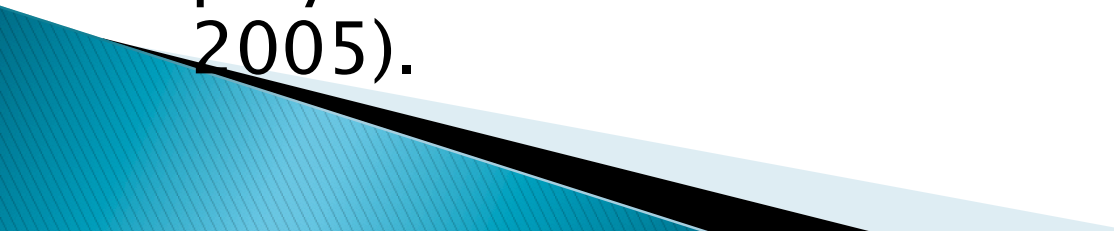# PERCEPTIONS OF LIBRARY PROFESSIONALS TOWARDS INNOVATIVE USE OF SHORT MESSAGESERVICE (SMS) FOR LIBRARY SERVICES IN PUBLIC LIBRARIES IN NIGERIA

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- The principal merchandise of libraries is information which has been adjudged to be a necessity for development as there are strong linkages between being uninformed, underdevelopment and poverty.
- Advances in information and communication technologies has made information to be a competitively traded commodity and libraries need to innovate in order to remain relevant for information provision.
- Innovations engender challenges skill and attitudinal-wise as they require changes in existing ways of task performance thus resistance is a normal response.

Introduction...

- Public libraries are meant to give access to information to all, irrespective of age, religion educational and social status.

- Invariably they need to explore avenues of ensuring that information gets to every member of their user community to aid the development process in all spheres of human endeavour.

- Also democracy which is the bedrock of continued civilization can only be sustained through the ability of well-informed citizens to exercise their democratic rights and to play an active role in the society (Drotner, 2005).

- The mobile phone which took over from land lines has become, over the past ten years, one of the major interfaces used to access and share information.
- It is mobile, asynchronous, versatile, accessible, unobtrusive and in everybody's hands.
- There are more than 101.4 million subscriptions to mobile phones in Nigeria (Essien, 2012).
- The most commonly used data application on mobile phones is Short message Service (SMS) or text messaging which is sending and receiving messages with the device.

- Messages can be up to 160 characters but service providers allow the linking of more than one text message at a time so that messages of up to 740 characters can be received as one long text.

- Text messages are cheaper than calls, allows for voiceless communication, is useful when one is in transit and calls can not go through and in noisy environments and does not require the immediate attention of the mobile phone user (Feuba, 2009).

- The service is very popular amongst young adults as a means of communication thus this generation has been called 'the texting generation' and 'generation text ' (Lippincott, 2010 ; Feldman, 2010).

- Use of public libraries have been on decline in Nigeria. This has been attributed to inadequate funding, lack of integration of ICTs in service delivery and the resulting poor perception of the relevance of the information services provided by these institutions.

- Introduction of new services using modern technologies have been known to increase library patronage and boost relevance and visibility

- However, the attitude of library professionals towards innovations is a deciding factor towards the introduction and sustenance of new services as library services are invariably driven by them.

- Without a positive attitude to change, facing the challenges involved will prove daunting and might strangulate all efforts towards instituting any innovations.

- Therefore, this paper aims to find out the perceptions of librarians working in Nigerian public libraries towards the use of SMS for information services.

- What is the attitude of librarians in Nigerian public libraries towards the introduction of library services through SMS?

- What are the library services that could be provided through SMS in Nigerian public libraries?

- What the facilities available in Nigerian public libraries that could facilitate the easy take off of the services?

- What are the possible hindrances to the introduction of SMS technology services in Nigerian public libraries?

- The popularity and availability of mobile communication makes it imperative for public libraries to offer services with the technology which their patrons are familiar with and which they use frequently in their daily lives (Kumar, Kumar & Prithviraj, 2013).

- An increasing number of libraries have taken advantage of the existing mobile technologies to provide innovative services with the result that many mobile web applications have been developed.

- SMS library services have the potential of offering library users all the services of web support chat without being connected to the internet. Library patrons can chat via SMS with a library by texting a dedicated Text-a-Librarian number which is usually shorter than the usual telephone number (Ikhemuemhe, 2005; Wang, RenKe & Lu, 2011).

- Text message facilities of mobile phones could be used to facilitate prompt handling and response to user query and also create awareness about up-coming events and new arrivals.

- It could be used for mobile learning with the advantage of allowing library users to learn in small manageable chunks anywhere and at anytime.

- It could be used to reinforce use of library and information literacy teachings where series of text messages comprising tips and reminders can be sent to students at relevant points in the term to augment face-to-face inductions most of the students receive (Walsh, 2009).

- Other library services that could be offered through text messaging include important news and notices, date due reminders, overdue notification and renewal request services, request arrival notification and information about opening and closing hours.

- Text messages could also be used to access book and audio book collections as well as reference assistance.

- A pilot project reported at Curtin Library explained that reference queries through SMS can arrive in the form of email to a mailbox specifically set up for that purpose and the client will receive the response on his mobile phone as a text message (Giles & Grey-Smith, 2005).

- As far back as 2008, the Oriental Institute of Technology (OIT), Taiwan introduced Library services via SMS as an entry-level mobile web service through which the library could offer her patrons speedy news announcements, event reminders and other requested information (Wang, RenKe & Lu, 2011).

- A public library in New York have used SMS to send information to users who registered to learn Italian language through a web based portal (Levy & Kennedy, 2005).

- Close to 100 women receive regular SMS from the Tamale Northern Regional Public Library with information tailored purposely to help reduce maternal mortality (DeLong, 2012).

❑ Library services through SMS could be made more viable and less burdensome by use of enabling technological facility known as 'broadcast' where text messages (especially the ones that are not individualised) are sent to all the library contacts in the address book on the mobile phone, at once (Wang, RenKe & Lu, 2011; Seeholzer & Salem, 2011).

❑ Giles & Smith (2005), outlines four possible means of implementing SMS services in libraries. First, certain library systems now include the notice production software which gives the option to automatically send SMS text messages informing library patrons when a reserved item has been placed on hold for them.

- Second, a plug-in product can be acquired and integrated into a library's existing email system to enable email to SMS messaging.

- Third, custom-made technology which enables clientele to use SMS to send reference queries to the Library, renew library books, pay library fines and check the availability of library resources could be installed and programmed through normal web-based SMS services such as JANET txt http://www.pageone.co.uk/janettxt/

- Fourth, the service could be outsourced to an external telecommunications messaging vendor.

- Also, it could simply involve putting a normal phone on the reference desk for answering enquiries by text.

- Google Voice service available at http://voice.google.com allows a library to choose a new phone number and distribute calls and text messages for that number to other phones so that more than one librarian can answer reference queries at any given time. Text messaging to and from this number is free and the library can reply from the web browse if there is internet access (Vecchione & Ruppel, 2012).

- Furthermore, Library3hlp (available at http://library3hlp.com) provides an amalgamated that integrates a mobile phone using the open source Android operating system and additional features in in its software that enables chat.

- An example of a system specifically marketed for this sort of service is 'Text a Librarian' by Mosio (http://www.textalibrarian.com/) (Buczynski, 2008).

- Attitudes are our feelings, opinions, acceptance, rejection, perceptions and reactions in certain ways to situations, ideas entities. They stem from our individual mindset and from various other factors.

- Attitudes can be rigid, flexible or moderate. Rigidity leads to pessimism and negativity in approach and acceptance of changes which could be a major challenge (Valadez, 2007).

- The right attitude can be a catalyst for innovations to thrive in a workplace while a negative attitude can ultimately impact productivity and efficiency while killing off innovation and creativity (Allameh, Shahriari & Mansoori, 2012).

Attitude …

- Positive attitudes to change have been found to be vital for the success of new ways of doing things while resistance to change has been recognized to be a critical failure factor of successful implementation of innovations in organisations (Eby, Adams, Russell & Gaby, 2000).

- According to Al-Jaderat, Nagresh, Al-Shegra & Jadellah (2013), the success or failure of any introduced innovation is dependent on the attitude of staff who will drive the innovation.

- This is highly influenced by how the organisation manages the information about the change, the objectives of the change, how they are made to understand it and how it will change their work environment and habits.

- Survey research method was used.The total population of library professionals in two States of the country used are 61.

- The census technique of sampling was used considering the small population involved.

- The questionnaire titled 'Attitude of Library Professionals towards the use of SMS for Library Services (ALPUSLS) was used to collect data.

- It was divided into 5 Sections to elicit responses on the bio-data of the respondents, their attitude towards the deployment of SMS for library services, their opinions about services that could be provided through SMS, amenities that are available that could facilitate the introduction of the service and the perceived hindrances to the service

- Total number of questionnaires received back was 40 representing 65.6% of the population of study.

- In order to answer the research questions of the study, all the collected data were analyzed using SPSS Computer Software Package Version 17.

- The decision rule for the mean score of the attitude of librarians towards the use of SMS for library services in Nigerian public libraries as inquired in research questions 1 to 4 are as follows: Strongly Agree (SA) and Very High Extent (VHE); Agree (A) and High Extent (HE); Disagree (D) and Low Extent (LE) and Strongly Disagree (SD) and Very Low Extent (VLE). 2.50 and above was regarded as a positive score while all points below 2.50 were rated negative scores in the analysis of the data.

Results

- The demographic distribution of the respondents shows that 77.5% are female while 22.5% are male. Their years of working experience range from 2-5yrs(7.5%), 6-10yrs(12.55%), 11-16yrs(17.5%), 17-22yrs (45%) to 23-35yrs (17.5%). 57.5% of the respondents have postgraduate degrees while 25% have a first degree in Library and Information Science.

- The librarians' perception of the importance of SMS library services was also explored as another aspect of their attitude towards the introduction of the service.

- All the options yielded positive mean values although 20% felt that SMS services will not boost reading culture while 10% felt that the service would not provide any incentive to those who find the library far from their homes. However the respondents mostly feel that SMS services will bring about changes to the library (mean value of 3.80) as shown in Table 1 below.

❑ **1. SMS services will introduce changes to the library**

Very High Extent	High Extent	Low Extent	No Extent	Mean	Standard deviation
85%	10%	5%	0%	3.80	.510

❑ **2. Use of SMS could increase our membership**

Very High Extent	High Extent	Low Extent	No Extent	Mean	Standard deviation
67.5%	20%	7.5%	5%	3.50	.847

❑ **3. Reading culture would be boosted as the Library would be used by more people**

Very High Extent	High Extent	Low Extent	No Extent	Mean	Standard deviation
40%	27.5%	12.5%	20%	2.87	1.15

❑ **4. Use of SMS would be a great incentive for use of our services for those who find the Library far from their homes**

Very High Extent	High Extent	Low Extent	No Extent	Mean	Standard deviation
52.5%	25%	12.5%	10%	3.20	1.01

❑ **5. It will be difficult to introduce new services to the library**

Very High Extent	High Extent	Low Extent	No Extent	Mean	Standard deviation
37.5%	10%	62.5%	20%	2.05	.782

❑ **6. Texting or sending SMS is problematic for me**

Very High Extent	High Extent	Low Extent	No Extent	Mean	Standard deviation
12.5%	0%	77.5%	15%	2.10	.810

❑ 7. Adoption of changes is highly challenging and tasking

Very High Extent	High Extent	Low Extent	No Extent	Mean	Standard deviation
7.5%	87.5%	2.5%	2.5%	3.00	.452

❑ 8. It might drive away some readers as they might prefer information texted to them instead of coming to the library

Very High Extent	High Extent	Low Extent	No Extent	Mean	Standard deviation
55%	15%	7.5%	22.5%	3.02	1.25

❑ 9. Young people might abuse it for frivolous enquiries

Very High Extent	High Extent	Low Extent	No Extent	Mean	Standard deviation
25%	55%	15%	5%	3.00	.784

❑ 10. We would need more staff for the service

Very High Extent	High Extent	Low Extent	No Extent	Mean	Standard deviation
37.5%	52.5%	10%	0%	3.27	.640

❑ Another aspect of the attitude of librarians investigated was their perceptions of the problems that the introduction of SMS library services could engender. 55% of the respondents perceive that it might keep readers away from the Library as they would prefer information texted to them while 22% agreed to a high extent that young people might abuse the services. The results are clearly shown in Table 1 above.

- Data collected show that all the options about the library services that could be provided through SMS have a positive mean value ranging from 3.65 to 2.72. This clearly indicates that the respondents feel that all of the options are viable library services that could be provided with SMS.

- Newspaper headlines alert had the highest mean value of 3.65 as an information service the library could perform through SMS followed by the service of providing important news and notices through SMS with a mean score of 3.42 and use of SMS for sending notice of overdue books with a mean value of 3.27.

- The details are in Table II below.

- 1. Newspaper headlines alert

Very High Extent	High Extent	Low Extent	No Extent	Mean	Standard deviation
70%	25%	5%	0%	3.65	.579

- 2. New arrivals

Very High Extent	High Extent	Low Extent	No Extent	Mean	Standard deviation
52.5%	27.5%	10%	5%	3.22	.999

- 3. Notice of overdue books

Very High Extent	High Extent	Low Extent	No Extent	Mean	Standard deviation
37.5%	55%	5%	2.5%	3.27	.078

- 4. Book renewal services

Very High Extent	High Extent	Low Extent	No Extent	Mean	Standard deviation
45%	35%	17.5%	2.5%	3.22	.831

- 5. Literary functions

Very High Extent	High Extent	Low Extent	No Extent	Mean	Standard deviation
27.5%	65%	5%	2.5%	3.17	.635

- 6. Important news and notices

Very High Extent	High Extent	Low Extent	No Extent	Mean	Standard deviation
50%	42.5%	7.5%	0%	3.42	.635

- 7. User query and requests

Very High Extent	High Extent	Low Extent	No Extent	Mean	Standard deviation
52.5%	25%	10%	12.5%	3.17	1.05

❑ Data collected to find out what amenities are presently existent to facilitate the introduction of SMS library services show that all the options have a negative mean value. The lowest value was the absence of library dedicated phones (1.00) and internet access (1.12) even via modems sold over the counter by communication network operators. The details are explicitly outlined in Table III below.

❑ Table III – Available amenities for introduction and sustenance of SMS Library services

Options	Available	Not Available
1. Capable & dedicated manpower	80%	20%
2. Computer for bulk (broadcast) SMS	40%	60%
3. Internet facility/modem	12.5%	87.5%
4. Library dedicated phone	0%	100%
5. Library e-mail	30%	70%
6. Phone number of registered users	82.5%	17.5%
7. Data bank of registered users	30%	70%
8. Finance	25%	75%

- Data collected on the possible hindrances to the introduction of SMS library services show that lack of internet connection/modem has the highest mean value (3.85) followed by sporadic power supply (3.80) and inadequate funds (3.57).

- Non-access to the phone numbers of users and the non-availability of a data bank of users' information requirements were considered impediments to SMS library services by 30% (SA) and 18%(A) of the respondents and 28%(SA) and 7%(A) respectively.

- The full details are shown in Table IV below.

Table IV – Possible hindrances to the introduction of SMS library services

- ❑ 1. Sporadic power supply

Strongly agree	Agree	Disagree	Strongly disagree	Mean	Standard Dev.
80%	20%	0%	0%	3.80	.450

- ❑ 2. Erratic network services

Strongly agree	Agree	Disagree	Strongly disagree	Mean	Standard Dev.
35%	50%	15%	0%	3.20	.686

- ❑ 3. Non-access to users phone numbers

Strongly agree	Agree	Disagree	Strongly disagree	Mean	Standard Dev.
30%	45%	17.5%	5%	3.00	.847

- ❑ 4. Non availability of users information requirements

Strongly agree	Agree	Disagree	Strongly disagree	Mean	Standard Dev.
70%	17.5%	7.5%	5%	3.52	.846

- ❑ 5. Lack of library dedicated mobile phones

Strongly agree	Agree	Disagree	Strongly disagree	Mean	Standard Dev.
45%	37.5%	20%	0%	3.27	.750

- ❑ 6. Inadequate funds

Strongly agree	Agree	Disagree	Strongly disagree	Mean	Standard Dev.
57.5%	42.5%	0%	0%	3.57	.500

- ❑ 7. Lack of internet facility/modem

Strongly agree	Agree	Disagree	Strongly disagree	Mean	Standard Dev.
85&	15%	0%	0%	3.85	.361

Discussion

- Findings indicate that the librarians would want to see library services provided through SMS as it would boost the reading culture and would be a great incentive for use of library services for those who find the Library far from their homes.

- However the study found out that the public library of Delta State is yet to be connected to the internet for use of SMS library services that might require computer and connectivity interface unlike that of Anambra State.

- Also, a negligible number of librarians find it problematic to use the SMS function in mobile phone. The findings of the study also point to the fact that young people might abuse the service with frivolous enquiries. This agrees with the findings of Turel, Serenko & Bontis (2007) who investigated users acceptance of SMS services.

- Perceived problems in the implementation of the innovation include lack of a data bank of information requirements of users, erratic network and power supply as well as inadequate funding.

Conclusion

- Library services through SMS have been in practice among the libraries of the developed world.

- Libraries in developing areas of the world especially in Nigeria need to key in into this innovation as it can be conveniently and cheaply provided with mobile phones in the Reference section. This would increase their reach, boost membership and equally raise their visibility and relevance.

- Attitude is a predictor of behaviour. Thus the mainly positive attitude recorded by the study provides grounds for the belief that public libraries in Anambra and Delta States of Nigeria have the willpower to introduce this innovation into the rendering of information services.

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