

Users Attitude towards Use of Smart Phones to Access Information: A Case Study of PG Students' of Bodoland University in Kokrajhar, Assam

Manoj Kumar Verma and Krishna Brahma

Department of Library & Information Science, Mizoram University, Aizawl, Mizoram, India

E- Mail: manojdlis@mzu.edu.in, krishnabrahma255@gmail.com

(Received 19 May 2018; Revised 11 June 2018; Accepted 25 June 2018; Available online 9 July 2018)

Abstract - The purpose of this study is to investigate users' attitude towards the use of smart phones to access information by the students of Bodoland University in Kokrajhar, Assam. It is carried out in order to know the extent of use of the mobile phone for accessing library services and other information. A survey has been conducted in which random sampling technique has been applied for the collection of data i.e., 250 PG students of Bodoland University were asked to fill the structured questionnaires and in the same day, duly filled-in questionnaires were collected. The data were analyzed and presented in the form of tables and graphs. From the study, it revealed that the population taken for the study are all using smart phone, majority are using since 5 years, total 14 different brands were used, in which Samsung was popular among the mentioned brands and PANASONIC, NOKIA and Karbonn are the least used brand by the respondents, majority uses phone for the purpose of accessing information, paid internet service is mostly used and indicated 4G as most preferred paid internet service. It also examined the frequency of using smart phone. The study found that majority 192 students are not using smart phone for accessing any library services, only 58 students are recorded of accessing library services mostly for the purpose of searching books or checking catalogue and 46% students are satisfied, 44% are highly satisfied and the least 10% are partially satisfied.

Keywords: Smart phones, online information, user's attitude, PG students, Bodoland University, Kokrajhar

I. INTRODUCTION

People use mobile technology for communication, learning, transportation, etc., in their everyday lives. These mobile devices have become affordable and hence are within reach of the masses. They have also introduced a variety of new tools that improve user-friendliness to the extent that they can even support education. Likewise, developments in wireless communication networks such as the 3G/data card, data bundles, Bluetooth, Wi-Fi and general packet radio service (GPRS) further extend opportunity for mobile technology users [8]. Mobile communications are transforming how people search, receive, and interact with information on a daily basis. These mobile tools provide portable access to the world of information across boundaries of subject, discipline and organization [9]. The recent advances in wireless technology infrastructure and devices have decreased the accessibility, cost and consequently increased their adoption across society layers and countries. The number of people who own smart phones around the world has increased tremendously. Since smart

phone allows individuals to access the internet anytime and anywhere, they are emerging as a critical tool to narrow the digital divide [7]. Mobile technology is the portable modern devices which are handy easy to carry for accessing and sharing of information and has become the habitual activity of people. With the help of an internet, the use of smart phone has broadened the communication channels which allows business professionals, academicians, students to share information, photographs, instant messages and to connect people all over the world. This paper gives information about the students of Bodoland University on the use of smart phone for accessing information situated in Kokrajhar, Assam.

II. OVERVIEW OF BODOLAND UNIVERSITY, KOKRAJHAR, ASSAM

Bodoland University was set up as a campus of Gauhati University in the name and style of 'Gauhati University, Kokrajhar Campus' in 1997 and was upgraded into full-fledged state university as per the provision of the Act in 2009. It is a state university located in Debargaon, Kokrajhar, Bodoland, Assam, India, which is the first and only university in Bodoland Territorial Area Districts (BTAD) region. Presently there are six numbers of schools functioning under Bodoland University. It caters to the educational need of the people, not only Bodoland area but also the adjoining states and nations like Bhutan, Nepal, and Bangladesh [3]. Kokrajhar district is an administrative district in B.T.A.D. (Bodoland Territorial Area Districts), Assam and is inhabited by the Bodo tribe. It is located on the northern bank of the Brahmaputra river. It also shares a boundary with Bongaigaon (Chirang), Dhubri, West Bengal, Barpeta and Bhutan.

III. LITERATURE REVIEW

Cummings, *et al.* [4] conducted a study on use of handheld mobile devices their impact and implications for library services and the study indicated that total 58.4 percent of respondents would use small screen devices, like PDAs or web-enabled cell phones to search library OPAC, 37.4% respondents neither they owned a web-enabled cell phone, nor a PDA, while 7.8 % are unsure. Dresselhaus and Shrode [6] conducted a study on mobile technologies and academics and investigated whether students use mobile technologies in their academic lives and are librarians ready

to meet this challenge at Merrill-Cazier library in Utah State University. The study explored that students are very interested in mobile access, 54% of undergraduates and 50% of graduate students are using mobile technology for academic purpose, while the librarians responded that the libraries have provided mobile access from a few weeks to more than ten years, five librarians indicated that they have provided mobile access for six to ten years, 71% says that "everything" or a variety of library resources should be made available. Suki [11] examined students' dependence on smart phones and their influence of social needs, social influences and convenience and 30% of the students expressed that they used smart phone for more than two years, 73.5% admits that smart phone application is easy to find, 72.5% says that their smart phone is reliable all the time, 78% students opinion says that their smart phone is fast and effective, 32 % uses Android, 8% use iOS, and 2% prefer Windows phone.

Aharony [1] surveyed the Librarians' attitudes towards mobile services in Israel and has used SPSS software for analyzing the data. MANOVA was performed to find differences between respondents who use or do not use smart phones and found differences between two groups, there was a correlation between mobile technology usefulness and behavioral intention to use a mobile technology. Soni, *et al.* [10] examines the usage and awareness of mobile applications and technologies by LIS professional in library services with special reference to North-West part of Madhya Pradesh and the survey revealed that all the respondents are aware of mobile applications, majority use Android phones, are used for instant messaging, social networking, gaming, sports, watching videos and surfing the web, majority are satisfied and are comfortable with the use of mobile technologies. Devi and Verma [5] examined the users' attitude towards the use of smart phones of Mizoram University students to access information and it is observed that students are using smart phones for different purposes, 22 different brands were used by the students where, Samsung is the most widely used brand, the majority use phone to access information with paid internet service i.e., 3G, students access library services mostly for renewal of books and checking fines/overdue, Wi-Fi connectivity access in the university is the barrier and majority agreed with the special training on smart phones.

IV. THE OBJECTIVES OF THE STUDY

1. To know the students' usage and the attitude towards smart phone to access information by the students' of Bodoland University (BU)
2. To identify the purpose of usage of smart phone, preferred brand, and type of connectivity
3. To know the frequency of using smart phone with internet connection
4. To know the use of smart phone for accessing library services
5. To find out the level of satisfaction from accessing information with smart phone

V. METHODOLOGY

For the present study, a questionnaire method was used for data collection to meet the above-mentioned objectives. A total of 250 structured questionnaires were distributed in the selected classrooms of PG students in Bodoland University randomly and duly filled-in questionnaires were collected on the same day.

VI. DATA ANALYSIS

Table 1 depicts the gender wise distribution of respondents in the study. It shows that out of 250 respondents, male respondents (53.2%) are higher than female respondents (46.8%).

TABLE I GENDER WISE DISTRIBUTION OF RESPONDENTS

Gender	No. of Respondents
Male	133 (53.2%)
Female	117 (46.8%)
Total	250

Fig. 1 illustrates the age wise distribution of respondents and observed that majority are of 22 years constituting 48.80%, followed by 23 years (25.20%) and 21 years (13.20%).

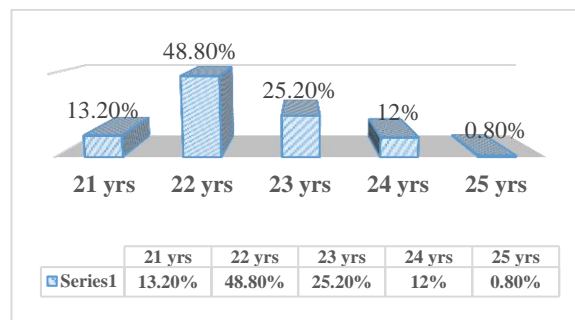


Fig. 1 Age wise distribution of respondents

It revealed that all the respondents use smart phone and from the table II and fig. 2, it is observed that total 14 different brands are used by the respondents, in which Samsung (36%) was the most preferred brand by the respondents, which is followed by VIVO (19.2%) and OPPO (10%). PANASONIC, NOKIA, and Karbonn are the least used brand by the respondents each with 0.8%.

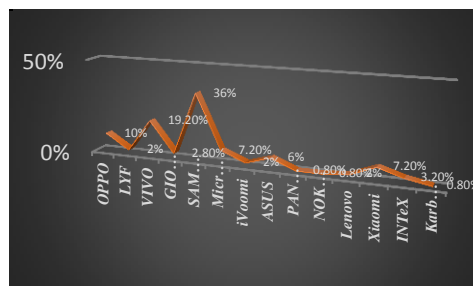


Fig. 2 Brand name of smart phone

TABLE II BRAND NAME OF SMART PHONE

Brand Name	Respondents
OPPO	25 (10%)
LYF	5 (2%)
VIVO	48 (19.2%)
GIONEE	7 (2.8%)
Samsung	90 (36%)
Micromax	18 (7.2%)
iVoomi	5 (2%)
ASUS	15 (6%)
PANASONIC	2 (0.8%)
NOKIA	2 (0.8%)
Lenovo	5 (2%)
Xiaomi	18 (7.2%)
INTeX	8 (3.2%)
Karbons	2 (0.8%)
Total	250

Table III shows the duration of use of smart phone by the respondents and found that majority 158 students (63.2%) were using since 5 years, 80 students are using for 2 years (32%), 7 students are using for 10 years (2.8%) and 5 people for more than 10 years (2%).

TABLE III USE OF SMART PHONE SINCE

Year	Respondents
2 years	80 (32%)
5 years	158 (63.2%)
10 years	7 (2.8%)
More than 10 years	5 (2%)
Total	250

Table IV illustrates the purpose of the use of mobile phone by the respondents. It indicated that majority of 172 respondents have mentioned for the purpose of accessing information with 27.96%, 137 (22.27%) students uses for the purpose of social networking and 98 students mentioned for making calls with 15.93%, followed by listening music (14.30%), watch or make videos (8.94%), watch movies/daily soaps (6.50%) and for playing (4.06%).

TABLE IV PURPOSE OF USING A MOBILE PHONE

Purpose	Respondents
To make phone calls	98 (15.93%)
Social networking	137 (22.27%)
To access information	172 (27.96%)
Watch or make videos	55 (8.94%)
Playing	25 (4.06%)
Watch movies/daily soaps	40 (6.50%)
Listening music	88 (14.30%)
Total	615

Table V depicts the type of preferred connectivity used by the students of Bodoland University. It explored that even if the

university is Wi-Fi enabled campus, majority 215 of the students are preferring paid internet service to access the internet and representing 86%, 28 students are using both Wi-Fi connectivity of university and paid internet service representing 11.2% and only 7 students mentioned Wi-Fi connectivity of university with 2.8%.

TABLE V TYPE OF PREFERRED CONNECTIVITY

Connectivity	Respondents
Wi-Fi connectivity of university	7 (2.8%)
Paid Internet Service	215 (86%)
Both	28 (11.2%)
Total	250

Table VI shows the preferred internet paid service by the students and found that majority 205 (80.39%) respondents indicated the use of 4G as their connectivity for internet, while 47 (18.43%) respondents preferred 3G as their connectivity and the least 3 students are using 2G representing 1.17%.

TABLE VI PREFERRED INTERNET PAID SERVICE

Internet paid service	Respondents
2G	3 (1.17%)
3G	47 (18.43%)
4G	205 (80.39%)
Total	255

Table VII reveals the frequency of using smart phone with an internet connection by the students. As, data were collected from a total of 250 students, but some of them have not response all. The study found that majority 200 students representing 85.10% use smart phone several times a day with an internet connection, majority 127 (51.41%) students use smart phone occasionally for sharing photos/videos, 78 (33.47%) students mentioned that they download media content several times a day, 93 (42.27%) students download/update mobile application occasionally, 112 (47.05%) students check their emails at least once in a day, 130 (59.09%) mentioned that they browse the website several times a day, 58 (26%) students read e-books or e-journals once in a day, 122 (53.04%) reads online newspaper once in a day, 100 (45.04%) listens to online music several times a day, 140 (62.22%), 93 (38.42%) and 118 (48.16%) students check bus/rail/flight timetables, access academic resources and access other library services occasionally.

It is to be noted that 58 (23.2%) students are using smart phone for accessing library services and 192 (76.8%) are not using. Table 8 also revealed the purpose for accessing library service and found that majority students' access library service for the purpose of searching books or checking catalogue (30.67%), followed by renewing books (26.67%) and searching e-databases (22.67%) and the least mentioned for finding e-books/e-journals (20%).

TABLE VII FREQUENCY OF USING SMART PHONE WITH INTERNET CONNECTION

Activities	Several times in a day	Once in a day	Once in a week	Occasionally	Never	Total
Use of social networking sites	200 (85.10%)	30 (12.76%)	3 (1.27%)	2 (0.85%)	0	235
Sharing photos/videos	65 (26.31%)	25 (10.12%)	28 (11.33%)	127 (51.41%)	2 (0.80%)	247
Download media content	78 (33.47%)	30 (12.87%)	60 (25.75%)	60 (25.75%)	5 (2.14%)	233
Download/update mobile application	42 (19.09%)	25 (11.36%)	55 (25%)	93 (42.27%)	5 (2.27%)	220
Checking emails	33 (13.86%)	112 (47.05%)	55 (23.10%)	30 (12.60%)	8 (3.36%)	238
Browsing the website	130 (59.09%)	43 (19.54%)	15 (6.81%)	25 (11.36%)	7 (3.18%)	220
Reading e-books or e-journals	55 (24.66%)	58 (26%)	30 (13.45%)	52 (23.31%)	28 (12.55%)	223
Reading newspaper online	33 (14.34%)	122 (53.04%)	15 (6.52%)	37 (16.08%)	23 (10%)	230
Listening to online music	100 (45.04%)	40 (18.01%)	25 (11.26%)	43 (19.36%)	14 (6.30%)	222
Checking Bus/Rail/Flight time tables	20 (8.89%)	13 (5.78%)	7 (3.11%)	140 (62.22%)	45 (20%)	225
Accessing academic resources	52 (21.48%)	42 (17.35%)	35 (14.46%)	93 (38.42%)	20 (8.26%)	242
Other Library Services	15 (6.12%)	25 (10.20%)	25 (10.20%)	118 (48.16%)	62 (25.30%)	245

TABLE VIII PURPOSE FOR ACCESSING LIBRARY SERVICE

Purpose	Response
Library webpage	0
Renew Books	20 (26.67%)
Search books/Check catalogue	23 (30.67%)
e-books/e-journals	15 (20%)
Check fines/overdue	0
Search e-databases	17 (22.67%)
Total	75

Table IX and fig. 3 illustrates the level of satisfaction using smartphone from accessing information by the students and explored that among 250 respondents, majority 115 (46%) students are satisfied, while 110 (44%) are highly satisfied and the least 25 (10%) are partially satisfied.

TABLE IX LEVEL OF SATISFACTION USING SMARTPHONE FROM ACCESSING INFORMATION

Level	Response
Highly satisfied	110 (44%)
Satisfied	115 (46%)
Partially satisfied	25 (10%)
Not satisfied	0
Total	250

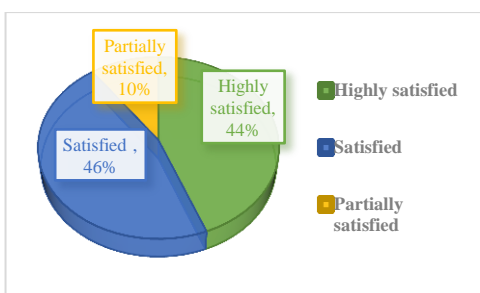


Fig. 3 Level of satisfaction using smartphone from accessing information

VII. MAJOR FINDINGS OF THE STUDY

1. It explored that all the 250 respondents are using smart phone and majority (27.96%) uses mobile phone for the purpose of accessing information, followed by social networking (22.27%) and for making calls (15.93%).
2. It is observed that total 14 different brands were used by the students, in which Samsung (36%) was the most preferred brand, followed by VIVO (19.2%) and OPPO (10%) whereas, PANASONIC, NOKIA and Karbonn are the least used brand by the respondents each with 0.8%.
3. The type of preferred connectivity mostly used by the students of Bodoland University is paid internet service (86%), only 2.8% students mentioned Wi-Fi connectivity of university and majority (80.39%) respondents indicated use of 4G as preferred paid internet service.
4. Based on the frequency of using smart phone with an internet connection by the students, the majority 85.10% reveals that they use several times a day, 51.41% students use smart phone occasionally for sharing photos/videos, 33.47% students download media content several times a day, 42.27% download/update mobile application occasionally, 47.05% check their emails at least once in a day, 59.09% browse the website several times a day, 26% read e-books or e-journals once in a day, 53.04% reads online newspaper once in a day, 45.04% listens to online music several times a day, 62.22% checks bus/rail/flight timetables, 38.42% access academic resources and access and 48.16% for other library services occasionally.
5. It is to be noted 192 (76.8%) are not using smart phone for accessing any library services and 58 (23.2%) students was recorded of accessing library services, where, majority access for the purpose of searching books or checking catalogue (30.67%), followed by

renewing books (26.67%) and searching e-databases (22.67%) and the least mentioned for finding e-books/e-journals (20%).

6. The level of satisfaction using smartphone from accessing information by the students was known that majority (46%) students are satisfied, while 44% are highly satisfied and the least 10% are partially satisfied.

VIII. CONCLUSION AND SUGGESTIONS

Bodoland University is the first and the only state university in the B.T.A.D. (Bodoland Territorial Area Districts) region. Though the university is newly emerging, very few departments were introduced at first, later it was increased. Bodoland University is open and flexible to modern innovations in higher education. The main aim of the university is to work for the advancement in knowledge and impart instructional and research facilities to its students in fully need-based and unexplored areas so that, their talents and potentials could be realized to the optimum level [2]. Also the university has introduced M.Phil and Ph.D. courses recently. It is observed from the study that even if the university is Wi-Fi enabled campus, maximum students are preferring paid internet service for accessing information. The study also highlighted that majority of the university students are not accessing library services with smart phone. Only a few are accessing library service mostly for the purpose of searching books or checking catalogue, followed by renewing books and e-databases and the least mentioned for finding e-books/e-journals. It is suggested that the university library should provide free access to resources to the students and the contents of the library website need to be simple, attractive and dynamic. It also recommends that higher bandwidth of internet access should be provided to the students in the campus.

REFERENCES

- [1] Aharony, N. (2013). Librarians' attitudes towards mobile services. *Aslib Proceedings*, 65(4), 358-375, <https://doi.org/10.1108/AP-07-2012-0059>.
- [2] Bodoland University Prospectus. Retrieved from http://bodolanduniversity.ac.in/s24c/docs/BU_Prospectus_2016-17.pdf.
- [3] Bodoland University Administration About the university. Retrieved from http://bodolanduniversity.ac.in/s24c/menu/administration/about_university.php
- [4] Cummings, J., Merrill, A., & Borrelli, S. (2010). The use of handheld mobile devices: their impact and implications for library services. *Library Hi Tech*, 28(1), 22-40, <https://doi.org/10.1108/07378831011026670>.
- [5] Devi, KK, & Verma, M. K. (2016). Users' attitude towards use of smart phones to access information: a case study of Mizoram University students. Paper Presented at the 19th National Convention on Knowledge, Library and Information Networking NACLIN, Tezpur, Assam: DELNET. 57-74.
- [6] Dresselhaus, A., & Shrode, F. (2012). Mobile Technologies & Academics: Do Students Use Mobile Technologies in Their Academic Lives and are Librarians Ready to Meet this Challenge?. *Mobile Technologies & Academics*, 82-101.
- [7] Hong, S.G., Trimi, S., & Kim, DW. (2016). Smartphone use and internet literacy of senior citizens. *Journal of Assistive Technologies*, 10(1), 27-38. <https://doi.org/10.1108/JAT-03-2015-0006>.
- [8] Mayiselak T. (2016). The potential use of mobile technology: enhancing accessibility and communication in a blended learning course. *South African Journal of Education*. 33(1), 1-18. Retrieved from <https://files.eric.ed.gov/fulltext/EJ1136116.pdf>.
- [9] DS Negi. "Using mobile technologies in libraries and information centers." *Library Hi Tech News*, Vol. 31, No. 5, 2014, 14-16. Retrieved from <https://doi.org/10.1108/LHTN-05-2014-0034>.
- [10] Soni, NK., Sudan, US., & Vij, R., Usage and Awareness of Mobile Applications and Technologies by LIS Professional in Library Services: Special Reference to North-West Part of Madhya Pradesh. Paper presented at the 10th International CALIBER 2016, Himachal Pradesh: INFLIBNET, 298-306.
- [11] Suki, NM. (2013). Students' dependence on smart phones: The influence of social needs, social influences and convenience. *Campus-Wide Information Systems*, 30(2), 124-134. <https://doi.org/10.1108/10650741311306309>.