Uses of bulk SMS in political campaigns prior to Nigeria's 2011 general elections

By
Michael A. Kombol and John O. Ogi
Department of Mass Communication
Benue State University, Makurdi, Nigeria
e-mail: michael kombol@gmail. com
GSM: 08068695906
Email: ogijohnliv@yahoo.com
GSM: 07035592020

Abstract
Mobile phones have become widely used in Nigeria. These digital devices cut across social, religious, and economic strata. Thus, the widespread use of mobile phones in Nigeria underscores the awesome potential of mobile phones as a medium to reach more than three quarters of the Nigerian population. Politicians as well as political parties realised the benefits of sending bulk SMS to the Nigerian electorate during the 2011 elections. This study identifies the uses which bulk SMS was put to by political candidates and the problems they faced while doing so. Using a survey of 125 purposively selected political candidates, the study found that; bulk SMS is used because it is an efficient channel; and a significant number of candidates used bulk SMS to propagate manifesto, while others informed the electorate about the time and venue of political rallies. Furthermore, epileptic network coverage is the most significant problem encountered. Bulk SMS is an emerging channel of political communication, yet it is a means nonetheless of bringing contentious issues to the fore of political discourse.

Introduction

Campaigns are important in the political life of any democratic country. It is that point in time when political candidates have something to say to the electorate and the electorate on the other hand, listen attentively or other wiseto what is being said. At least a significant proportion of the electorate may listen while others may remain apathetic for a number of reasons. During a political campaigns (or electoral campaigns as some may choose to refer to it) there is a planned and sustained interaction between the candidates and the electorate. According to Brady, Johnston and Sides (2006, p. 18)

Campaigns are the moments in democratic life when representatives and the represented interact most energetically. It would thus disappoint if voters largely turned out and voted only in rote and ritualistic partisan ways. Campaigns can affect what voters know, whether they will vote, whom they will vote for, and why they will vote for that person.

Political candidates may use a number of channels of communication during campaigns. These channels are often selected according to those that are perceived as most effective considering the dominant cultural, infrastructural and social conditions of the cities, towns and villages where the campaign is held. Thus, the medium which the candidate selects may go a long way to determine reception by the audience in the first place and persuasion in order that they will vote in favour of the candidate. In other words, if the medium or channel used to communicate to the voters is not accessible to them, the latter will not receive the message and will be completely

ignorant. This is not what political candidates want to happen. Their campaign messages are expected to reach the voters so that they will vote appropriately on Election Day.

Apart from radio, television, billboards, handbills, newspapers, magazines, public address vans, etc., mobile phones too have become one of the channels which political candidates use during election campaigns. Mobile phones have become widely used in Nigeria for a number of reasons. Osuagwu (2014) estimates that 63% of adult mobile phone users in Nigeria own more than one mobile phone. Some of the many reasons for the widespread use of mobile phones in Nigeria include: portability, signal reception over rugged terrain, the wireless nature of the technology, flexibility to the multilingual nature of the muddle of populations called Nigeria, etc. The list of reasons seems endless and form a basis for study because why is a people on the African continent poor (and indeed most people in the developing world) yet they have the highest penetration rates of mobile phones in the world? According to Powell (2012), 73% of Nigerians say that they own mobile phones of their own. This widespread use of mobile phones in Nigeria as suggested by Osuagwu (2014) as well as Aker and Mbiti (2010) has made it an efficient medium to reach the Nigerian populace especially with political messages via SMS. Efficiencyhere is conceived in terms of the instant delivery of SMS as soon as it is sent. Technology has advanced to a stage where one text message (SMS) is sent to thousands of users at the click of a button. Hence the term, "bulk SMS." This study explores the extent to which bulk sms on mobile phones were used during campaigns for the 2011 general elections in Nigeria.

Statement of the problem

Political campaigns are integral for candidates seeking election into public office. During this period, candidates use a number of channels (which are perceived as effective) in order to reach the electorate in a bid to secure their votes on election day. This study investigates the use of bulk SMS during Nigeria's 2011 election campaign. Channels of political communication abound , yet some candidates chose to use SMS to reach the electorate. The use of SMS for this political purpose creates a puzzle and directs this study to investigate why this was so, the kind of messages sent and the problems encountered in the use of these SMS. Research on the use of mobile phones in political processes is increasing. Stein and Verclas (2010) examined the use of mobile phones in voter and electoral registration campaigns, while Aker, Collier and Vincente (2013) investigated the role of mobile phones and free newspapers during elections in Mozambique. The problem which this study investigates is the reason for using SMS, content and problems encountered in the use of these bulk SMS during Nigeria's 2011 elections.

Research Questions

i. Why were bulk SMS used during the 2001 political campaigns in Nigeria?
ii. What messages did political candidates send out in bulk SMS during the2011 political campaign in Nigeria?
iii. What problems were encountered by political candidates in the use of bulkSMS during the 2011 political campaign in Nigeria?

Conceptual clarification

Political Campaign

Political campaigns are also known as electoral campaigns. In most, circles, both terms are used interchangeably. Emphasis on the electoral nature of the campaign is often due to the fact that

the campaign build up to and terminates on election day. On the other hand, the campaign has a political purpose hence the term. In a nutshell, a political campaign refers to the communication process which precedes an election where political candidates seek toconvince members of the electorate to vote for them. Brady, Johnston and Sides state that (2006, p.3)

> A campaign is the period right before citizens make a realpolitical choice. This common knowledge typically heightenscitizens' attention to politics in direct relation to the proximityof the event. Concomitantly, campaign activity is more likelyto register on voters' minds as Election Day draws near. Thusthere is an interaction between campaign effort and theapproaching "deadline" of Election Day. Evidence for greatersalience of voters could manifest itself in, for example, mediaattentiveness, campaign interest, political discussion,knowledge about candidates, and strength of vote intention.

Political campaigns are periods where political candidates want to saysomething to the voters. They want to say a number of things which willconvince the voters that they are the right candidate for the position. Thus alot of means to achieve this purpose is explored. Semetko (2008) notes veryinteresting aspects of electoral campaigns when he writes that,

> The mass media are the most common source for information about election campaigns in democracies and societies in transition around the world. In terms of the sheer volume of information available to citizens via the media on issues, political parties and leaders, political communication often represents a high point in a national news stream during national election campaigns. Concerns about political bias in the mass media are at the heart of debates about the roles and responsibilities of the media at election time. Behind these concerns is the assumption that there may be effects, intended or unintended, on public opinion and political behavior and, ultimately, electoral outcomes.

Election day is usually the terminal point of campaigns. As the election day draws nearer, a lot of activity picks up especially from the political candidates. There is a concerted effort from this group to send more messages to the electorate.. Thus, political candidates will use whatever channels to send messages to the voters that will eventually be in their favour. Writing on the intensity of election campaigns, Brady, Johnston and Sides (2006, p.3) note that,

> Another indicator of intensity is the effort put into the campaign by parties and candidates, which usually increases as the campaign progresses. This increase may come in total outlays, such as a flurry of television advertisement, or merely in a different distribution of the same overall amount of effort, such that the campaign seems more intense to (some) voters and the media.

Short Message Service (SMS)

The Short Message Service is known by the acronym SMS. It involves the composition and transmission of messages in form of text- alphabets, numbers, symbols, etc. Upon reception,

literacy skills are required of the receiver in order to read the message. According to ADC telecommunications (1999),

> Short message service (SMS) is a globally accepted wireless service that enables the transmission of alphanumeric messages between mobile subscribers and external systems such as electronic mail, paging, and voice mail systems.

As a text based service, SMS is cheaper than voice calls. Similarly, the textual nature of SMS ensures that it can be stored for future reference. Voice calls on the other hand are fleeting, although they can be recorded and referred to on a later date. When SMS is sent to a significant number of people, say all the inhabitants of a town or city, it is referred to as bulk SMS. Often this is achieved using PC based applications which search for subscribers numbers within a given geographical location and the SMS is sent to large numbers of people at minimal cost.

Theoretical framework

Technological determinism

This study is explained by technological determinism proposed by Marshall Mcluhan. According to Bimber (1998) developments in technology determine social change. Technological determinism is a reductionist theory which assumes that the technology available in society, influences the growth of its social structures and indeed the social values that are held in that society. In other words, the theory holds that improvements in technology (in this case, communication technologies such as mobile phones and bulk SMS) is a catalyst for change in society. The change here is the shift from other channels of political communication to the use of bulk SMS. Bulk SMS is not solelyused but has been included as a medium of political communication. Smith (1985) summarizes technological determinism as, "the beliefs in technology as the key governing force in society." This statement holds true with reference to the fact that technology may influence people to behave in certain ways that were not thought possible. Who ever thought earlier that bulk SMS will be used today in political communication? In previous years, the introduction of technology influenced the industrial revolution and ideas of using machines for work instead of human labour. The influence of machines and indeed other technologies in fields such as agriculture is profound with mechanised farming and improved agro based economies. In this study, focus is upon bulk SMS in political communication. The influence of technology on society is explained in the statement by Postman (1992:3-20)

The printing press, the computer, and television are not therefore simply machines which convey information. They are metaphors through which we conceptualize reality in one way or another. They will classify the world for us, sequence it, frame it, enlarge it, reduce it, argue a case for what it is like. Through these media metaphors, we do not see the world as it is. We see it as our coding systems are. Such is the power of the form of information. By extension, mobile phones (and bulk SMS by extension) are not just machines that are used to convey information from one point to huge numbers in society. Technology may influence society in ways that are yet imagined. At various stages in society, as technology develops, it is important to pause and examine the extent to which particular technologies influence and reshape society. At this juncture, this "pause" is an examination of bulk SMS and the way it has re-shaped political communication. The subject is examined using a three pronged approach-why, content and problems. Technology may re-shape from time to time, thus it is pertinent to examine the intervening variables.

Penetration of mobile phones in Nigeria

The proliferation of mobile phones in Nigeria is not a myth. It is backed by empirical data. Pertinent to the discussion of the proliferation of mobile phones in Nigeria is the statement by Gayatri (2011, p. 2) who writes thus,

> Nigeria is one of the fastest growing mobile Markets in Africa. Although mobile communication was only introduced in 2001, it has long surpassed fixed line penetration. Nigeria has shown one of the highest growth rates of mobile phone access registering triple digit growth rates in subscriber numbers. Cell phonesubscribers grew from 0.02/100 subscribers in 2000 to 48/100 subscribers in 2009 Unprecedented growth in access to mobile phones has not only made communication easy, but also spurred economic and socio economic benefits in many countries. It is somewhat surprising to pause and note that mobile applications that emerged out of local inventions for local needs TT such as mobile money for the unbanked, crowd sourcing tools used during elections or humanitarian crises, and citizen mobile journalism TT were virtually unheard of only 5 or 6 years ago.

Adepetun (2014) writes that Nigeria ranks 7th among countries in the world as regard mobile phone penetration. Quoting a World Bank study, Adepetun (2014) notes that, with a population of 170 million, there are 168.5 million connected lines in Nigeria. Out of this number, only 127 million lines are active. This is a huge improvement from 400,000 fixed lines thirteen (13) years ago during the era of the NITEL (Nigerian Telecommunications). Earlier findings support the present statistics. According to the NCC (2013), a year ago Nigeria had the highest number of mobile phone subscriptions on the continent with 93 million, representing 16% of the total population in Africa.

Mobile phones have become very popular in Nigeria. Widespread use and acceptance of mobile phones in Nigeria has a number of implications. It has made mobile phone companies very profitable and dwindled profits of postal services (also known as snail mail). This statement is supported by Ndukwe in Leek and Astler (2009) thus,

> Since 2001, the growth recorded in mobile communications has been outstanding and by the end of last year (2008), there were approximately 64 million mobile subscribers in Nigeria. This translates to a 56 percent annual growth accumulation; with penetration of over 40 percent, up from an astonishing 0.4 percent just seven years ago.

The number of mobile phone users in Nigeria has continued to grow over the year. This overwhelming growth has attracted the attention of international observers. Developing countries like Nigeria have a number of problems to grapple with such as poverty, unemployment, disease, corruption, conflict, etc. Thus, with this legion of problems it is difficult to expect a boom in

mobile phone use, yet the success story is true and still unfolding. Fox (2011, p. 20) captures this situation when he writes that,

> It may seem unlikely, given its track record in technological development, but Africa is at the centre of a mobile revolution. Africa has experienced an incredible boom in mobile phone use over the past decade. In 1998, there were fewer than four million mobiles on the continent. Today, there are more than 500 million.

The African continent as a whole has experienced a boom in the use of mobile phones, but it is important to note the advances in each of the countries on the African continent. When a country by country approach is undertaken, the impact of mobile proliferation is better appreciated. Lambeek and Astler (2009, p. 23) write that,

> Yet, it is the African nations collectively that enjoy the highest growth rate of mobile phone subscriptions. Nigeria has witnessed one of the most amazing growths in the continent, from close to zero mobile penetration in 2002 to over 40 percent today. Affordability through a favorable regulatory environment, increased competition- and innovation has been and is a driving force behind the growth that emerges more and more from the rural areas of the world.

The reasons for the proliferation of mobile phones in Nigeria are numerous although there have been a lot of odds against the use of mobile phones. Poverty is a major problem which posed a barrier to proliferation but this problem is overcome through various ways and strategies. It is amazing that mobile phones have found foot on the African continent and indeed in other developing countries of the world. Before the advent of mobile phones, Africa was least thought of to use the technology. Heeks and Jagun (2007, p. 27) describe the situation when they write that,

> 'Explosive' is the only way to describe mobile phone growth. Half the world's 6.5 billion people now use a mobile (up from two billion just two years ago). There are more than twice as many mobile owners in developing countries as in industrialised countries. Subscriber growth rates in developing countries are 25 percent per year - and double that in Africa.

Related empirical studies

SMS and democratic governance in the Philippines

SMS is beneficial to government and in places where it has been used widely, there is a list of gains that have been attained. In the Study, "SMS and democratic governance in the Philippines," Lallana (2006) examines the use of SMS in promoting democratic governance as well as its role in promoting popular participation in Philippine politics. Using a survey, Lallana (2006) identifies the use of SMS in Filipino government, revenue service, provisionof public information, amplifying voice, vigilant citizens and public safety, elections and mass action. In the analysis of the use of SMS in elections in the Philippines, Lallana (2006) notes that in the 2004 political campaigns, one of the candidates used "text brigades" to propagate messages. These text brigades were groups of volunteers dedicated to sending out text messages, which were meant to organize meetings, rallies, assemblies and other campaign events. In order to

lighten the financial aspects of the campaign, they used *Chikka,* which is an instant messenger system which provides free text messages from the PC to any mobile phone in the world. Apart from *Chikka* other PC based software were used, namely *C3 Locale.* According to Lallana (2006),

> C3 Locale not only allows campaign directors to give voters information about their candidates but also to control their political operatives and coordinate their, campaign volunteers. In the post-campaign scenario, this software allows for the monitoring of election results (a quick count mechanism). C3 Locale was used in the successful 2004 mayoralty campaign of Angelito Sarmiento in the City of San Jose del Monte - in the northeast of Metro Manila.

The use of SMS in elections in the Philippines is a lesson to other developing countries. Such nations should realize the potential of SMS and use it effectively during election campaigns. On the whole, Lallana (2006) concludes that,

> SMS has also been harnessed as a tool for political involvement—these include expressing opinion, working for a campaign, becoming informed about political issues or developing political accounts, and as a tool for political action. To date, Filipinos have shown that they can use SMS in interesting and creative ways - despite the limitations imposed by technology. To date, SMS has been successfully used to promote democracy.

The success story of mobile phone use during election campaigns in the Philippines is an indication that the technology can do same in other developing countries where similar conditions exist. Each of these developing countries need to tailor mobile phones to suit their needs in the same way political aspirants in the Philippines did to ensure that their messages reached each member of the electorate.

The Study of political campaigns

Persuasive strategies are of interest to this study because it also investigates the content of political messages in bulk SMS during campaigns. In the study, Brady, Johnston and Sides (2006, p.3), seek to find out whether: campaigns persuade voters; if campaign persuade voters, which voters do they persuade?; whether campaigns prime certain issues or considerations; if campaigns prime certain issues and considerations, for whom and which issues or considerations are primed?; and whether campaigns shape strategic considerations as well. Given the nature of the purpose of the study it was important to identify a research method that will be useful in identifying and studying the effects of campaigns. Toward this end laboratory experiment was used in the study because experiments eliminate the competing causal explanations via random assignment and thereby isolate the causal impact of some treatment. In the study of campaigns, a particular stimulus may be created and afterwards the impact of the stimulus can be examined. In this case, an example of the stimulus can be an advertisement on television or a printed material like a poster or leaflet which propagates the political candidate or party. Other studies have used this research method and attest to its efficacy, for example, Lodge, Steenbergen and Brau (1995), Ansolabehere and lyengar (1994) and Mendelberg (1997). The study analysed various empirical methods (such as questionnaire, field studies and panels) that can be used in research about campaigns. This is a viable stepping stone for further research as it will guide further studies on election campaigns across the world.

Review of current use of mobile telephony in developing regions

The use of mobile phones is an area of study which has attracted a lot of attention. It is often intriguing to note the rate of adoption of mobile phones in developing countries. People in these places are largely poor, illiterate and often seem to rely on traditional methods. Thus, it is pertinent to ascertain the reasons for their adoption of mobile phones and the uses to which they put these mobile phones to. In the study, "Review of current use of mobile telephony in developing regions" Forlin, Larcher and Schivo (2008) seek to find out the penetration of mobile phone technology in developing countries, number of operators, and the type of services which they offer. The study also seeks to identify the reasons for the increased use of mobile phones in developing countries and what can arise from the current state of affairs. The study uses a survey of existing literature on the topic to ascertain the impact of mobile telephone on developing countries. According to the study, in Nigeria,mobile phones have a penetration rate of 30%. Over the years, this penetration rate has increased steadily. As the most populous black nation in Africa, Nigeria has high penetration of mobile phones and widespread use of the technology.

Methodology

This study used survey. In order to select a representative and relevant sample of respondents for the study, purposive sampling was used. Purposive sampling was used because the study did not have enough research assistants to cover all the states in central Nigeria simultaneously. These research assistants were trained for a week and sent out to administer copies of questionnaire at the same time. Thus, some states in central Nigeria were left out. The area of study is some states in central Nigeria which comprises the following states: Plateau, Kogi, Benue, Nasarawa and Kwarra. In each of these states, political candidates who used bulk SMS in their campaigns were selected and a copy of the questionnaire was administered. These candidates were mostly those vying for seats in the House of Representatives and Senate as well as the state houses of assembly. Candidates contesting as local government chairmen did not use bulk SMS as much as the others mentioned. The reason is quite obvious. The scale of their campaigns did not necessitate the use of bulk SMS. On the other hand, candidates vying for House of Representatives and Senate as well as the state houses of assembly, had a wider scale. In each of the states in central Nigeria, twenty (25) respondents were selected. Thus, the study had a total of one hundred and twenty five (125) respondents. The table below presents the distribution of respondents used in the study.

		Candidates			**Grand Total**
s/n	**States**	**Senate**	**House of Representatives**	**State Houses of Assembly**	
1	Plateau	5	5	15	25
2	Kogi	5	5	15	25
3	Benue	5	5	15	25
4	Nassarawa	5	5	15	25
5	Kwara	5	5	15	25
					125

Data presentation

Table I: Most significant reason for use of bulk SMS during 2011 campaign.

s/n	Most significant reason	Frequency	%tage
1	Cost	33	26.4
2	Efficiency	47	37.6
3	Labour saving	07	5.6
4	Timeliness	13	10.4
5	Wide coverage	25	20
	Total	125	100

Efficiency is highlighted as the most significant reason for use of bulk SMS during the 2011 political campaign in Nigeria (by 47 respondents representing 37.6 percent of the total population). These respondents identified efficiency because bulk SMS provides instant delivery and covers a large number of people simultaneously. Other channels of political communication have delayed delivery. The efficiency of bulk SMS state here is restricted to instant delivery and reach. In this way, other channels of political communication in Nigeria such as billboards and mobile megaphones are not as efficient as bulk SMS.

Table II: Most common messages of bulk SMS during 2011 campaign.

s/n	Most significant reason	Frequency	%tage
1	Invitation to rallies andmeetings	14	11.2
2	Counter rumour	34	27.2
3	Propagate manifesto	46	36.8
4	Challenge opponents	07	5.6
5	Comment on news/events	24	19.2
	Total	**125**	**100**

Most respondents (36.8 percent of the total population) indicate propagating manifesto as the most common message of the bulk SMS they sent out. BulkSMS were most often used by political candidates to tell the electorate about what they intend to do when elected into office. These manifestos are unique to each candidate, thus informing the electorate about manifesto may give one candidate an edge over the other.

Table III: Most significant problem encountered during use of bulk SMS

s/n	Most significant reason	Frequency	%tage
1	Erratic power supply	15	12
2	Illiteracy	08	6.4
3	Epileptic network coverage	67	53.6
4	Linguistic barriers	16	12.8
5	Technology illiteracy	19	15.2
	Total	**125**	**100**

Network coverage to mobile phones in Nigeria is not constant in Nigeria. Most respondents by 53.6 (percent of the total population) indicate epileptic network coverage as the most significant problem encountered in their use of bulk SMS during the 2011 campaign. Spells of inactivity in network coverage affect delivery of bulk SMS thereby thwarting its instant nature. When bulk SMS need to be delivered in time due to the situation, epileptic network coverage hinders this delivery.

Findings

Bulk SMS is an efficient way of communication between political candidates and the electorate due to its instant nature. Bulk SMS is received as soon as it is sent. Unlike word of mouth which may be misinterpreted, with bulk SMS there is high fidelity (message sent is same as message received). There are few distortions with bulk SMS as opposed to other channels of communication during election campaigns, especially word of mouth. Apart from the efficiency of bulk SMS, the technology is also beneficial because it: saves cost; is labour saving as it employs only a few people; it is timely and has wide coverage.

During the 2011 campaign in Nigeria, bulk SMS was used to propagate the manifesto of the candidates. The candidates felt the need to make the electorate know what they will do if they are elected into office. Thus they used the bulk SMS for this purpose. Apart from using bulk SMS to propagate manifesto, the technology was also used to: invite to rallies and meetings; counter rumour; challenge opponents and; comment on news/events.

Epileptic network coverage is the most significant problem encountered in the use of bulk SMS, Mobile phone network in Nigeria can fail at any time. This posed a problem to its use during the 2011 election campaigns. However it was used nonetheless. Other problems encountered in the use of bulk SMS include: erratic power; linguistic barriers and technology illiteracy.

Conclusion and recommendation

Bulk SMS is efficient in political communication between the electorate and the candidates. There is no room for distortion as the message is transmitted from the candidates to the electorate. Word of mouth on the other hand is noted for such distortions. More political candidates in Nigeria should consider using bulk SMS during campaigns. Mobile phone networks in Nigeria (such as MTN, Glo, Airtel, Etisalat, etc), should sell this service more aggressively to political candidates.

Most candidates in the 2011 election campaigns used bulk SMS to propagate their manifesto. However, these political candidates, should be careful about the type of messages they send. They must weigh the consequences of these messages. They should be concerned about what the electorate will be thinking. Some messages might not be to the advantage of the candidate. For example, some types of rumour require a silent treatment and the rumour will die out. However, when the candidate counters the rumour, discourse is extended.

Mobile phone companies are doing a good job in Nigeria but network failure remains a problem. These mobile phone companies should tackle network failure in order to strengthen confidence in mobile services. Mobile failure is a problem faced by political candidates in their use of bulk SMS during election campaigns. If this problem is tackled, it will improve the popularity of SMS as a channel among political candidates during electoral campaigns.

References

ADC telecommunications (1999) *Wireless Short Message Service Tutorial* Shelton Connecticut: ADC NewNet Inc.

Adepetun, Adeyemi (2014) "Nigeria ranks seventh in world's mobile phone penetration statistics" Retrieved 8th July 2014 fromhttp://www.ngrguardiannews.com /compulife/55-compulife/165351-nigeria-ranks-seventh-in-world-s-mobile-phone-penetration-statistics.

Aker, Jenny C. and Mbiti , Isaac M. (2010) "Mobile Phones and EconomicDevelopment in Africa"*Journal of Economic Perspectives* 24(3) pp.207-232.

Aker, Jenny C., Collier, Paul and Vicente, Pedro C. (2013) "Is InformationPower? Using Mobile Phones and Free Newspapers during an Election inMozambique"Retrieved 8th July 2014 from http://www.pedrovicente.org/cell.pdf.

Bimber, Bruce (1998) "The Internet and political transformation: populism,community and accelerated pluralism"*Polity* 31 (1). Brady, Henry E., Johnston, Richard and Sides, John (2006) "The Study ofCampaigns" In Henry Brady and Richard Johnston *CapturingCampaign Effects* Ann Arbor: University of Michigan Press.

Bandyopadhyay, Gautam (2010) "Banking the Unbanked: Going Mobile in Africa"*Asia, Africa and the Middle East The Guide to Working CapitalManagement 2009/2010* London: Standard Chartered.

Fox, Killian (2011) "Dispatches from Africa's mobile phone revolution,"*TheObserver* 24th July.

Gayatri, Murthy (2011) "Mobile Futures"*Development Research Brief June*Retrieved July 21st from http://www.audiencescapes.org/sites/default/files/AudienceScapes%20Briefs_Mobile%20Futures_Murthy%20Gayatri.pdf.

Gray, Vanessa (2004) *The un-wired continent: Africa's mobile success story*Geneva: International Telecommunications Union.

Heeks, Richard and Jagun, Abi (2007) "Mobile Phones and Development"*id2l Insights* no. 69 September Retrieved July 21st 2011 fromhttp://www.dfid.gov.uk/r4d /PDF/Articles /insights69.pdf.

id21 (2007) insights 69,September edition, Retrieved July 21st 2011 fromwww.id21.org.

Jensen, R. (2007). The Digital Provide: Information (Technology), MarketPerformance, and Welfare in the South Indian Fisheries Sector. TheQuarterly Journal of Economics, 122(3), 879-924.

Katz, Elihu; Blumler, Jay G. and Gurevitch, Michael (1974) Uses andGratifications Research The Public Opinion Quarterly Vol. 37 No. 4pp. 509-523.

Lambeek, Alex and Astler, Frederic (2009) "Story behind each number*Expanding Horizons* vol 2 Retrieved July 21st 2011 fromhttp://www.nokia.com/NOKIA_COM_l/ Corporate_Responsibility/Society_/Expanding_Horizons/Expanding_Horizons_NEW/pdf /Expanding_Horizons_Q2_2009.pdf.

NCC (Nigeria Telecommunication Commission) (2013). *Industry Data:* Retrieved 8th July 2014 from www.ncc.gov.ng.

Michele Forlin, Roberto Larcher and Stefano Schivo (2008) "Review ofcurrent use of mobile telephony in developing regions"*ICTfor socialdevelopment* Sweden: IT46 Osuagwu, Prince (2014) "63% of adult Nigerians use more than one phone —Survey"*Vanguard* 8th January Retrieved July 8th 2014 fromhttp://www.vanguardngr.com/2014/01/63-adult-nigerians-use-one-phone-survey/#sthash.WRggk27j.dpuf

Powell, Adam Clayton (2012) "Gallup/BBG survey; 'Massive' increase inmobile phone, Internet use in Nigeria." University of South Carolina:Centre on Public Diplomacy Retrieved July 8th 2014fromhttp://uscpubIicdiplomacy.org^log/gallup_bbg_survey_massive_increase_in_mobile_phone_internet_usejn_nigeria.

Postman, Neil (1992). *Technology: the Surrender of Culture to Technology*Vintage: New York pp 3-20 Semetko, Holli A. (2008) "Election campaigns, balance and the mass media"Harvard/World Bank Workshop 29th- 31st May holding at the John F.Kennedy School of Government, Harvard University. Singh, Rohit (2009) "Mobile phones for development and profit: awin-win scenario"*Opinion* London: OverseasDevelopment Institute April.

Smith, Merrit Roe (1985) *Military Enterprise and Technological Change*Boston, MA: Masschussetts Institute of Technology.

Stein, Michael and Verclas, Katrin (2010) "Using mobile phones in voter andelectoral registration campaigns" Retrieved 8th July 2014 fromhttps://www.ndi.org/files/ MobileActiveGuidel_English.pdf