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Use of Mobiles by Library and Information Science Professionals: A Survey

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ABSTRACT

Due to proliferation and multi-disciplinary relevance in all the subjects, lot of digital information in various formats is knocking the doors of the knowledge seekers and it can be accessed by using tools and techniques of information and communication technology (ICT). The present study is on how library and information science (LIS) professionals use mobile phones for getting access to the information, usefulness of mobile technologies in their learning activity, their attitudes towards use of mobile devices and its impact on their behaviours. The results reveals that majority of LIS users most frequently use mobiles for communication purpose operating from their homes and expend 1-2 hours daily on mobiles using a 3G network. They are well aware about search techniques and skills to access information on internet over mobiles and use it for downloading implications by not participating in online discussion/ chatting forum on internet. Further survey perceived that they are not using mobile for financial transaction and online shopping. The paper concluded that basic knowledge accompanied with self-learning skill is the pre-requisite for easy handling of mobile and its related technologies for all kinds of professionals.

Keywords: Mobile, smart phone, internet, LIS user, mobile use.

1. INTRODUCTION

In the recent decade internet and mobile access are the two major attractions amongst the younger generation. However, with the advent of wireless communication technologies, the internet and its allied technologies are accessed from portable hand held devices like mobile phones (M-phone), Personal Digital Assistance (PDAs) etc. It is observed that in the recent years the use of such portable devices has increased phenomenally. So the concepts like virtual network, virtual library, M-library etc are in force. There are different brands, models and public networks are available in the market for m-phone services, each of them having distinct features and operating styles. Only users can find which devices and network services are best suited for their work and interest.

2. REVIEW OF THE LITERATURE

Review of literature is necessary to know the findings of similar studies carried out in the past and uniqueness of the present study to the present. Carroll & others[1] contributes to information system design, marketing and training practice by describing the influences on 16 to 22 years old appropriation of mobile telephones. A survey on mobile internet was carried out by Rice & Katz[2] which shows internet and mobile phone usage was very similar and that several digital divides exist with respect to both internet and mobile phone usage. Kinshuk & Chen[3] suggests application of mobile devices like mobile phones and PDAs for educational services and describes a mock-up system to integrate these services into the mobile platform. Mobile devices can play a vital role in the teaching of languages it is reflected when Cooney & Keogh[4] published an article to investigate the use of m-learning for teaching and learning Irish language. Asif & Krogstie[5] in their paper describe system for providing relevant information to students on a mobile platform.

Bomhold[6] conducted a survey to know use of smart phone applications by undergraduate university students which reflects that majority of students use mobile apps for completing their academic activities. Burford & Park[7] explore the information behaviours of young adults when they are given unlimited access to mobile tablet devices; it establishes the potential for constant access to digital information for their research related activities. Kumar[8] explores the students' opinion regarding use and success of mobile technology in the library environment for providing better services by library. Rhoda & Lee[9] in their study examine the use of mobile devices for the delivery of emergency notifications information to end users from a mobile government (m-government) perspective. It is known from above review that no any study was dealt with use of m-phones for information seeking behavior particularly towards LIS

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discipline; hence the present study is undertaken.

3. MOBILE TECHNOLOGY

Information and communication are the two sides of the same coin and can't be separated from each other. To handle the smooth flow of information, communication channels like radio, TV, computer, internet and now mobiles play a vital role. However, to access these channels one has to use each of the media separately or in combination at a particular physical space. On the contrary, portable device like mobile phones can be accessed and used anywhere, which is now bundled with services like music, video, internet, camera, m-commerce, etc, apart from using it for communication. The prime characteristic of m-phone includes high degree of mobility, flexibility and independence in use.

4. OBJECTIVES

The main objectives of the study are to:

(a) Understand the brand/model and network of mobile phones used by the lis professionals

(b) Know the purposes for using mobile phones

(c) Know the place of access of mobiles, time and money spent on the use of mobile phones

(d) Analyse use of mobile services like mobile internet, e-mail, whatsapp, and allied applications

(e) Understand awareness about techniques and methods of accessing information through mobiles

(f) Kind of information accessed by professionals; and

(g) Know the impact of mobiles on LIS professionals behavior and to ascertain the diverse effect of mobile technologies.

5. RESEARCH METHODOLOGY

The survey method of research is used to carry out the present research work. The data is collected through structured questionnaire focusing on factors like purposes of using mobiles, internet access, search techniques used for accessing information over mobiles and impact of mobiles on LIS professionals behavior.

5.1 Scope and Limitation

The scope of the study is limited to students, teachers and professional staff working at Department of Library and Information Science, Shivaji University, Kolhapur and the colleges affiliated to Shivaji University, Kolhapur, Maharashtra. A random sample of 70 LIS professionals including professionals (such as librarians and teachers) and students (viz., BLISc, MLISc and PhD) etc., were selected, out of which 54 responded (77.14 %). From the responded population, 36 (66.66 %) are LIS students i.e., BLIsc 12 (22.22 %), MLISc 17 (31.48 %) remaining 7 (12.96 %) are PhD research students whereas 18 (33.33 %) are working LIS professionals i.e., 14 (25.92 %) librarians and 4 (7.40 %) teachers from 8 affiliated colleges.

6. DATA ANALYSIS AND DISCUSSION

From the total survey of LIS users 29 (53.70 %) are male and 25 (46.30 %) are female. 59.25 % LIS professionals have smart phones and remaining 40.74 % users have general phone. Not a single LIS user has tablet like hand-held devices.

6.1 Mobile Phone Information

- Concerning choice of brand (handset Company) of mobile, it is observed that Samsung (46.29 %) occupies at highest order by the LIS users followed by Nokia (16.66 %), Karbonn, Micromax and Sony (9.25 %), Reliance (3.70 %) and Spice, iball (1.85 %). Nobody uses the handsets of Motorola, LG, Apple and Lava.
- As regards to network used by the respondents, highest choice found towards Idea network (35.18 %) followed by BSNL and Vodafone (24.07%), Tata Docomo (18.51 %), Aircel (11.11 %), Uninor, Reliance (9.25 %), and MTS (1.85 %). Android operating system is used by 59.25 % users followed by Windows (7.40 %). No one uses mobile operating system such as iOS, Firefox, Symbian, Palm, and Bada.

6.2 Purposes of Using Mobiles

- The survey indicated that 33 (61.11 %) of them most frequently use mobiles for communication purpose, 21 (38.88 %) of them use frequently for sending messages (SMS, MMS, etc.) and for internet access, 20 (37.03 %) of them frequently use for educational purposes (like e-book reading, download, assignment, field trip, map, etc., and for updates, alerts and enquiries. 16 (29.62 %) of LIS users both occasionally and frequently use mobiles due to its built-in various facilities and applications (like Blue tooth, Camera, Calculator, Alarm, Calendar, Reminder, Dictionary, etc.). 15 (27.77 %) of them rarely use mobile for entertainment purpose and 14 (25.92 %) of them occasionally as well as frequently use mobiles for chatting purposes. 29 (53.70 %) are not making use of mobiles for financial purposes like money transaction, stock market, etc. Similarly, 20 (37.03 %) of respondents are not using mobiles for shopping. (Table 1).
- With regard to place/areas for the use of the cellular phone, it is observed that use of mobiles at home (83.33 %) gets highest position followed

Table 1. Purposes of using mobile phones

Purposes of using mobile phones	Five point scale (codes) with Response				
	1 Not used	2 Rarely used	3 Occasionally used	4 Frequently used	5 More frequently used
Communication (Talking)	0 (0.00 %)	3 (5.55 %)	9 (16.66 %)	9 (16.66 %)	33 (61.11 %)
Sending messages	1 (1.85 %)	6 (11.11 %)	14 (25.92 %)	21 (38.88 %)	11 (20.37 %)
Educational purposes	6 (11.11 %)	8 (14.81 %)	10 (18.51 %)	20 (37.03 %)	10 (18.51 %)
Internet access	7 (12.96 %)	6 (11.11 %)	9 (16.66 %)	21 (38.88 %)	10 (18.51 %)
Entertainment	11 (20.37 %)	15 (27.77 %)	11 (20.37 %)	10 (18.51 %)	5 (9.25 %)
Facilities	3 (5.55 %)	5 (9.25 %)	16 (29.62 %)	16 (29.62 %)	14 (25.92 %)
Updates, alerts and enquiry	8 (14.81 %)	14 (25.92 %)	9 (16.66 %)	20 (37.03 %)	2 (3.70 %)
Finance	29 (53.70 %)	12 (22.22 %)	7 (12.96 %)	3 (5.55 %)	1 (1.85 %)
Chatting	11 (20.37 %)	7 (12.96 %)	14 (25.92 %)	14 (25.92 %)	7 (12.96 %)
Shopping	20 (37.03 %)	14 (25.92 %)	8 (14.81 %)	7 (12.96 %)	2 (3.70 %)

by 'during travel' (46.29 %), at LIS department (42.59 %), at Institution/offices and common place (38.88 %) and at the library (27.77 %).

6.3 Use of Mobiles

- 35.18 % of users spent between 1-2 hours everyday on mobiles, below 1 hour (25.92 %), between 1-3 hours (20.37 %), between 1-4 hours (14.81 %) and above 5 hours (1.85 %).
- Out of total population under survey, 46.29 % of them spend upto Rs. 250/- per month on mobiles, 31.48 % of them can spend below Rs.100/-monthly, 11.11 % spend between Rs.250 to Rs.500/- per month, 5.55 % users spent below Rs.50/- per month and 3.70 % can spent Rs.500/- and above as a monthly charges on mobile services.

6.4 Access of Internet-based Services over Mobiles

- Regarding use of network technology (generation) it is noticed that 46.29 % of LIS users prefer 3G technology, followed by 2G (44.44 %), Wi-Fi (12.96 %), 1G (9.25 %). Nobody uses latest 4G services of mobile-internet technology.
- In regard to use of web browser software by LIS professionals, it is noticed that 55.55 % of user prefer Google chrome browser software, followed by UC browser (40.74 %), Internet explorer (33.33 %), Opera (14.81 %) and Mozilla by (3.70 %) of users.
- The survey results that out of total population 25 (46.29 %) LIS users frequently use internet on mobiles for downloading of information, 20 (37.03 %) of them are frequently use mobile internet for e-mail communications, 16 (29.62 %) frequently use internet for social media applications like facebook, ning, twitter and blogs etc. and to browse mobile-optimised websites, educational websites/videos etc. Further 21 (38.88 %) are not using internet over mobiles for watching internet related advertisement, similarly 19 (35.18 %) of them are not using for Google play, 16 (29.62 %) are not using internet over mobiles for various

Table 2. Use of mobiles for internet services

Use of internet over mobiles	Five point scale (codes) with response				
	1 Not used	2 Rarely used	3 Occasionally used	4 Frequently used	5 More frequently used
E-mail	5 (9.25 %)	9 (16.66 %)	20 (37.03 %)	10 (18.51 %)	9 (16.66 %)
Social medias	13 (24.07 %)	6 (11.11 %)	12 (22.22 %)	16 (29.62 %)	5 (9.25 %)
Apps	16 (29.62 %)	7 (12.96 %)	9 (16.66 %)	13 (24.07 %)	8 (14.81 %)
Google play	19 (35.18 %)	9 (16.66 %)	12 (22.22 %)	10 (18.51 %)	1 (1.85 %)
Advertisement	21 (38.88 %)	9 (16.66 %)	14 (25.92 %)	7 (12.96 %)	1 (1.85 %)
Mobile-optimised websites, educational websites/videos, etc	7 (12.96 %)	8 (14.81 %)	13 (24.07 %)	16 (29.62 %)	9 (16.66 %)
Download	8 (14.81 %)	4 (7.40 %)	6 (11.11 %)	25 (46.29 %)	10 (18.51 %)
Online discussion/chatting	15 (27.77 %)	7 (12.96 %)	13 (24.07 %)	10 (18.51 %)	7 (12.96 %)
Entertainment	13 (24.07 %)	11 (20.37 %)	9 (16.66 %)	13 (24.07 %)	5 (9.25 %)

mobile apps, 15 (27.77 %) are not using for online discussion through mobile internet. 13 (24.07 %) are frequently using it for entertainment and equal number of them are not taking benefit of it for entertainment purposes (Table 2).

6.5 Accessing Techniques and Skills

- It is heartening to note that 50 (92.59 %) of LIS users are well aware about the techniques and skills regarding accessing of information through mobiles. 85.18 % of LIS users adopt Google search engine as a tool to access information over mobiles, followed by keyword search (59.25 %), other search engines (38.88 %), Boolean operator (29.62 %), by knowing web address (27.77 %), referring search history (25.92 %), by citing internet sources (9.25 %), by narrow/limit search option (7.40 %), avoiding use of suffixes (3.70 %) and by avoiding use of website contain multiple advertisement by (1.85 %).
- Regarding kind of information accessed by LIS professionals from mobiles, it is noticed that news item (57.40 %) is the first priority, followed by academic information like e-resources, OPAC, assignment over e-mail, conference, (55.55 %) and the equal number of respondents for entertainment related media information like youtube, classic e-book/literature, etc. Current [alerting] information by (50 %), general information (44.44 %), multimedia information (22.22 %), full text information (18.51 %), information about international organisation by (16.66 %), Statistical and scientific information each of by (12.96 %) of LIS users.

6.6 Impact of Mobiles

- It is observed from the analysis that excess use of mobiles makes impact on information seeking behavior of LIS professionals, empirically 26 (48.14 %) of them observed greater impact on the activity like communication to teacher, colleagues and friends, followed by greater impact on education (44.44 %), 23 (42.59 %) of users observed high impact on personality development activity, 19 (35.18 %) of them observed little impact on concentration activity and 13 (24.07 %) observed greater impact towards social, economic and political activities. Further 88.88 % of users opined that the excess use of mobile/radiation would make diverse effect on their health.
- It is noticed that 38.88 % of users under survey change mobile handsets after 5 years, after 2 year by (22.22 %), after more than 5 years (18.51 %), after 3 year (12.96 %) and after 1 year (7.40 %). 37.03 % of users change mobile network/service provider after more than 3 year. 18.51 % of them are of the opined that they don't like to change network/service provider, after 2 year by (11.11 %), yearly (9.25 %), six monthly (7.40 %) and monthly (5.55 %). No any LIS user change mobile network on quarterly or weekly basis.

7. SUGGESTIONS

Following suggestions are given by LIS professionals regarding use of cellular technology:

- Internet services offered by cellular companies (through mobiles) are cheaper than other mode of access
- Access to internet on all the models of mobile handset
- Mobile based library services should be provided by library for their stakeholders
- Alertness about health consciousness

8. CONCLUSIONS

It has been observed from the study that LIS professionals make greater use of mobiles to strengthen their various academic and research activities by accessing internet on mobiles. Now use of mobile is as essential as the food in day to day life. The growth and development in mobile technology is fabulous, which makes academia life smarter and easy. It is need of the hour to grab and use the innovative advancement taken place in mobile technology for fast forwarding the routine, academic and professional activities of the professionals, as the future scope of higher education will more depend under the impression of e-learning and m-learning. Basic knowledge accompanied with self-learning skill is the pre-requisite for easy handling of mobile and its related technologies for all kinds of professionals.

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