



USES AND EFFECTS OF SHORT MESSAGE SERVICE (SMS) BUSINESS TEXTING ON THE PERFORMANCE OF COMMERCIAL BANKS IN UYO METROPOLIS

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ABSTRACT

This study examined the uses and effects of short message service (SMS) business texting on the performance of commercial banks in Uyo Metropolis. The study used the technology acceptance model (TAM) to capture the perceived usefulness and perceived ease of use of SMS by businesses. Three hundred and thirty (330) staff of 11 commercial banks in Uyo Metropolis, Akwa Ibom State made up the population of the study. The researchers selected a sample size of 180 respondents using the Taro Yamane sample size formula. The finding of the study was that commercial banks in Uyo metropolis use business texting (SMS) in their interactions with customers and investors (98.3%). The study further revealed that using both one-way SMS as well as two-way SMS by commercial Banks in Uyo Metropolis increased the effects of SMS on banks performance in terms of usefulness and convenience (60% useful and 81.9% convenient). The study recommends that commercial banks should adopt both ways (Push and Pull) SMS for effective communication with customers, and increased efficiency in conducting routine business activities.

Keywords: Business texting, Short Messaging Service (SMS), organizational performance, commercial banks, TAM

Introduction

Over the years, the adoption of technology has been the driver for positive change for millions of businesses. The survival of any business enterprises in the 21st century greatly depends on the initiation and implementation of new strategies of gathering and communicating information with the internal and external shareholders. It is important in the process of carrying out business operation nowadays. In practical terms, business enterprises harnessed the potentials of new invention in technology are benefitting greatly. It is believed that these businesses have gained significant achievement of their objectives and goals.

With these environmental, organizational, and technological factors, the business environment is becoming highly competitive with customers as the focal point (Turban et al., 2010). This helps strengthen their competitive positions in rapidly changing/emerging economies. According to Turner *et al* (2010), the modern workplace is inherently collaborative, and this collaboration relies on effective communication among co-workers. Many communication tools such as short message service (SMS), Email, blogs, wikis, Twitter, etc. have become increasingly available and accepted in workplace communications.

Business communications using SMS (Short Message Service) by commercial banks is one of the best and most popular mobile marketing channels for building mobile databases and driving consumer engagement (Kats, 2013). In 2011 alone, about 7.8 trillion text messages were sent worldwide. Implying that, every living person on earth received over 1,000 texts that year (Portio, 2012). This means that we use text messaging in our everyday lives to ask questions, convey thoughts, confirm plans and opinions in the same way; customers want to engage with companies and companies with customers to instigate business transactions for each party benefits.

In Nigeria, Taiwo (2010) observed that SMS (Short Message Service) is used widely for identity formation, romance, business, and several other socio-cultural purposes. So, businesses can leverage SMS to reach out to their customers. Hence, this study examined the uses and effects of short message service (SMS) business texting on organizational performance of commercial banks in Uyo metropolis, Akwa Ibom State.

Statements of the Problem

It is a straightforward presumption that business enterprises are adopting new communication technology to effectively and cordially relate with their employees and customers. One of such new communication trend is the use of business texting – short message services (SMS). From cosy survey, this trend appears to be used more often by businesses nowadays; and the banking sector has not been left behind. Banks now leverage on SMS to notify customers of transactions, products, value-added services, etc. The most common of these SMS are debit and credit alerts. Banks also send SMS to their customers on special days such as birthdays.

With so many products and services to communicate with their customers, coupled with transaction notifications, the number of text messages sent by commercial banks to their customers is increasing. Almost every day customers of banks receive SMS alerts on their mobile phones from their respective banks. These text messages are forms of business communication between the banks and their customers. But the question here is: do these text messages contribute to their overall organisational performance of commercial banks? Or are they merely communicative?

Research objectives

The general objective of this study is to determine the uses and effects of short message service (SMS) business texting on organizational performance of commercial banks in Uyo metropolis, Akwa Ibom State. In specific terms, the objectives of this study are to:

- i. ascertain the uses of SMS business texting in commercial banks in Uyo metropolis, Akwa Ibom State;
- ii. find out which of the dimensions of SMS is adopted by commercial banks in Uyo metropolis, Akwa Ibom State; and,
- iii. examine the effects of using SMS business texting on organizational performance of commercial banks in Uyo metropolis, Akwa Ibom State.

Conceptualisation of terms

Business Texting and Short Message Service (SMS)

Business texting is an aspect of text messaging which involve the use of short message service to send texts (exchange information) within and outside the organization to give out or get information to/from customers, suppliers and shareholders to enhanced effective decision making/formulations and implementation of plans. It is, also, one of the tools of management information system that ensures the transmission of information within and outside the conference of the organization (Chui et al., 2012). According to Blumberg (2014), the demand for business texting began in 2015. It was expected to grow even faster in 2016 and beyond.

On the other hand, Short Message Service, also known as "texting", refers to the exchange of brief messages, typically between 140-160 characters, sent between mobile phones over cellular networks. According to Taiwo (2012), it is designed to allow the exchange of short text messages between users of mobile phones (Tiago et al., 2013).

Dimensions of Short Messaging Service (SMS)

According to Rotimi *et al* (2007), there are two methods of SMS widely used by banks. They are the PUSH and PULL.

Push SMS: Push SMS is sending a message from an application (that is, short message service (SMS) Server) to users. It is a one-way message. That is, the message is initiated by the mobile application (in this case, the SMS banking application). An example could be a deposit alert, which notifies the user when a deposit is made to his/her account.

Pull SMS: Pull SMS is sending a request and obtaining a reply. In pull SMS, a user sends a request to the SMS banking application and the application replies with the information requested. This is applicable when a bank customer requests for his or her bank account balance via SMS.

Empirical review

Information communication systems in organizations have widely been studied. Charles (2014) in one of his studies investigated the impact of technological innovation on organizational performance. It shows that strategic planning in terms of implementing new and fast-tracking communication and

marketing capability of accessing customers independently and jointly influence organizational performance. The result of the study also reveals that there is a positive interaction between technological innovation such as business texting and performance variables (resources availability, staff quality, productivity, sales revenue, financial strength, public image and goodwill).

In another study, Ardam (2017) using a descriptive-analytic approach discovered a positive significant impact of social media usage on organizational performance in Dead Sea products companies in Jordan in term of rapid adaptation, time to market, cost reduction, satisfaction, and innovation. The study results showed that there is a high social media usage among limited liability companies especially small and relatively new companies. Furthermore, results indicated that there is a lack of social media usage in public shareholding companies, especially large and old companies.

Chui et al. (2012) explored the potential impact of internal social media use within four commercial sectors: consumer packaged goods, retail financial services, advanced manufacturing, and professional services. The research found out that social media technologies can create value by improving productivity across the value chain. Also, they could potentially add \$900 billion to \$1.3 trillion in yearly worth across the four sectors.

The above stated empirical literatures so far discussed, have not specifically emphasized business texting as one of the elements of information technology through the result from studies on IT investment indicated a positive relationship on organizational performance (profitability). However, most of the kinds of literature were not conducted in the banking sector and the dimension of business texting was majorly on social media. Hence, this study focuses on examining the relationship between business texting in specific terms and organizational performance (profitability) considering to return on assets and return on equity as variables for organizational performance.

Theoretical framework: Technology Acceptance Model

Technology acceptance model/theory was adopted as the theoretical underpinning for this study. Davis in 1989 developed the Technology Acceptance Model (TAM). Ajzen and Fishbein in 1980 adapted the Theory of Reasoned Action (TRA) from TAM. Also, Theory of Planned Behaviour (TPB), developed by Ajzen (1985) and tailored to the context of technology acceptance and usage. The two items construe in the Technology Acceptance Model as it relates to this study includes perceived usefulness and perceived ease of use that are proposed to influence the acceptance of a technology.

Davis (1989) believes that perceived ease of use refers to the level to which an individual believes that using a particular system would be easy and free of stress. While perceived usefulness refers to the users' behavioural intention to use an information system is geared, to a large extent, by their perceived usefulness of the system (Davis et al., 1989). Technology Acceptance Model (TAM) is widely used and accepted to explain the relationship between perceptions and the use of technology such as business texting. The two main constructs that influence behavioural intention are Perceived Usefulness (PU) and Perceived Ease of Use (PEU)(Azmi *et al* (2010); Olushola & Abiola (2017); Fishbein & Ajzen (1979) as cited in Momani & Jamous, (2017).

Research methodology

The study used a survey research design. The population size was a total of 330 members of staff from 11 commercial banks in Uyo Metropolis, Akwa Ibom State. Number of staff was obtained from the Human Resource department of the various branches as of November 14th, 2019. One hundred and

eight-one (181) respondents were selected as sample for the study using Taro Yamane statistical formula. Copies of the close-ended questionnaire were, personally, administered by the researchers on the respondents. Permission was obtained from the management of the banks to research their workplaces during official hours. The analyses of the returned questionnaires were done with a simple descriptive analysis of frequency distribution and percentage.

Data presentation and analysis

This section is designed to present, analyse and interpret the primary data obtained via the questionnaire which was administered to the respondents. These are shown in the table below:

Do banks use SMS to communicate with customers as well as investors?

Table 1: Percentage analysis of Responses on the use of SMS

OPTION	Frequency	Per cent (%)
YES	169	98.3
NO	3	1.7
Total	172	100.0

Source: Fieldwork, 2019

The analysis from table 1 above shows the frequency of responses and their percentages on the use of SMS in commercial banks in Nigeria. From the result of the responses above, the highest responses (169 representing 98.3%) indicate that majority of commercial banks in Uyo metropolis use SMS to communicate with their customers and investors as well.

Which of the dimensions of SMS is adopted in your bank?

Table 2: Percentage analysis of Responses on dimensions of SMS adopted

OPTION	Frequency	Per cent (%)
PUSH SMS	21	12.2
PULL SMS	46	26.7
BOTH PUSH AND PULL	105	61.0
Total	172	100.0

Source: Fieldwork, 2019

Table 2 above shows the frequency of responses and their percentages on the dimensions of SMS adopted in the banks. The percentage analysis above indicates that commercial banks in Uyo Metropolis use SMS to communicate with their customers and usage of both Pull and Push SMS (61%) was mostly used to communicate with customers as well as receiving of feedback from them.

Table 3: Percentage analysis of Responses on the use of Push (One-way) SMS

S/N	Only for respondent that earlier choose both Push SMS as stated above	Extent of Agreement				
		SA (%)	A (%)	SD (%)	D (%)	Total (%)
3	One-way SMS (an SMS without enabling the client's reply such as deposit/withdrawal alert) as one of the dimensions of SMS is seen to be very useful in this bank.	13 (61.9)	7 (33.3)	-	1 (4.8)	21 (100)
4	One-way SMS (an SMS without enabling the client's reply such as deposit/withdrawal alert) as one of the dimensions of SMS is seen to be more convenient in this bank.	13 (61.9)	4 (19.1)	3 (14.2)	1 (4.8)	21 (100)

Source: Fieldwork, 2019

From the analysis of table 3 shown above, a majority of the respondents believe that one-way SMS (an SMS without enabling client's reply such as deposit/withdrawal alert) is a useful means of communicating with customers. Also, one way SMS is convenient for commercial banks (61.9% strongly agreed respectively). This implies that commercial banks in Uyo metropolis use push SMS for perceived usefulness (61.9%) and convenience (61.9%).

Table 4: Percentage analysis of Responses on the use Pull (Two-way) SMS

S/N	Only for respondent that earlier choose Pull SMS as stated above	Extent of Agreement				
		SA (%)	A (%)	D (%)	SD (%)	Total (%)
5	Two-way SMS (an SMS were clients sends a request to the SMS banking application and the application replies with the information requested such as money transfer request, Recharge Card request e.t.c.) is useful in bank operations.	23 (50)	16 (34.8)	6 (1.5)	1 (2.2)	46 (100)
6	The use of Two-way SMS (an SMS were clients sends a request to the SMS banking application and the application replies with the information such as money transfer request, Recharge Card request e.t.c.) is seen to be more convenient for banking.	23 (50)	13 (28.3)	7 (15.2)	3 (6.5)	46 (100)

Source: Fieldwork, 2019

From the analysis of table 4 stated above, 50% of the respondents strongly agreed that two-way SMS is useful and convenient in commercial Banks in Uyo Metropolis. This implies that commercial banks in Uyo metropolis use pull SMS (50%). This looks useful and convenient, but, when placed in

comparison with the push message in table 3, it becomes clear that push SMS (61.9%) is more useful and convenient for commercial banks.

Table 5: Percentage analysis of Responses on the use of both One-way and Two-way SMS

S/N	Only for respondent that earlier choose both Pull/Push SMS as stated above	Extent of Agreement				
		SA (%)	A (%)	D (%)	SD (%)	Total (%)
7	The use of BOTH One-way and Two-way SMS is seen to be very useful in banking	63 (60)	36 (44.1)	6 (12.8)	-	105 (100)
8	The use of BOTH One-way and Two-way SMS in banking is seen to be more convenience in carrying out bank operations.	86 (81.9)	14 (13.3)	2 (1.9)	3 (2.9)	105 (100)

Source: Fieldwork, 2019

Table 5 above illustrates responses for both pull and push SMS in terms of usefulness and convenience. 60% of the respondents agreed strongly that the use of both pull and push is useful; on the other hand, 81.9% think that using both is more convenient for banking in accessing customers and investors. Putting table 3, 4 and 5 together, there is a varying level of usefulness and convenient in using SMS: Pull SMS (61.9), push SMS (50%) and both pull and push SMS (60% useful and 81.9% convenient).

Table 6: Percentage analysis of Responses on the effect of SMS on the organizational performance of commercial banks in Uyo metropolis

S/N	Options	Extent of Agreement				
		SA (%)	A (%)	D (%)	SD (%)	Total (%)
9.	The usefulness and convenience of Push (One-way) SMS (an SMS without enabling the client's reply such as deposit/withdrawal alert) as one of the dimensions of SMS increase organisational performance in the bank	12 (57)	7 (33.3)	-	2 (9.5)	21 (100)
10.	The usefulness and convenience of Pull (two-way) SMS (an SMS were clients sends a request to the SMS banking application and the application replies with the information requested such as money transfer request, Recharge Card request e.t.c.) increases organisational performance in the bank.	23 (50)	16 (34.8)	6 (1.5)	1 (2.2)	46 (100)

11	The usefulness and convenience of both push and pull SMS increases organisational performance in the bank.	86 (81.9)	14 (13.3)	2 (1.9)	3 (2.9)	105 (100)
	Total	121	37	8	6	172

Source: Fieldwork, 2019

Table 6 shows the effect of the use of SMS on the organisational performance of commercial banks. The table compares the three dimensions of SMS used by commercial banks. When considered individually, the three dimensions of SMS (push SMS, 57%; pull SMS, 50%; both push and pull SMS, 81.9%) are instrumental in increasing organisational performance in banks generally. When compared, using both push and pull SMS (81.9%) is the most useful and convenient and leads to an increase in organisational performance of commercial banks in Uyo metropolis.

Findings

From the data analysed and presented, this study finds out that majority of commercial banks in Uyo metropolis use SMS to communicate with their customers and investors as well (98.3%) using both Pull and Push SMS (61%). This concurs by Ardam (2017) that new media of communication are being explored by businesses to reach out to their client. Nevertheless, Ardam (2017) did not refer specifically to SMS which gives this study is uniqueness. This finding aligns with the Technological Acceptance Model, which holds that claim that perceived ease of use can trigger the acceptance and usage of new technologies including SMS.

The study further revealed that using both one-way SMS as well as two-way SMS by commercial Banks in Uyo Metropolis increased the effects of SMS on banks performance in terms of usefulness and convenience (60% useful and 81.9% convenient). This combination of the two dimensions of SMS to achieve better results agreed with the averment of Charles (2014) that it takes strategic planning in terms of implementing new and fast-tracking communication independently and jointly to influence organizational performance.

Conclusion

The concept of business texting for this study is captured from the perspective of Short Message Service (SMS) also known as text messages. Short message service/text message which was first sent over the Vodafone GSM network in the UK on December 3rd, 1992 has become a major medium of passing across information from one person to another, companies to customers irrespective of the distance between the 'sender' and 'receiver'. Commercial banks in Nigerian are also adopting SMS/ business texting to reach out with information to their customers. Customers of banks enjoy receiving information update about their bank activities through SMS. They also adopt this medium in performing banking operations. This to a large extent according to them helped to enhance customer loyalty and confidence in bank operations.

Recommendation

Thus, this study makes the following recommendation:

- i. Commercial banks should adopt both ways (Push and Pull) SMS for effective communication with customers, increased efficiency in conducting routine business activities.

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