Application Of Smartphones For Strengthening Library Services By The Lis Professionals

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Abstract:
In this paper the researcher had surveyed the LIS Professionals for on-going activities regarding the use of smart phones to strengthen the library services to the users. The purpose of these trials was to explore and identify which content and services could be delivered through the smart phones in order to support learning and communication in the context of library services. Web 2.0 applications like wikis, blog, RSS, Tagging and social networking can be provided to the library users through smartphone by the LIS Professionals. The Questionnaire was distributed to the Refresher course participants in NBU, Siliguri to collect the data and findings are stated on that basis. In conclude the researcher has find that majority of LIS Professionals are using their smart phones for recreational purpose not for educational. So they should use their smartphones to explore the library services at anywhere and anytime in their handheld and extend the boundaries of knowledge of users. The recommendations are given to increasing the potential for successful application of multitasking smartphones to strengthen library services.

Introduction:
Nowadays, we are observing that most people are engaged with their mobile phones in the bus, market, college campus and even in libraries. Peoples are too much busy with their jobs and routine work. They are using mobile phones/smart phones, iPhones, PDAs, iPod etc. for recreation and learning. Mobile technology became boon for those peoples who are not able to get traditional library services. Mobile applications for information seeker too have grown up tremendously with the growth of technology. From Children to adults all are finding their piece of information with this wireless technology. Various research has been carried out in this respect and it came up with unexpected results which shows people today are using this handheld device for text messaging, photo messaging, access internet from their mobiles, e-mail and do so many interactive activities with handhelds various features. When we talk about ‘smartphones’, most people have their own idea of what they can do. However, there is no generally agreed definition. For the purposes of understanding, we defined smartphones as mobile phones that have a comparatively advanced operating system, capable of running multiple programs and applications. As smartphone ownership increases, library users are accessing the mobile web from anywhere and everywhere.

Most of the mobile phones nowadays are addressed as ‘smartphone’, as they offer more advanced computing power and connectivity than a contemporary mobile phone. Along with the smartphone fundamental capabilities to make voice call, video call, SMS, and MMS, smartphones have been repositioned as a “new information medium”. In other words, smartphones have extended list of information processing functionalities such as managing personal time schedule, accessing Internet contents, editing documents, utilizing location-awareness function, and many other exciting applications. Nonetheless, no matter how smart the smartphone is; it will not result in expected benefits and effectiveness, if they are not being utilized. The availability of smartphones and other mobile devices has provided new opportunities for communication, creativity, gaming, shopping, customer service, and more. With mobile devices surging in popularity among patrons, library innovators have started experimenting with these technologies in their services. The present study is focusing on practical application of smartphones for to strengthen the library services.
Mobile Technology has now come up with “Libraries in Hand” trend. Our librarians are in move to determine how these devices are affecting information access and ensure that they are communicating with patrons and providing web content in the most appropriate and effective ways. Our Librarians must be prepared to take this challenge and put his efforts to increase the market and demand for mobile access to personalized facts and information anytime, anywhere on one’s own handheld device.

Review of Literature:

Keren Mills (2009) published the research report “M-Libraries: Information use on the move”. This research involved an online survey questionnaire of students and faculty at both the UK Cambridge and Open Universities. He found that respondents felt would be most useful to access using a mobile phone: Open hours, Location map, Contact information, Library catalogue (OPAC), Borrowing record. ECAR (2008) Study of Undergraduate Students and Information Technology examined the “technology behaviors, preferences, and attitudes of higher education’s undergraduates” and was found that two-thirds of students who responded owned an “internet-capable cell phone”, although only 30.8% reported using it to access the Internet. The chief reason reported for not doing so was cost. Todd (2008) research study “Handheld Librarians: A Survey of Librarian and Library Patron Use of Wireless Handheld Devices” for Collection development librarian at Bradley University. This paper results that are of the perceptions that librarians rather than patrons had of the need for wireless device access. Laouris and Eteokleous’ argument sound dehumanizing, many people cannot do without Mobile devices such as cellular phone. Mobile stations include devices such as laptops, cellular phones and personal digital assistants (PDAs). They are affordable and portable for easy mobility. The emergence of mobile stations ensures that computer technologies are no longer confined to desktop and office settings. Mobile stations ensure easy mobility of users and the devices. The devices have a variety of functions. For example, they can be used: 1) to record data, 2) to access information resources, and 3) to communicate with other users. As in business, Mobile devices are continually been exploited to provide enhancement for teaching and learning in in teaching and learning.

Objectives:

I. To assess the level of familiarity of smartphone applications.
II. To understand the purpose of using the smartphone in library services context.
III. To enlist the possible applications of smartphones to strengthen the library services.
IV. To suggest the applications regarding the library services.

Scope:

This study is based on the survey among the Library and Information science professionals participated in the refresher Course in Library and Information science at the MHRD-UGC Academic Staff College, North Bengal University, Siliguri, Dist.-Darjeeling, West Bengal.

Methodology:

A survey among the LIS professionals has been carried out to meet the objectives of the present study. Survey has been conducted through questionnaire method. Total research population is 38. Each of the LIS professional participated in the refresher Course in Library and Information science at the UGC Academic Staff College, North Bengal University, Siliguri, Dist.-Darjeeling was distributed with the questionnaire.

The set of questionnaire was designed for LIS professionals to obtain the data regarding application of smartphone for strengthening the library services. The questionnaire was designed with different questions on the basis of variables such as personal and organizational variable, in connection with this study. The answer to the questionnaire was analyzed through quantitative method to understand the use of smartphones for library services.

Analyses of Data and Interpretation:

The results of quantitative analyses have been presented under the following headings. The total participants of Refresher course are 38 and out of them 34 LIS professionals have submitted the questionnaire. The total response is 89.49% for
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questionnaire. 32 LIS professionals have Smartphone of their own. The participants are aware with their smartphone model and various apps had downloaded by them. The research questions are analyzed as following:

6.1 Attitude towards the use of smartphone for Library work/Services:

<table>
<thead>
<tr>
<th>Sr.No.</th>
<th>Attitude</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Using the Smartphone for library work is (would be) a good idea</td>
<td>75.00</td>
</tr>
<tr>
<td>02</td>
<td>Using the Smartphone while library working is unpleasant</td>
<td>37.50</td>
</tr>
<tr>
<td>03</td>
<td>Using the Smartphone is beneficial to my library work</td>
<td>65.63</td>
</tr>
<tr>
<td>04</td>
<td>I like (would like) using the Smartphone for library working</td>
<td>71.88</td>
</tr>
</tbody>
</table>

The above Table No.1 shows that 75.00 % LIS Professionals attitude is using the smartphone for Library work is a good idea and they also like to use the smartphone for library work.

6.2 Degree level of usage of Smartphone for various activities:

The above Figure No. 1 indicates that majority of activities like Social networking, Accessing Emails, Text Messages, Playing Games, Listening music and watching Videos etc. activities are always used on the Smartphone i.e. above 65%, and Getting news alerts, Directions and Completing Coursework are rarely used i.e. below 10%.
The above Figure No. 2 indicates that 53.12% LIS Professionals using their smartphone for view library hours, 71.87% Professionals are decline to use of FAQs for readers as well as 65.62% professionals are not agree about view library contact information through smartphone and 59.38% professionals are also gave same response to the view of library floor map information through smartphone/library website.

6.4 Purpose of usage of Smartphone for to strengthening the Library services:

The above Figure No.3, shows that the LIS professionals are using the smartphone for various purposes like reading and recreation (75%), to use various types educational apps (59.38%), Social networking e.g. Facebook, wikis, blog, twitter (87.50%), to browse the information (71.88%) etc. whereas they are not agree to use smartphone for the various purposes such as meeting minutes & communication (56.25%), Bibliographic instruction (75%), Virtual reference (65.63%).
6.5 LIS Professionals can provide the various Library services to the users on their Smartphones:

In the above Figure No.4, describes that the LIS professionals can provide various services to their users on smartphone, especially they are agreeing on various services like Email/SMS (84.38%), Browsing Library Webpages (93.75%), Search for e-books/e-journals/Databases (90.68%), Renew books (78.13%), To Check Library records/fines/overdue (65.63%), Search for Books/Check Catalogues/Web OPAC and Check Library contact details (56.25%) where as 50% for Reading e-Books and Articles and disagree about Subject guides (62.50 %).
6.6 Various Apps can be used for to strengthen the library services through smartphone:

The above pie diagram describes that majority of LIS Professionals are prefer for using the apps like Whatsapp (93.75%), Play store (93.75%), Facebook (87.50%), Google Maps (62.50%), Quick office pro(56.25%), UC browser(87.50%) etc. for strengthen the library services through smartphones whereas less preference to apps like@ voice aloud, Adobe reader, Bookviser, Good Reader, Messages, Kindle, Drop box, Audio Books, Skype, True caller, Nook, My Library, Teacher kit, Libri, Team viewer etc. Most of the LIS Professionals prefer to use apps which are made for recreation not for educational i.e. teaching and learning purpose.

6.7 Own Library App and Suggested apps by the LIS professionals for to strengthen the library services through Smartphone:

Majority of LIS professionals are negatively responded their own Library App and which will provide the latest information of their own library statistics as well as new events, new arrival of books and journals, notices of library, Library services and schemes etc. Only one Librarian have their own library app and remaining are thinking to prepare their libraries apps with help of open source softwares in future. Some of the LIS professions are suggested the Educational App, Competitive exam App, News App etc. should be in the smartphone to strengthen the library services.
6.8 Suggested apps to LIS Professionals for strengthen the library services through Smartphone:

<table>
<thead>
<tr>
<th>Sr No</th>
<th>Name of App</th>
<th>Source/Info.</th>
<th>Sr No</th>
<th>Name of App</th>
<th>Source/Info.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ACS Mobile</td>
<td>ACS = American Chemical Society</td>
<td>8</td>
<td>Patent Search</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Beilstein</td>
<td>Beilstein Journal of Organic Chemistry and Beilstein Journal of Nanotechnology</td>
<td>10</td>
<td>Science</td>
<td></td>
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<tr>
<td>4</td>
<td>Brow Zine</td>
<td>Browse thousands of journals</td>
<td>11</td>
<td>Scientific American</td>
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</tr>
<tr>
<td>6</td>
<td>EBSCO eBooks</td>
<td>Features Cambridge Journals Online Mobile (CJOm) explained</td>
<td>13</td>
<td>SciVerse Science Direct</td>
<td>ScienceDirect IPhone Userguide</td>
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<td>7</td>
<td>EBSCO Mobile</td>
<td>Find eBooks in the e-book collection of the University of Twente</td>
<td>14</td>
<td>SciVerse Applications</td>
<td>Register at Sciencedirect first (free).</td>
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<td>15</td>
<td>Informa Healthcare</td>
<td></td>
<td>21</td>
<td>Nature.com</td>
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<td>16</td>
<td>JSTOR Mobile</td>
<td>Informa Healthcare usage guide</td>
<td>22</td>
<td>Patent Genius</td>
<td>Register at Nature.com first (free)</td>
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<tr>
<td>17</td>
<td>Nature.com</td>
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<td>Patent genius</td>
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<td>Bento</td>
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<td>iBookshelf</td>
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<td>26</td>
<td>Taylor &amp; Francis</td>
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<tr>
<td>21</td>
<td>Documents To Go</td>
<td></td>
<td>27</td>
<td>Wiley Health Sciences</td>
<td>Sci Verse applications that improve search and discovery on Sci Verse Science Direct, Scopus or Hub.</td>
</tr>
<tr>
<td>22</td>
<td>Lab Guru</td>
<td></td>
<td>28</td>
<td>WorldCat Mobile</td>
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<tr>
<td>23</td>
<td>TED</td>
<td></td>
<td>29</td>
<td>Teacher Aide Pro</td>
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<tr>
<td>24</td>
<td>Northwestern</td>
<td></td>
<td>30</td>
<td>Blackboard Mobile Learn</td>
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<tr>
<td>31</td>
<td>iUsask</td>
<td></td>
<td>32</td>
<td>UH Library</td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>HK libraries (searches consortium of HongKong Libraries)</td>
<td></td>
<td>34</td>
<td>Library Navigator (Tokyo)</td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>Dukemobile</td>
<td></td>
<td>36</td>
<td>iUsask</td>
<td>(Part of University IPhone app)</td>
</tr>
</tbody>
</table>

7. Findings:
1. Majority of LIS Professionals shows positive attitude towards the use of Smartphone for Library work is a good idea and they like to use the Smartphone for library work.

2. The LIS professionals are using their smartphones for Social networking, Accessing Emails, Text Messages, Playing Games, Listening music and watching Videos etc. whereas Getting news alerts, Directions and Completing Coursework are rarely used.
3. LIS professionals are using the smartphone for various purposes respectively like Social networking e.g. Facebook, wikis, blog, twitter etc., Reading and Recreation, to browse the information, Internal purposes such as meeting minutes & communication where as they are not agree to use smartphone for the various purposes like Bibliographic instruction, Virtual reference, Research Consultancy, to use various types educational apps.

4. LIS professionals are willing to provide maximum services to their users through smartphone. Especially they wants to provide various services like Email/SMS, Browsing Library Webpages, Search for e-books/e-journals/Databases, Renew books Check Library records/fines/overdue, Search for Books/Check Catalogues/Web OPAC etc.

5. LIS Professionals are prefer for using the apps like Whatsapp, Play store, Facebook, Google Maps, Quickofficepro, Ucbrowseretc. for strengthen the library services through smartphones whereas less preference to apps like@ voice aloud, Adobereader, Bookviser, Good Reader, Messages, Kindle, Drop box, Audio Books, Skype, Truecaller, Nook, My Library, Teacherkit, Libri, Teamviewer etc.

6. Majority of LIS professionals are agreed that they should have their Library App and which will provide the latest information of their library statistics as well as new events, new arrival of books and journals, notices of library.

8. Suggessions:
1. LIS Professionals should prepare their library website in mobile view.
2. They should prepare their library app by using the open source softwares.
3. LIS professional should find out the various educational apps and provide to the users.
4. LIS Professionals should use the suggested apps in figure 6.8. and also search more appson Play Store app of smartphone.
5. The following websites are also useful for to get the apps:-

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5. The following websites are also useful for to get the apps:-

Mobile sites and apps

- NHS Direct symptom checker
- mobile _mobile.nhsdirect.nhs.uk/
- Pubget Mobile http://pubget.com/mobile
- Pubmed mobile www.ncbi.nlm.nih.gov/m/pubmed
- iTriage – http://www.itriagehealth.com/
- Medical calculations http://www.mediquations.com/iPhone_iPodTouch_iPad/index.html
- Nature http://www.nature.com/mobileapps/
- Pubmed on tap http://www.referencesontap.com/
- SIGN (Scottish Intercollegiate Guidelines Network) http://www.sign.ac.uk/guidelines/apps/index.html

9. Conclusion:
This paper shows that the LIS professionals became familiar with the smartphones, recreational apps whereas less using the educational apps. Most LIS Professionals willing to start different library services through smartphones i.e. Email/SMS, Browsing Library Webpages, Search for e-books/e-journals/Databases, Renew books Check Library records/fines/overdue, Search for Books/Check Catalogues/Web OPAC etc. Majority of LIS Professionals shows their keen interest in preparing their library app by using open source softwares. The LIS Professionals has to understand fully the capabilities and potentials of the mobile technology and its use in libraries in near future by providing the quality based services matching with the needs of the user.

References:


5. The Handheld Librarian. (2010), Handheld computer news, ideas, and opinions from librarians and others interested in libraries. [http://handheldlib.blogspot.com/]
