final year students when seeking information web. Unfortunately, specialized academic sources like academic web forum and publishers' website were least utilized.

Table 2: Extent of use of web information sources

S/N	Web Information Sources	Highly utilized	Utilized	Rarely utilized	Never utilized	Mean	S.D
1.	Search engines, e.g. Google, Ask.com, Yahoo	193(66.6%)	64(22.1%)	24(8.3%)	9(3.1%)	3.52	0.78
2.	Academic search engine sites, e.g. Google scholar	157(54.1%)	84(29.0%)	35(12.1%)	14(4.8%)	3.32	0.87
3.	Wikis, e.g. Wikipedia/Blogs	148(51.0%)	97(33.4%)	26(9.0%	19(6.6%)	3.29	0.88
4.	Web references (e.g. dictionaries, encyclopedia, e-notes)	115(39.7%)	116(40.0%)	38(13.1%)	21(7.2%)	3.12	0.90
5.	E-books	99(34.1%)	103(35.5%)	64(22.1%)	24(8.3%)	2.96	0.95
6.	Web serials e.g. Journals	83(28.6%)	127(43.8%)	55(19.0%	25(8.6%	2.92	0.90
7.	School website	87(30.0%)	107(36.9%)	65(22.4%)	31(10.6%)	2.87	0.96
8.	Library website	71(24.5%)	97(33.4%)	67(23.1%)	55(19.0%)	2.63	1.05
9.	Web databases (e.g., SCIENCE DIRECT, JSTOR, ERIC, PUBMED)	67(23.1%)	88(30.3%)	89(30.7%)	46(15.9%)	2.61	1.01
10.	Web library catalogues, e.g. OPAC, OCLC, Library of Congress catalogue	77(26.6%)	73(25.2%)	87(30.0%)	53(18.3%)	2.60	1.07
11.	Publishers' websites (Emerald, Elsevier, etc)	69(23.8%)	83(28.6%)	79(27.2%)	59(20.3%)	2.56	1.06
12.	Academic Web discussion forum	63(21.7%)	73(25.2%)	74(25.5%)	80(27.6%)	2.41	1.11

RQ 3: What is the duration of time spent web per week by the final year students at Babcock University?

Respondents were asked to indicate the duration of time spent web per week. As expected finding revealed in figure 1 that majority spend 7-9 hours (35%) web, this is followed by 4-6 hours

(25%). Least number of respondents indicated that they spend 1-3 hours (19%) web. This may imply that majority of final year students spend considerably good duration of time web. This may be due to the extent of academic work at this level or the proliferation of the internet capable hand held devices

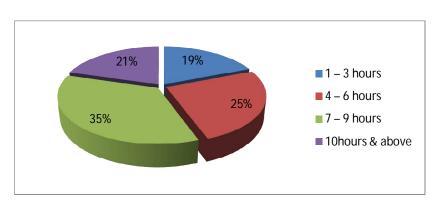


Figure 1: respondents' duration of time spent web

RQ 4: For what purpose do the final year students make use of web information sources? Respondents were asked to indicate the purpose or reasons for using web information sources. Findings from table 3 revealed that majority of the respondents use web information sources to complete their class assignment (mean=3.57);

write project and research (mean=3.52) and to update knowledge (mean=3.41). The least reasons for using web information sources among final year students were to prepare for examination (mean=3.17) and to prepare class note(mean=3.08). This implies that final year students use web information sources for basic academic activities.

Table 3: Purpose of use of web information sources

S/N	Reasons for Web information use	Strongly Agree	Agree	Disagree	Strongly Disagree	Mean	S.D
1.	Complete assignments	188(64.8%)	84 (29.0%)	14(4.8%)	4(1.4%)	3.57	0.65
2.	Write projects and research	188(64.8%)	72(24.8%)	23(7.9%)	7(2.4%)	3.52	0.74
3.	To update my knowledge	136(46.9%)	142(49.0%)	6(2.1%)	6(2.1%)	3.41	0.64
4.	For entertainment	160(55.2%)	94(32.4%)	20(6.9%)	16(5.5%)	3.37	0.84
5.	To get facts for discussions and debates	138(47.6%)	117(40.3%)	23(7.9%)	12(4.1%)	3.31	0.79
6.	Write term papers	121(41.7%)	118(40.7%)	35(12.1%)	16(5.5%)	3.19	0.85
7.	Prepare for examinations	117(40.3%)	123(42.4%)	33(11.4%)	17(5.9%)	3.17	0.85
8.	To prepare class notes	103(35.5%)	129(44.5%)	37(12.8%)	21(7.2%)	3.08	0.88

RQ 5: What are the challenges of web information seeking faced by final year students at Babcock University?

Respondents were asked to indicate the challenges they face while seeking information web. The findings in table 4 revealed that poor internet connectivity (mean=3.22) is a major challenge faced as regards web information

seeking. This was closely followed by Information gathered being too advanced or not applicable to present need information (Mean=3.18), lack of access to ICT facilities (mean=3.05) and inadequate technological facilities to use (mean=2.95). On the other hand, just a little above average expressed Low level of ICT skills (mean=2.50) as a challenge.

Table 4: Challenges to web information seeking

S/N	Challenges	Strongly Agree	Agree	Disagree	Strongly Disagree	Mean	S.D
1.	Poor internet connectivity	156 (53.8%	75(25.9%)	26(9.0%)	33(11.4%)	3.22	1.02
2.	Information gathered are either too advanced or not applicable to my present need	138(47.6%	92(31.7%)	35(12.1%)	25(8.6%)	3.18	0.95
3.	Lack of access to ICT facilities	115(39.7%	109(37.6%)	31(10.7%)	35(12.1%)	3.05	0.99
4.	Inadequate technological facilities to use	115(39.7%)	87(30.0%)	46(15.9%)	42(14.5%)	2.95	1.07
5.	Web information seeking is very time consuming	94(32.4%)	97(33.4%)	63(21.7%)	36(12.4%)	2.86	1.01
6.	Inability to evaluate the usefulness of information gathered web	65(22.4%)	132(45.5%	52(17.9%)	41(14.1%)	2.76	0.96
7.	Low level of ICT skills	74(25.5%)	80(27.6%	52(17.9%)	84(29.0%)	2.50	1.10

Discussion of Findings

In the internet age, web information seeking behavior is a paramount issue that must be understood for proper information service provision. Specifically, understanding final year students' information seeking behavior provides structures for providing web information to support their academic activities.

From this study, it was observed that among final year students, scanning broadly diverse sources on the web/internet (mean=2.46) was the topmost strategy used. Other strategies used include searching based on specific topic or subject area (mean= 2.29); identifying web sites containing or pointing to information of interest (mean=2.29); following links on starting pages to other content-related sites (mean=2.29). This corroborates the findings of Choo et al (2000)

and Hölscher and Strube (2000). Web search behaviours include following hyperlinks, examining page headings and viewing site maps, using search engines and going to a known website directly.

The findings further shows that majority of the respondents, used the general search engines (mean=3.52). Other web sources used include academic search engines (mean=3.32); Wikis, e.g. Wikipedia/Blogs (mean=3.29); Web references e.g. encyclopedia (mean=3.12). This suggests that both general and academic search engine and wikis/blogs were mostly utilized by the final year students when seeking information web. Unfortunately, specialized academic sources like academic web forum and publishers' website were least utilized. This finding is in line with the findings of Kumar (2013) and Choo (2000), Google search engine,

using "portal" sites, intranet homepages and going directly to pages of interest were identified as common web information search tools.

Further, respondents spent 7-9 hours(35%) web, this is followed by 4-6 hours (25%). This suggests majority of final year students spend considerably good duration of time web. This finding is in agreement with Adetoro and Sodipe (2013) notes that students use the Internet regularly at least several times per week particularly from mobile devices.

Furthermore, majority of the respondents use web information sources to complete their class assignment(mean=3.57); write project and research (mean=3.52) and to update knowledge (mean=3.41). This may imply that final year students use web information sources for educational purposes. This finding was supported by Onuoha and Awoniyi (2011); Kumar (2013) and Onuoha and Obiako (2013) noted that knowledge update, research, preparing for examinations and doing assignments constitute the major purposes for web information seeking.

Poor internet connectivity (mean=3.22), Information gathered being too advanced or not applicable to present need information (Mean=3.18), lack of access to ICT facilities (mean=3.05) and inadequate technological facilities to use (mean=2.95) constituted major challenges to web information seeking behavior by final year students. This suggests the need for improved internet infrastructure and training on how to gather relevant information. This is in line with the findings of Onuoha and Obiako (2013).

Conclusion and Recommendation

The overwhelming embrace of the internet by the young generation now referred to as "Net generation" has changed the way they perform their day-to-day activities. Undergraduates, particularly final year students now depend on greatly on information sources available on the World Wide Web or internet. This has also has changed the way they seek information. This has implication for library and information service delivery to undergraduates as they are better engaged via web information services. Therefore the study recommends the following:

1. Library and information service providers in Nigerian institutions of higher learning need to further educate undergraduates through instructional

- programs how to better source for information web to satisfy their information need.
- Library management should look at providing web information services to undergraduates in order to satisfy their information need
- 3. Management of Institution of higher learning in Nigeria must seek ways to improve internet connectivity and infrastructure and it access.

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