

Full Length Research Paper

The church in the contemporary world: Information and communication technology in church communication for growth: A case study

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The last two decades has seen the adoption of information and communication technology (ICT) in contemporary church communications for growth. Contemporary church communications for growth is taking phenomenally great strides. However, adoption levels vary across countries, church groups, church budgets, and with the increasing threat to mass gathering by insurgencies, the rate of adoption will further increase. This paper examines the adoption of ICT in contemporary church communication for growth in Nigeria. It analyzes the perception of church leaders on internet usage for church growth programmes, adoption of electronic mails, telephone and virtual learning environment for communication as well as the deployment of church ICT infrastructure for church administration and human capital management. With the increasing internet bandwidth intensity and teledensity in Nigeria, the paper attempts to identify potential structural shift in church growth and communication strategy

Key words: Missions, internet evangelism, repository communication information technology church.

INTRODUCTION

The Holy Bible New Testament is replete with examples of the disciples sharing the good news where people spend their time. Peter preached the gospel in a public place and thousands responded. Paul preached the gospel at the centre of culture and influence in Greece and influential people responded (Bible, Acts 17:21-34). In Nigeria (Bolu, 2011), more and more young people are turning to the internet to find personal, social and religious information and ecclesiastical institutions are devoting more and more resources to improving their presence on the web. In a world where every day we become more interconnected, the global visibility of churches is clearly linked to their commitment to the worldwide web. Virtual learning programs and open access initiatives allow Bible knowledge to spread beyond physical boundaries, thus, enhancing the church's important role in raising new generation of leaders with character.

There are several studies on the impact of information

and communication technology in church communications for growth. Sturgill (2004) discusses the scope and purpose of church web sites for church communication. Andrade (2007) in his exploratory and interpretive research examines the anticipated consequences of information and communication technology (ICT) on six remote rural communities located in the northern Peruvian Andes, which were provided with computers connected to the Internet. The study reveals that individuals' exploitation of ICT is related to how individuals overcome difficulties and make the most of available ICT tools and that complementing existing social networks through ICT reflects the interaction between the ICT-mediated information and virtual networks with the local existing social networks. The study concludes that any ICT intervention in a developing country requires at least three elements to be effective: a tolerable physical infrastructure, a strong degree of social texture, and an activator of information.

Ihejirika's (2010) research in the field of media religion and culture, made extensive comparative analyses of the Catholic and Pentecostal churches in Nigeria and their different communication strategies highlighting the appropriation of the new information and communication technologies by these two Christian denominations in Nigeria. The study describes the Pentecostal denomination as seeing media technologies as an extension of the church pulpit while the Catholic church as generally exhibiting a somewhat cold attitude towards these instruments of mass communication and remained largely a print-based church, investing most of her communication energy in the print media and in oral catechism. This attitude goes back to the advent of the cinema which the Catholic church's hierarchy then saw as having the potential of corrupting faith and moral. Surprisingly, Ihejirika's research revealed that of all the technologies of mass communication, none has been so instantly accepted and embraced by the Catholic Church in Nigeria as the new information and communication technologies (ICT) and goes on to reveal some novel pastoral initiatives using the new information and communication technologies.

Chandler (2004), in her research on exploring cross-generational attitudes and opinions on the use of multimedia in the Christian church, investigated the attitudes and opinions across generations regarding to the relatively new implementation of multimedia into the church worship service, compared to traditional teaching techniques. Before collecting the data, it was believed that the younger generation would be more in favour of multimedia use, because of their exposure and familiarity with multimedia in their everyday lives. It was predicted that the older generation would be in favour of maintaining a worship service with traditional teaching techniques. The research findings supported both hypotheses and also revealed that both age groups share many of the same concerns and viewpoints regarding multimedia and its implementation.

An interesting philosophical study by Cheon (2011) on communication for life in cyberspace—a Christian ethical quest in reference to the Korean situation, raises awareness that all living beings are the communicating subjects, not objects to be communicated to; and attempted to establish a communication value named 'communication for life' which provides a new perspective on communication.

(Williams, 2008) in his study of a Baptist local church in the USA found that there is a changing worship experience with the emergence of media technology and contemporary worship in evangelical churches. (Wyche, 2010) in her work in the investigation of religion and computing in mega-churches graphically shows how church members and leaders use ICT in ways that ties to their Protestant Christian faith. Feijter (2006), metaphorically, illustrated the situation of Christianity and the need to communicate in today's world, which is

saturated by electronic media, in his research on the art of dialogue in religion, communication and global media culture just as it was during the days of the first Christian missionaries in the first century.

Gunton (2011) in the research on religious information literacy and using information to learn in church community explores the nature of informed learning in the context of the church as a learning community. The study anticipated that insights resulting from this exploration may help church organisations, church leaders and lay people to consider how information can be used to grow faith, develop relationships, manage the church and respond to religious knowledge, which support the pursuit of spiritual wellness and the cultivation of lifelong learning.

Ukah (2003) studied the Redeemed Christian Church of God, Nigeria. In the research on local identities and global processes in African Pentecostalism, he noted that information technology also played a role in the church globalization. Today the Redeemed Christian Church of God makes global broadcast of her programmes through their television station. Many church leaders see the Internet as God's solution to world missionary logistics challenges. Commenting on the Internet evangelism day, Pastor Ayo Oritsejafor, National President of the Pentecostal Fellowship of Nigeria, Pastor Word of Life Bible Church and the current chairman of the Christian Association of Nigeria (CAN) says (IEC, 2011):

"The great commission of our Lord Jesus Christ is that we should take the gospel to the end of the earth through various evangelistic activities. The Internet has proved to be one of the most efficient and reliable means of communicating globally with little or no restrictions, which Christians cannot ignore. Like other means of communication, we urge Christians to take advantage of the numerous opportunities provided by the Internet for evangelism. Churches should promote computer literacy programmes for members to enhance their use of the Internet as outreach to many who need to hear about the gospel of our Lord Jesus Christ. Much as the gospel is eternal and never changes, it will be difficult for us to significantly influence the 21st century if we are not knowledgeable enough about modern tools for influencing world opinion like the Internet. We need to sufficiently saturate the Internet with evangelistic websites and information that can win over unbeliever from the kingdom of darkness into His marvelous light."

Christian mission is obeying Christ. After Christ's death and resurrection, He commanded the disciples to share the gospel, the message of His redemption. (Bible, Matthew 28: 19 - 20) says;

"Go therefore and make disciples of all the nations, baptizing them in the name of the Father and the Son and the Holy Spirit, teaching them to observe all that I

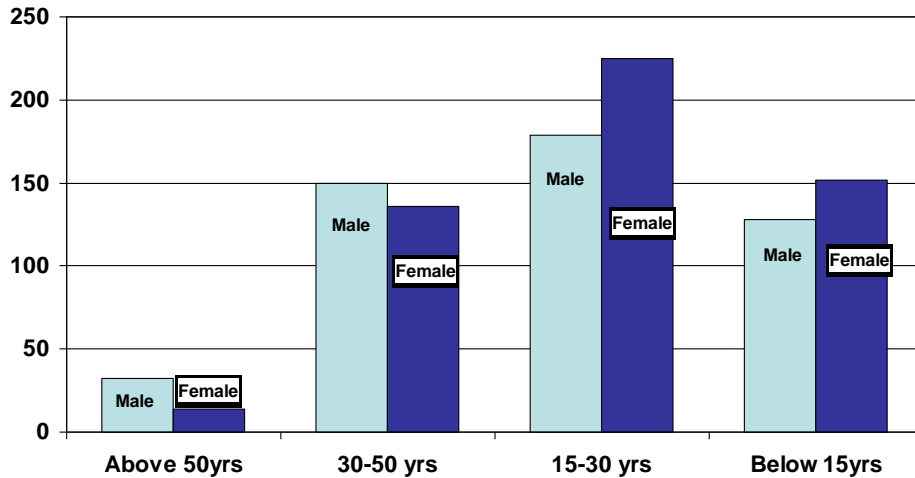


Figure 1. Typical Nigerian church membership age analysis (Bolu, 2011).

Table 1. World internet bandwidth statistics – year 2000.

Country	Mbps per billion people	World rank
Nigeria	0.017	182
Ghana	0.206	151
Kenya	0.342	139
India	0.827	126
USA	394.393	19
UK	1,447.618	7

Source: NationMaster.com.

commanded you; and lo, I am with you always, even to the end of the age”

Church planting, a specific focus within the larger work of “missions”, is the establishing of an organized body of believers in a new location. The process of planting a church involves evangelism, the discipleship of new believers, the training of church leaders, and the organization of the church according to the New Testament model. Usually, the process also includes writing a church charter and/or doctrinal statement and finding a place to meet or buying property and erecting a new building. As the apostle Paul traveled through an area, he always tried to spend enough time in each city to establish a local body of believers and train the leadership (Acts 14:21-23). Later, he would try to revisit those churches to confirm and encourage them in the faith (Acts 15:41; 1 Thessalonians 3:2). The churches he established would then begin to send out missionaries themselves, and so the work of church planting continued (1 Thessalonians 1:8). Today, the world is shrinking into a global village through the Internet and the outreach strategies of Apostle Paul can be achieved through effective use of the worldwide web.

In contemporary Nigeria, there are several factors that need to be considered in designing an information and communication technology (ICT) strategy for church missions today. Firstly, studies in most of the Assemblies of God churches in Nigeria and Nigerian Churches, Bolu (2004, 2011) show that young people make up the lion share of church membership with some churches as high as seventy percent! A typical demography structure is shown in Figure 1. Secondly, in Nigeria internet bandwidth is fast increasing with the huge quantity of terrestrial bandwidth flowing into the country. Tables 1 and 2 show the international internet bandwidth defined as the contracted capacity of international connections between countries for transmitting internet traffic, and Nigeria is now fast moving to the top 50 in the world. Thirdly, internet bandwidth in Nigeria is fast becoming a commodity. Table 3 shows the bandwidth expected to have been brought in Nigeria before the end of 2011. By the end of year 2011, a total of about 7TB would have been lit in Nigeria from the paltry 0.5 TB nearly 2 years ago. Nigeria may now be going for capacity of over 45Mb per thousand. Also, a price, which was over \$ 50 in 2005, has dropped to less than \$ 10 in 2011.

In the light of improving internet enablers and the global

Table 2. World internet bandwidth statistics - year 2004.

Country	Mbps per billion people	World rank
Nigeria	1.010	131
Ghana	7.764	108
Kenya	3.137	121
India	11.392	106
USA	3,306.438	19
UK	13,061.973	4

Table 3. Terrestrial internet bandwidth in Nigeria.

Code	Company	Date	Quantity (TB/s)
Sat-3	NITEL	Existing	
Additional			
Glo-1	Globacom	November 2009	0.64
Main-1	Main one cable Ltd	June 2010	1.92
WACS	Many companies	June 2011	3.84
Total new			6.40

Source: National universities commission, 2010.

threat to mass gathering by insurgencies, this paper examines the adoption of Information and Communication Technology in contemporary church communication for growth in Nigeria. After analyzing the perception of church leaders on Internet usage for church growth programmes, use of electronic mails, telephone and virtual learning environment for communication as well as the deployment of church ICT infrastructure for church administration and human capital management, it attempts to identify and proffer potential structural shift in church growth communication strategy in contemporary Nigeria.

METHODOLOGY

In this study, two methods were used: the first is the empirical method, and the second, the historical method involving the use of records and secondary data. Field research involved the use of research instruments consisting of both online and paper-based questionnaires (Appendix; Tables 1 to 7); observation was both participatory and non-participatory, personal interviews and informal discussion.

The empirical research activities included online and paper-based questionnaire, interviews and discussions. Over 1000 online and hard copy questionnaires were circulated. The online questionnaire was created using Google Docs and circulated to church leaders across Nigeria and Nigerian churches in the diaspora. Leaders included pastors, priests, church superintendents, deacons and church board members.

The historical method involved data collected by means other than questionnaires, observation, interviews and discussions. Two forms of existing material are printed and electronic sources of

information. Printed Sources included information collected through content analysis of printed sources such as sermons, church wgrowth seminars, diaries, magazines, church bulletins, brochures, and church manuals. Electronic sources included websites, web rich files, downloaded sermons and video recordings.

The research instrument was structured into seven parts, namely, Basic details of respondents and local church profile; Church leader's perception of Internet usage for church growth programmes; use of electronic mails and telephone messaging; virtual learning environment for church growth; church ICT infrastructure; ICT in church administration for growth; church ICT human capital management. Observations included participations in church retreats, event planning and Christian professional congresses.

RESULTS AND DISCUSSION

Profile of respondents and churches

The profiles of most of the respondents were largely the clergy such as priest, pastors, reverend ministers, prophets, bishops, evangelists, missionaries and the laity such as deacons, and elders. Over 50% of the respondents were the clergy and large portions of the laity were church board members or church workers. These groups represent knowledgeable class of the church leadership required for this research.

The analysis of the church type revealed a divide into two broad groups, namely, Orthodox and Pentecostal churches; the orthodox being the Catholics and the Anglican Communion. Church structure showed that the

average church size was less than 1000 attendance with the larger churches over 1000 located in southern part of Nigeria. Youth population was between 30 to 50% and children population about 30%. This means that majority of church attendance are children and young people. The results also showed that female gender was generally more in number.

Perception of internet usage for church growth programmes

Paradoxically, the church is living with myths that are militating against the deployment of the worldwide web for growth. Some of these myths are (IEC, 2011):

1. Churches will not reach people on the internet
2. The church does not have enough money or human resources for Internet evangelism.
3. The internet is all hype and not missionary in nature.
4. The internet is the devils playground which churches should stay out of.

Church members think that the internet is the new pub, marketplace or back fence. There is a perception that only large churches that have dedicated staff can do internet evangelism. In addition there are marketing myths about online marketing which are either under-valuing or over-valuing communication. Some of these myths are:

1. Church marketing is evil. It degrades God. It is not biblical. Marketing is for business, not for the church.
2. Churches should not spend money on marketing
3. Marketing alone will grow the church
4. People are not marketing the church enough
5. What works for one church will work at all churches
6. If it is hype, it works.
7. Good marketing design does not matter

Myths of under-valuing communication come from the underlying assumption that communication does not really matter for a church (Fogg, 2011; Got Questions.org, 2011). If a church just follows God, people inside and outside the church will be able to figure out everything they need to know and get connected with God and others in the church. Myths of over-valuing communication come from the underlying assumption that communication is the most important thing a church does. If a church just communicates well, people inside and outside the church will get excited about what is happening and connect with God and others in the church. Communication comes from the underlying assumption that communication is the most important thing in a church.

The result of the study on the perception of Nigerian

church leaders can be summarized as follows:

1. Although, church leaders disagree that the Internet is where Nigerians spend large proportion of their leisure time, they agree that many Nigerians are turning to the Internet for their personal, social and religious information and totally agree that young people now spend a large proportion of their leisure time on the Internet.
2. Interestingly, church leaders totally disagree that the church cannot reach people on the Internet, nor that the church have enough money or human resources to use the Internet effectively. They equally disagree that the Internet is all hype and is not missionary in nature and that the Internet is the devils playground which churches should stay out of.
3. With regards to marketing of Church programmes, leaders totally disagree that Churches should not spend money on marketing their programmes, but totally agree that marketing alone will not grow the church and in fact that churches are not marketing the Church enough. However marketing strategies must be unique for a Church depending on their location and profile. They however caution that marketing design is important in addition to prayers.
4. With regards to the use of social media like facebook and twitter. Surprisingly, over 70% of church leaders interviewed and respondents totally disagree that the church should discourage the use. Both the clergy and laity should be actively be involved in the work of church missions.

Use of electronic mails and telephone

World Bank (2011) puts the Internet users per 100 persons in Nigeria as 28 for year 2010 and is one of the highest user densities in Africa and compares favorably with USA with 79 (Table 4). This density will certainly increase significantly with the growth of internet facilities on the internet enabled telephones.

NCC (2011) gives a table of subscribers and teledensity for mobile and fixed telephony services as at October 2011 in Nigeria. Again, Nigeria has one of the highest teledensity in Africa (Table 5). The result of the study on the use of electronic mail (e-mail) and telephones can be summarized as follows:

1. Although, most churches have email address, they are usually Internet email address and no specific email addresses are designated for church ministries and they do not have organised email directory.
2. There is little communication between members and church leaders by email. When communication is done it is usually by telephone.
3. Very few leaders are able to use the electronic mail to communicate despite the fact that larger younger membership's population has e-mail addresses.
4. Very few churches have fixed telephone lines. Official

Table 4. Internet user density, 2010.

Country	Internet users (per 100 people)
USA	79
Nigeria	28
Egypt	27
South Africa	12
Ghana	9
India	8
Libya	6

Source: World Bank, 2011.

Table 5. Telephone subscribers data, October 2011.

Type	Operator	October, 11
Connected lines	Mobile (GSM)	110,326,120
	Mobile (CDMA)	12,530,030
	Fixed wired/wireless	2,285,930
	Total	125,142,080
Active lines	Mobile (GSM)	88,005,862
	Mobile (CDMA)	5,116,957
	Fixed wired/wireless	801,297
	Total	93,924,116
Installed capacity	Mobile (GSM)	141,213,932
	Mobile (CDMA)	17,232,725
	Fixed wired/wireless	9,394,042
	Total	167,840,699
Assumed population	Teledensity	67.09
	140 million	

telephones are usually GSM mobile phones. Few churches have dedicated telephone lines designated for specific church ministries such as pastoral care, counseling, etc.

5. Almost all members have personal cell phones but paradoxically, many church leaders are not able to communicate using the short messaging system (SMS) or the instant messaging system such as the blackberry, Yahoo! and Google messaging system.

Virtual learning environment for church growth

Virtual learning environment is fast becoming a medium for learning and e-learning brings with it new dimensions in christian education such as blogs, wikis, chats, messaging, etc. Some of the advantages for christian education delivery are:

1. Learning is self-paced and gives members a chance to speed up or slow down as necessary,

2. Learning is self-directed, allowing students to choose content and tools appropriate to their differing interests, needs, and maturity levels,

3. Accommodates multiple learning styles using a variety of delivery methods geared to different learners; more effective for certain learners,

4. Designed around the learner,

5. Geographical barriers are eliminated, opening up broader christian education options,

6. 24/7 accessibility makes scheduling easy and allows a greater number of people to attend classes,

7. On-demand access means learning can happen precisely when needed,

8. Travel time and associated costs (parking, fuel, and vehicle maintenance) are reduced or eliminated,

9. Threat to mass congregation due to insurgencies reduced or eliminated,

10. Fosters greater student interaction and collaboration,

11. Fosters greater member/pastor contact.

E-learning is not, however, the all and end to all christian

education delivery, it does have limitations such as up-front investment and technology issues. The result of the study on the use of virtual learning environment (or e-learning) for church growth in Nigeria can be summarized as follows:

1. Almost all churches have a Bible Knowledge correspondence school in Nigeria or abroad and are only instructor-led or paper-based.
2. Very few churches upload your sermons, Bible studies, music, etc on their church website for people to download.
3. Many churches are either not aware of virtual learning management system or the leaders not aware of virtual learning solutions.
4. Many churches either are not aware of institutional repository for storage of Christian education content or the leaders not aware of institutional repositories.
5. Although, most churches totally agree that virtual learning on the Internet will assist in Bible training of members and adherents or assist in the process of conversion of people to Christ, they however totally disagree that Bible teaching on the Internet is more of a nuisance/cost than an asset for church growth.

Church ICT infrastructure

Church ICT infrastructure for growth include content such as VSAT, TV station or TV production, computers, central storage or repository, database server, SMS server, web portal, email server, Internet bandwidth, local area network (within church buildings), wireless network infrastructure, optical fiber cabling, call centre or help desk, church internet domain, ICT resource centre, CD/DVD production studio, and printing press or publishing house. The result of the study on the importance of church ICT infrastructure for growth can be summarized as follows:

1. Churches are not aware of the availability of bulk bandwidth and where they do they are looking at less than 512 kbps.
2. Some churches have website, bulk SMS system, video viewing centres, cybercafé but do not have learning management system, distance learning infrastructure, web streaming, podcast, webinar, television broadcast or even church internet domain, etc.

ICT in church administration for growth

The objective of the e-administration implementation is to completely run the church administration processes and increase the response time for church administration, such a membership management, and pastoral care services.

Church membership will address membership structure and analysis with a view of understanding the growth prognosis of the Church. Outreach management system will address crusade statistical analysis, penetration strategy, while pastoral care will assist in counseling, follow-up and visitation management. Church financial system will include church accounting, logistics and human capital management. Church digital assets management will include the document workflow and institutional repository while the education management system will be used for the management of church missionary schools and colleges. The result of the study on the use of ICT in church administration for growth can be summarized as follows:

1. Church leaders agree that the areas that are most impacted by the adoption of ICT are evangelism, Bible teaching and pastoral care. They do not see any major impact on prayer intercession, church administration, and church infrastructure administration or in healing/deliverance ministries.
2. Churches do not have computer-assisted church management system, and where they have it does not go beyond the membership register.

Church ICT human resources

The result of the study on the use of ICT in church human capital management for growth can be summarized as follows:

1. Very few churches have a standing ICT committee
2. Churches do not have paid ICT personnel and where they have they are usually audio system technicians and television technicians.
3. While most churches do not have ICT personnel they totally agree that they need to have one.

CONCLUSIONS AND RECOMMENDATIONS

Based on the aforementioned developing Internet enablers and environment, the ICT strategy for church growth should address the ICT infrastructure in a comprehensive manner as well as promoting computer literacy programmes for members to enhance their use of the Internet as outreach to many who need to hear about the gospel of our Lord Jesus Christ.

To cater for the huge proportion of the younger membership, the church premises, and all the meeting halls where members congregate should have internet access. This will further catalyse local and indigenous software development in Nigeria as stressed by (Uwaje, 2010). With the crashing of unit cost of internet bandwidth, the church should work towards getting the last mile to the church through terrestrial fiber optic

cabling. The church missions committee should set up proper data centre and network operating centre. Enough bandwidth will be required for the various online programmes of the church such as evangelistic webinars, distance Bible learning and several online programmes. Counseling, follow-ups and visitation ministries will require modern call centre for counseling as well as, help desk. An institutional repository is necessary for storage of evangelistic digital content, such as sermons, Bible studies, and musical and choral recordings. The missions department should provide easy access to ICT resources such as online christian library, reprographic centre and global classroom for christian programmes.

Churches should setup a steering team to develop and oversee an Internet outreach plan along with expected needs and results. The web will continue to play great role in church communication medium and virtual learning environment might be as important and representative as a real one.

Best practices for hosting Church mail portals include owning a church domain reflecting the church name and ministry, providing church domain email addresses for distance Christian education and discipleship training and communication between church members should be through the church domain email addresses.

The benefits gained by implementing church document management system include secure storage of documents, easy retrieval of documents, excellent search capabilities to cut down on time searching for documents, controlled environment for updates to document, complex security rules to control access, increased visibility of key documents, one source and one set of rules for managing documents, reduced time and effort spent on document management, ability to maintain document history to meet legal requirements.

To take advantage of worldwide web church management information system must be web-based enterprise solutions. It must address areas like church membership, church outreach management system, church pastoral care management, church financial system, church document management system and church education management.

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Appendix

Table 1. Basic details and local church profile.

1. Name (Optional) Surname First Email: (if you wish to receive a copy)	
2. Church Office/Ministry	<p>(Tick in the appropriate circle) Select only one</p> <ul style="list-style-type: none"> <input type="radio"/> Priest/Pastor/Minister/Prophet/Bishop <input type="radio"/> Evangelist/Missionary <input type="radio"/> Deacon/Deaconess/Elder <input type="radio"/> Church Worker/Teacher <input type="radio"/> Church Administrator <input type="radio"/> Ordinary Member <input type="radio"/> Other, Please name:
3. Church type	<p>Select the most appropriate</p> <ul style="list-style-type: none"> <input type="radio"/> Orthodox <input type="radio"/> Evangelical <input type="radio"/> Pentecostal <input type="radio"/> Apostolic <input type="radio"/> Other, Please name:
4. Church location (Zone)	<p>Select only one</p> <ul style="list-style-type: none"> <input type="radio"/> North Western Nigeria <input type="radio"/> North Central Nigeria <input type="radio"/> North Eastern Nigeria <input type="radio"/> South Western Nigeria <input type="radio"/> South Eastern Nigeria <input type="radio"/> South Southern Nigeria <input type="radio"/> Nigerian church in the Diaspora (say Europe, America, etc)
5. Size of church (General attendance including children) (Select only one)	<p>Select only one</p> <ul style="list-style-type: none"> <input type="radio"/> Less than 500 <input type="radio"/> 500 – 1000 <input type="radio"/> 1000 – 2000 <input type="radio"/> 2000 – 5000 <input type="radio"/> Above 5000
6. Youth population (12-35 years)	<p>Select only one</p> <ul style="list-style-type: none"> <input type="radio"/> Less than 30% <input type="radio"/> 30% to 50% <input type="radio"/> Above 50%
7. Children population (below 12 years)	<p>Select only one</p> <ul style="list-style-type: none"> <input type="radio"/> Less than 30% <input type="radio"/> 30% to 50% <input type="radio"/> Above 50%
8. Approximate population distribution by gender	<p>Select only one</p> <ul style="list-style-type: none"> <input type="radio"/> Male more than Female <input type="radio"/> Female more than Male <input type="radio"/> About Equal

Table 2. Perception of internet usage for Church growth programmes.

Select one that best answers the questions below	Totally disagree	Partially disagree	Not too sure	Partially agree	Totally agree
1. The Internet is where people now spend a large proportion of their leisure time?	○	○	○	○	○
2. The Internet is where young people now spend a large proportion of their leisure time?	○	○	○	○	○
3. In Nigeria, more and more people are turning to the Internet to find personal, social and religious information?	○	○	○	○	○
4. The Church cannot reach people on the Internet?	○	○	○	○	○
5. The Church does not have enough money or human resources to use the Internet effectively?	○	○	○	○	○
6. The Internet is all hype and is not missionary in nature?	○	○	○	○	○
7. The Internet is the devils playground which churches should stay out of?	○	○	○	○	○
8. Church marketing is evil. It degrades God. It is not biblical. Marketing is for business, not for the church?	○	○	○	○	○
9. Churches should not spend money on marketing their programmes?	○	○	○	○	○
10. Marketing alone will not grow the church?	○	○	○	○	○
11. People are not marketing the Church enough?	○	○	○	○	○
12. The marketing strategy that works in a Church in Nigeria, will normally work for any Church?	○	○	○	○	○
13. Even if marketing is a hype, it works in Church communication?	○	○	○	○	○
14. God marketing design does not matter; it is the prayer that matters?	○	○	○	○	○
15. If a Church follows God, people inside and outside the Church will figure out everything they need to know and get connected with God and others?	○	○	○	○	○
16. If a Church just communicates well, people inside and outside the church will get excited with what is happening and get connected with God and others in the church?	○	○	○	○	○
17. Use of Social Networking Media such as Facebook, Twitter for Church communication should be discouraged?	○	○	○	○	○
18. Church Missions is a private matter and should be left to only those called for such as evangelists, missionaries, etc?	○	○	○	○	○
19. Any suggestion you will want to give on use of the Internet for Church growth?	○	○	○	○	○

Table 3. Use of electronic mail (e-mail) and telephones electronic mails.

Question		Instruction (Please tick one only)					
1.	Does your local Church have an official email address?	<input type="radio"/>	Yes				
		<input type="radio"/>	No				
2.	If answer to 1 is Yes, is the email name specific for the Church (i.e. NOT Internet email such as Yahoo!, Hotmail, AOL, etc)?	<input type="radio"/>	Yes				
		<input type="radio"/>	No				
		<input type="radio"/>	Do not know				
3.	Is your email server or service provider in Nigeria?	<input type="radio"/>	Yes				
		<input type="radio"/>	No				
		<input type="radio"/>	Do not know				
4.	Does your local Church provide email addresses for Church members?	<input type="radio"/>	Yes				
		<input type="radio"/>	No				
5.	Do you have specific email for church functions such as pastoral care, counseling, enquiries, etc?	<input type="radio"/>	Yes				
		<input type="radio"/>	No				
6.	Do you normally communicate with your visitors or members by e-mail?	<input type="radio"/>	Yes				
		<input type="radio"/>	No				
7.	Does your church have email directory of members?	<input type="radio"/>	Yes				
		<input type="radio"/>	No				
			None	Very few	Some	Almost all	All
8.	How many members have personal e-mail addresses?	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9.	How many of your Church leaders communicate with members through emails?	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10.	Do you store email addresses of your members	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11.	Which type of telephone does your local Church have for official use?	<input type="radio"/>	Fixed Telephone				
		<input type="radio"/>	GSM				
		<input type="radio"/>	Both				
12.	Is your official church telephone Internet-enabled?	<input type="radio"/>	Yes				
		<input type="radio"/>	No				
13.	Does your local Church keep a telephone directory of members?	<input type="radio"/>	Yes				
		<input type="radio"/>	No				
14.	Do you have specific telephone numbers for church functions such as pastoral care, counseling, enquiries, etc?	<input type="radio"/>	Yes				
		<input type="radio"/>	No				
15.	Do you normally reach all visitors and/or members by telephone call or SMS?	<input type="radio"/>	Yes				
		<input type="radio"/>	No				
16.	What is the usual communication mode with your visitors and/or members?	<input type="radio"/>	SMS				
		<input type="radio"/>	Telephone call				
		<input type="radio"/>	Voice mail				
		<input type="radio"/>	Other, please name:				

Table 3. Contd.

	None	Very few	Some	Almost all	All
17. How many members have their personal telephone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. How many of your Church leaders communicate with members using SMS or MMS?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. How many of your Church leaders can communicate using the telephone chat services?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Table 4. Virtual learning environment for church growth.

Question	Instruction (Please tick one only)				
1. Does your Church have a Bible Knowledge correspondence school in Nigeria or Abroad?	<input type="radio"/>	Yes			
	<input type="radio"/>	No			
2. Do you have a computer-based Bible Knowledge Learning system?	<input type="radio"/>	Yes			
	<input type="radio"/>	No			
3. Does your National Church have a Learning Management System for members and adherents?	<input type="radio"/>	Yes			
	<input type="radio"/>	No			
4. Do you upload your sermons, bible study, music, etc on your church website for people to download?	<input type="radio"/>	Yes			
	<input type="radio"/>	No			
5. Have you heard of or used any e-learning software?	<input type="radio"/>	Yes			
	<input type="radio"/>	No			
6. Which of the following e-learning software do you have or plan to ever use?	<input type="radio"/>	Blackboard			
	<input type="radio"/>	WebCT			
	<input type="radio"/>	Sakai			
	<input type="radio"/>	Moodle			
	<input type="radio"/>	Archimedes			
	<input type="radio"/>	Never heard of one			
	<input type="radio"/>	Other, please name			
	Totally disagree	Partially Disagree	Not too sure	Partially agree	Totally agree
7. Can virtual learning on the Internet assist in Bible training of members and adherents?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Can virtual learning on the Internet assist in the process of conversion of people to Christ?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Is Bible teaching on the Internet more of a nuisance/cost than an asset for church growth?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Table 5. Which of the following ICT infrastructure does your local church have?

Question	Instruction
1. Information and communication technology (ICT) infrastructure	Select as many as are applicable
	<input type="radio"/> VSAT
	<input type="radio"/> Internet Modem (e.g Dongles from MTN, Glo, StarComms, etc)
	<input type="radio"/> TV Station or TV Production
	<input type="radio"/> Computers

Table 5. Contd.

	<input type="radio"/>	Central Storage or Repository
	<input type="radio"/>	Database Server
	<input type="radio"/>	SMS Server
	<input type="radio"/>	Web Server
	<input type="radio"/>	Email Server
	<input type="radio"/>	Internet Bandwidth
	<input type="radio"/>	Local Area Network (within church buildings)
	<input type="radio"/>	Wireless Network Infrastructure
	<input type="radio"/>	Optical Fibre Cabling
	<input type="radio"/>	Call Centre or Help desk
	<input type="radio"/>	Church Internet Domain (eg www.yourchurch.org)
	<input type="radio"/>	ICT Resource Centre
	<input type="radio"/>	CD/DVD Production Studio
	<input type="radio"/>	Printing Press/Publishing House
2. What amount of internet bandwidth will your local church procure in the next 12 months?	<input type="radio"/>	Less than 512 kbps
	<input type="radio"/>	512 kbps to 1000 kbps
	<input type="radio"/>	More than 1000 kbps
	<input type="radio"/>	None or do not know
3. Which of the following Communication facilities does your local Church have?		Select as many as are applicable?
	<input type="radio"/>	Website
	<input type="radio"/>	Learning Management System
	<input type="radio"/>	Distance Learning
	<input type="radio"/>	Video Viewing Centre
	<input type="radio"/>	CD/DVD Library or Store
	<input type="radio"/>	Bulk SMS
	<input type="radio"/>	Web Streaming
	<input type="radio"/>	Cyber café
	<input type="radio"/>	Podcast
	<input type="radio"/>	Webinar
	<input type="radio"/>	Television Broadcast
	<input type="radio"/>	Church Internet Domain
	<input type="radio"/>	None or do not know
4. Which of the following Communication facilities does your National Church Headquarters have?		Please tick all that apply
	<input type="radio"/>	Website
	<input type="radio"/>	Learning Management System
	<input type="radio"/>	Distance Learning
	<input type="radio"/>	Video Viewing Centre
	<input type="radio"/>	CD/DVD Library or Store
	<input type="radio"/>	Bulk SMS
	<input type="radio"/>	Web Streaming
	<input type="radio"/>	Cyber café
	<input type="radio"/>	CD/DVD Duplicating Studio
	<input type="radio"/>	Webinar
	<input type="radio"/>	Television Broadcast
	<input type="radio"/>	Printing Press/Publishing House
	<input type="radio"/>	Church Internet Domain
	<input type="radio"/>	None or do not know

Table 6. ICT in Church administration for growth (Church Planting, a specific focus within the larger work of ‘missions’, involves evangelism, the discipleship of new believers, the training of church leaders, and the organization of the Church according to the New Testament model, sometimes writing the church charter, doctrines, finding a place to meet, buying a property).

Question	Instruction																																																
1. In your opinion, which of these is most impacted by the use of Information and Communication Technology?	Please tick one only <input type="radio"/> Evangelism <input type="radio"/> Discipleship <input type="radio"/> Training of church leaders <input type="radio"/> Church administration <input type="radio"/> Pastoral care – Counseling, Follow up																																																
2. In your Opinion, how will you rate the impact in the use of Information and Communication Technology for the following Church growth activities?	Select one that best answers the questions below <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;"></th> <th style="width: 15%;">Very low</th> <th style="width: 15%;">Low</th> <th style="width: 15%;">Average</th> <th style="width: 15%;">High</th> <th style="width: 15%;">Very high</th> </tr> </thead> <tbody> <tr> <td>3. Evangelism</td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> </tr> <tr> <td>4. Bible teaching</td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> </tr> <tr> <td>5. Prayer (Intercession)</td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> </tr> <tr> <td>6. Training of Church Leaders</td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> </tr> <tr> <td>7. Church administration</td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> </tr> <tr> <td>8. Church infrastructure management</td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> </tr> <tr> <td>9. Pastoral care – Counseling, visitation, etc</td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> </tr> </tbody> </table>		Very low	Low	Average	High	Very high	3. Evangelism	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	4. Bible teaching	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	5. Prayer (Intercession)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	6. Training of Church Leaders	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	7. Church administration	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	8. Church infrastructure management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	9. Pastoral care – Counseling, visitation, etc	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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10. Does your local Church have a Computer-based Church Management information System?	<input type="radio"/> Yes <input type="radio"/> No																																																
11. If your church does have a computer-based church management information system, which areas does it cover?	Select all that apply <input type="radio"/> Church Membership <input type="radio"/> Church Diary <input type="radio"/> Tithing <input type="radio"/> Attendance Analysis <input type="radio"/> Sunday School <input type="radio"/> New Convert Follow up <input type="radio"/> Evangelistic Outreach <input type="radio"/> Church Financial Accounting <input type="radio"/> Pastoral Care <input type="radio"/> None at all <input type="radio"/> Other, Please name																																																
12. Any additional information or suggestion you will want to give on ICT in Church Administration for Church growth?																																																	

Table 7. Church ICT human resources.

Question	Instruction
1. Do you have a standing ICT Committee in your local church?	Please tick one only <input type="radio"/> Yes <input type="radio"/> No
2. Do you have paid ICT personnel in your local church?	Please tick one only <input type="radio"/> Yes <input type="radio"/> No

Table 7. Contd.

3. Which of the following category of ICT personnel does your church employ?	Please tick as many may apply
	<input type="radio"/> System Administrator <input type="radio"/> System Engineer <input type="radio"/> Network Engineer <input type="radio"/> Web Designer <input type="radio"/> Programmer <input type="radio"/> Audio System Technician <input type="radio"/> Television Technician <input type="radio"/> Other, please name
4. How many ICT personnel does your church employ?	<input type="radio"/> Less than 5 <input type="radio"/> 5 to 10 persons <input type="radio"/> More than 10 persons
5. Any additional information or suggestion you will want to give on ICT human resources for Church growth?	
