

Utilization of Short Message Service (S.M.S) Technology for Library Services in Institute for Agricultural Research (I.A.R) Library, Ahmadu Bello University Zaria, Nigeria

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Abstract

The study was undertaken to determine the utilization of short message service (SMS) technology for library services in institute for agricultural research library, A.B.U Zaria, Nigeria. Three research objectives were raised and answers were sought to them. Survey research method was adopted for the study and data was collected from a sample of 12 out of the total population of 15 library professionals. The data were analysed descriptively using frequency count and percentages. The study revealed that utilization of Library S.M.S services technologies is limited in the library. The library sometimes utilizes News and event reminder service and new title notification service only through library social media face book group (IAR Library information retrieve group).The study recommends that the library should create avenue for training of staff and users so as to struggle less in the use of S.M.S service technology for their library services.

Keywords: *Short Message Service; S.M.S Technology; S.M.S Service; Library and Information centers*

Introduction

The aim and success of any library and information center is to provide effective and efficient services to their users. Libraries all over the world are utilizing the latest mobile technology to assist in their objectives of providing clients with effective and efficient services, as well as timely access to needed information. The explosion of advanced robust digital information collection prompt libraries to use mobile technology like S.M.S, e-reader etc to access library hours, view their library account, search databases easier.. SMS is the most popular mobile service use in libraries of 21st century. The invention of this communication mechanisms invented by Friedhelm Hillenbrand and Bernard Ghillebert in 1984 have made life beautiful, easy, exiting and tenderly. With SMS as the most popular mobile technology according to Brown (2007) users can rule the world with deployment of this technology anywhere and anytime which allow users to send a message using short code and receive information, it allows organization to manage contact, correspondence, sending notification and alert to people of any emergency broadcasting text messages (bulk SMS), thus facilitate message delivery to Multiple users. This technology Serves as

efficient marketing tool to advertise product through email, thus facilitates email generation. The S.M.S technology displays as media rich advertisement (WAP push) on mobile phones inform of text messages containing a link to download content (Music, games) to users which automatically displayed on the mobile phone browser.

Literature Review

SMS technology is used by many libraries to deliver their services more effectively and efficiently. SMS could be used to provide quick, easy access to library services. Libraries need more powerful and feature rich SMS services to communicate with users. Vimal and Chitra (2014) opined that many commercial service providers offer group SMS services with affordable rates. SMS Gupshup is a free group SMS provider. Free service is offered with the support of revenue from advertisement. Certain SMS softwares are available for the use of NGO's for community SMS delivery. Frontline SMS is free software enabling users to send and receive text messages with large groups of people through mobile phones. This software is used for noncommercial purposes such as emergency alerts, field data collection, conducting public

surveys, healthcare info requests, agricultural price updates, and providing weather updates. Frontline SMS does not require an internet connection and works with existing plan on all GSM phones. Libraries can also try these cost effective options for SMS services.

Library S.M.S Services

Text message alerts are entry-level mobile web services for library to offer users that can be sent to the customers (users of a library) in order to remind them of the overdue books and when it is due. In case they need to renew it, they can send a message for getting it renewed rather than going to the library for the renewal. The users can also be informed of the items on hold which are ready for collection from the library through SMS. They can check the loans and also know of the availability of any particular book by sending SMS. The SMS facility according to Vimal and Chitra (2014) can be used as a medium for communication of reference queries in libraries. It is a form of virtual reference service. The text messaging technology can be used for referral services, to guide the users to the source of information. This is also an effective way of receiving technical support from the library staff such as a problem in accessing databases and announcing of event taking place in the library. SMS technology is a readily accessible alternative to emails and the time lag due to delay in checking mails can be eliminated. By making use of the SMS technology, readers can subscribe to receive library notices via email, library newsletters and can also subscribe to online databases. Libraries can broadcast text messages to groups of clients for promoting services such as new databases, extended library opening hours, or a new series of hands-on workshops. SMS is a cost effective and efficient interactive communication system suitable for libraries other than email. The technology works well if it is used as an interactive two way system. To be more precise, mobile pervasive technology can be used by the libraries to serve their patrons as well as by the patrons to send feedback of the library services. In this way, the services offered by the libraries can become more customer-centric.

Libraries according to Chun-Yi (2011) can create SMS groups to circulate among people having similar interest. Groups to announce job alert, cultural events, health information, etc are examples of add on SMS services for both library users and the whole community. SMS services for exclusive groups seem more useful for public libraries serving rural community. For example, village libraries can cooperate with agricultural agencies to announce seasonal informative tips for farmers regarding use of fertilizers, soil and water management. Libraries should give substantial publicity about these SMS services among stakeholders. Library websites, information brochures, organizing group meeting and information display at key areas are necessary to attract users to join in SMS groups. Clear and simple procedures are necessary to ensure the involvement of users. Following is the procedure to allow a group to join the service, send the message JOIN AGRIALERT to them. Instructions to unsubscribe from groups also must be indicated. However, Libraries makes the following SMS services available to patrons; They includes:

1. **News and event reminder service:** This service sends reminders to patrons about important news, exhibitions, instructions, and so on.
2. **Due-day reminder and renewal-request service:** This service sends reminders to patrons when their borrowed items are due. Furthermore, if a patron receives a due-day reminder and wants to renew the item, the patron can click a renewal-request hyperlink embedded in the text message to renew a borrowed item.
3. **New title notification service:** This service lets patrons get informed of newly acquired titles. This service accompanies the preview and reservation of new titles introduced in
4. **Multimedia borrowing notification service:** Libraries like the OIT library stores their multimedia collection (including CD, VCD, and DVD) in a CD/DVD management system. After entering his/her PIN ID and password,

a patron can discover and check-out any discs they want from the CD/DVD management system. At the same time, an SMS alert will be sent to the patron so as to prevent account compromise.

5. **Request arrival notification service:** This service reminds patrons about the availability of reserved items.
6. **Overdue notification service:** This service reminds patrons about overdue items.

The researcher observes that Nigerian libraries are yet to utilize SMS service technology for library operations including, due date reminders, information on availability of library materials, provision of call numbers and locations etc. It is in view of this that the researcher set find out the utilization of short message service (SMS) technology for library services in institute for agricultural research library, A.B.U Zaria, Nigeria

Research Objectives

1. To determine the types of library S.M.S services technologies provided by Institute for Agricultural library (IAR) A.B.U Zaria.

2. To determine the level of awareness of library S.M.S services technologies in Institute for Agricultural library (IAR) A.B.U Zaria.
3. To determine the level of utilization of library S.M.S services technologies in Institute for Agricultural library (IAR) A.B.U Zaria.

Research Methodology

This paper used a quantitative survey method to collect the data in order to investigate the utilization of short message service (SMS) technology for library services in institute for agricultural research library, A.B.U Zaria, Nigeria. One set of questionnaire was constructed and administered to 15 professional librarians. Out of 15 questionnaire, 12 were collected from the respondents and were analysed descriptively using frequency count, percentage and mode. A bench mark of 40% per cent was used for data analysis.

Data presentation and analysis

The presentation and analysis was done under descriptive statistic with respect to three research objectives.

Table: 1. Types of Library S.M.S services technology offered to IAR library

S/N	Library S.M.S services technology	Responses
1	News and event reminder service (news announcement, event reminders)	√
2	Due-day reminder	•
3	Renewal-request service:	•
4	New title notification service	√
5	Multimedia borrowing notification service	•
6	Request arrival notification service	•
7	Overdue notification service	•
8	Provision of call numbers and locations via S.M.S	•
9	OPAC services	•

As reflect in the table above, on enquiry, the researcher discovered only two (2) SMS services technology are provided in IAR library including News and event reminder service (news announcement, event reminders) and New title notification service, out of the ten Library S.M.S services technology. This

finding indicate that the library do not offers Library S.M.S services technology to their users, The implication according to Dheeraj, (2014) is that most libraries are technologically inclined and the thought and notion of the use of any emerging technologies, are for banking, social media rather than library operations

Table: 2. level of awareness of Library S.M.S services in IAR library

S/n	Library S.M.S services technology	Aware	No opinion	Not aware
1	News and event reminder service (news announcement, event reminders)library	2 (16.67)	5 (41.67)	5 (41.67)
2	Due-day reminder	0 (0.00)	0 (0.00)	12 (100%)
3	Renewal-request service:	0 (0.00)	0 (0.00)	12 (100%)
4	New title notification service	2 (16.67%)	0 (0.00)	7 (58.33%)
5	Multimedia borrowing notification service	0 (0.00)	0 (0.00)	12 (100%)
6	Request arrival notification service	0 (0.00)	0 (0.00)	12 (100%)
7	Overdue notification service	0 (0.00)	0 (0.00)	12 (100%)
8	Provision of call numbers and locations via S.M.S	0 (0.00)	0 (0.00)	12 (100%)
9	OPAC services	0 (0.00)	0 (0.00)	12 (100%)
10	Users request opinion via S.M.S	0 (0.00)	0 (0.00)	12 (100%)

From Table 2 above, respondents indicate that they are not aware of Library S.M.S services technology. News and event reminder service (news announcement, event reminders), New title notification service are the only service familiar with the librarians using library face book group (IAR information retrieve) to send

and receive information with response rate of 16.67%.The fact that majority of respondents are not familiar with this technology means that the S.M.S technology are not available to the library and is only when S.M.S technologies are available that the library can utilized it.

Table 3: Level of utilization of Library S.M.S technology services in IAR library

S/n	Library S.M.S services technology	often	sometime	never
1	News and event reminder service (news announcement, event reminders)library	0 (0.00)	0 (0.00)	8 (66.67%)
2	Due-day reminder	0 (0.00)	0 (0.00)	12 (100%)
3	Renewal-request service:	0 (0.00)	0 (0.00)	12 (100)
4	New title notification service	0 (0.00)	0 (0.00)	10 (83.33)
5	Multimedia borrowing notification service	0 (0.00)	0 (0.00)	12 (100)
6	Request arrival notification service	0 (0.00)	0 (0.00)	12 (100)
7	Overdue notification service	0 (0.00)	0 (0.00)	12 (100)
8	Provision of call numbers and locations via S.M.S	0 (0.00)	0 (0.00)	12 (100)
9	OPAC services	0 (0.00)	0 (0.00)	12 (100)
10	Users request opinion via S.M.S	0 (0.00)	0 (0.00)	12 (100)

As indicated in Table 3 above, utilization of S.M.S services technology for library operations is limited in IAR library, only 33.33% indicated that they sometimes utilizes News and event reminder service (news announcement, event reminders), and 16.67% for New title notification service, But majority indicated they have never use other services with a response rate of 63% and above. This is attributed to the fact that that library staffs are not given mobile technology training on the use of these technologies or it may be the librarians do not have interest in adapting to new technology. This finding is in line with Tiko,(2014) that Library stakeholders who prefer to use information systems and technology in the library, struggle to do so because of lack training and understanding on how to use the systems.

Summary of the Major Findings

Base on the data collected for the study, the following findings were summarised below:

1. The study revealed that majority of the Library S.M.S services technologies are not provided in IAR library, only News and event reminder service and new title notification service are provided in the library.
2. The study discovered that most of the library staffs are not familiar with the Library S.M.S services technologies. They were familiar with only News and event reminder service and new title notification service through library face book group.
3. The study revealed that utilization of Library S.M.S services technologies is limited in the library. They sometimes utilize News and event reminder service and new title notification service only.

Conclusion

Library S.M.S services technologies place a very important role to library profession in this mobile technology era. It can be concluded that Library S.M.S services technology are not available and are not utilized by library staff to serve their users in IAR Library. This indicates that, Libraries in Nigerian as the case of IAR library are technologically not inclined toward S.M.S

services technology. This could be attributed to the fact that most libraries are lacking required persons with appropriate skills that can lead libraries into use of SMS mobile technology services as in banking.

Recommendations

1. Library should create avenue for training of staff and users in technological skills required for the use of S.M.S service technology.
2. IAR library and other libraries in Nigeria should offer various Library S.M.S services technology for library services like circulation, reference, cataloging and serial, for the need of their patrons to meet with the emerging technological trend in the world.
3. Libraries should make their patrons aware of the recent Library S.M.S services technology as it was done in banking and marketing cooperating with agricultural research institute to announce seasonal informative tips for farmers regarding use of fertilizers, soil and water management industries through various channels on their mobile phones and media relate advertisement.

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