

THE ROLE OF INFORMATION TECHNOLOGY IN MARKETING RESEARCH IN NIGERIA

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***Abstract:** This study was carried out to identify and examine the role of information technology in marketing research in Nigeria as a basis for making sound decisions. Attempt was made to highlights some of the literature review on the marketing research and information technology. The descriptive research design was adopted for the study. Findings include that information technology tools such as internet, online marketing research, computer networks, information technology parks etc. assist marketing researchers a lot to carryout researches that provide management with relevant, accurate, valid and current information for sound decisions making. Some recommendations made include the following: the management, companies or sponsors of any marketing research study should provide adequate funds to the researchers to guarantee valid, relevant and accurate outcome for sound decisions making, the respondents should be adequately educated on the intended purpose and usage of the research study embarks upon by the marketing researchers and the latest information technology tools should be provided to the researchers to ensure accurate, relevant and valid outcomes.*

Index Terms- Information Technology, Marketing Research, Nigeria

I. INTRODUCTION

Information technology has played an important role in marketing research. The business environment of today is so complex that no sane manager would want to make vital decision without securing enough information (Anyanwu, 1993). However, it must be noted that not all pieces of information are relevant.

In marketing research, information gathering must be systematic and objective in order to provide a comprehensive and relevance information to the researcher. This will aid decision making.

Information technology is the technology that supports activities involving the creation, storage, manipulation and communication of information together with their related methods, management and application (Adeleke, 1985).

The rate at which information technology is being developed will definitely change the process of marketing research in Nigeria. However, the development of information technology will bring about rapid change and development in marketing research.

Information is the life blood of both an individual and organization. It is pivotal and essential to the growth and survival of every organization. In marketing, information serves both as a catalyst and channel for which the organizations' products, services and ideas reached the desire destination (Onuoha, 1998).

The globalization of information technology has been a tremendous advantage to marketing research. Information technology will enable the decision makers, marketing researchers and marketers to identify clearly the marketing problems and opportunities.

Marketing researchers can now access millions of pages of information on the internet including electronic books, journals, abstracts, etc. Electronic library facilities are available, such as the Nigerian Virtual University Library, the African Digital Library, on line etc.

This paper is intended to identify and examine the role of information technology in marketing research in Nigeria.

II. LITERATURE REVIEW

In Nigeria, with the development of information technology, computer and telecommunications technology would allow business opportunities to serve their customers better in several ways such as shopping at home for goods and services through internet, with the introduction of internet as source of information technology assisting immensely in marketing research in Nigeria.

Improved development of marketing research through marketing information technology so as to meet up with the changes in the customers marketing practices. Any marketing organization that refuses to cope with these challenges will not sell because information through technology is the parameter for success in the market place.

According to Adeleke (2000) the world is being driven to telecomputing and marketers must follow suit. This is perhaps one of the greatest challenges to marketing.

The development of computer has perhaps triggered off development of technology. Shokan (1997) defines computer as a machine or collection of mechanical and electronic devices connected into a unit or system capable of processing data. It is a fast and accurate symbol manipulating system that is organized to accept, store and process data and produce results under the direction of stored programme instructions.

The development of information technology such as computer, internet etc would definitely change the practice of marketing research on a global level. Information technology refers to the technical side of an information system. It includes hardware, databases, software networks, and other devices. As such Turban (1996) sees information technology can be viewed as a subsystem of an information system. Sometimes, the information technology is also used interchangeably with information system or it may even be used as a broader concept that describes a collection of several information systems, uses, and management for an entire organization.

Hartzell (2006) defined information Technology as the process of gathering, recording, storage, processing and dissemination of information and represents the latest form of man-machine interface. It combines the technology of computer with that of communications.

Ukwuegbu (2004) also viewed information technology (IT) as the use of information system apparatus with communication apparatus to process and disseminate data/ information. Information technology involves the use of computer systems and communication facilities.

Busch and Houston (1985) defined marketing research is defined as the systematic and objective search for and analysis of information relevant to the identification and solution of marketing problems. Marketing information is sourced through marketing research and marketing information system (MIS).

However, Achumba (2003) views marketing research as the systematically and objectively gathering, recording and analyzing of all marketing facts about problems relating to the transfer and sale of goods and services from the producer to the consumers and for provision of information to the marketing managers for decision making. According to the American Marketing Association (AMA) marketing research is the systematic gathering, recording and analyzing of data about problems relating to the marketing of goods and services.

Okpara (2002) defines marketing research as the planned collection, analysis, and reporting of data for possible application to a specific marketing situation.

Based on the above, marketing research depends largely on the information technology which immensely assisting the decision makers in solution of problems concerning marketing.

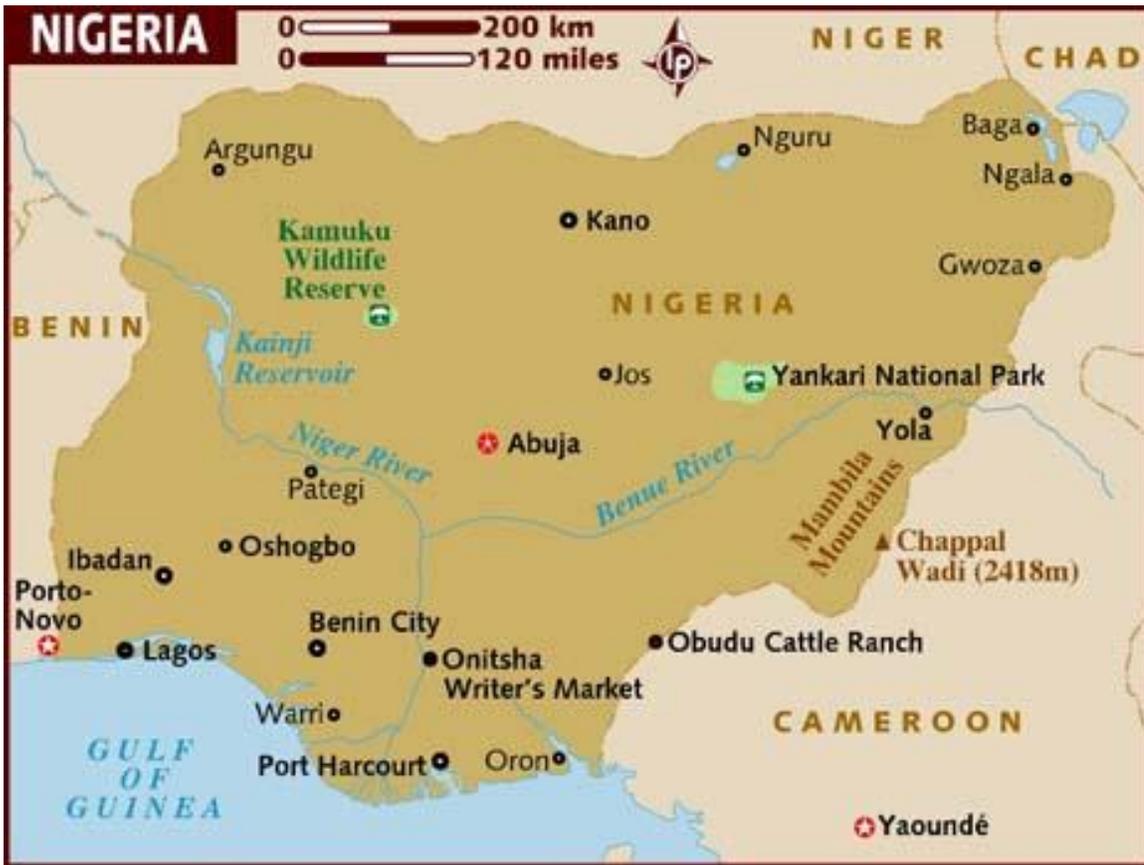
III. THE STUDY LOCATION

Federal republic of Nigeria being one of the largest economies in Africa is generally regarded as the giant nation of Africa, considering its size, population over 140 million (NPC, 2006) and natural resources. Lying entirely within the tropics almost at the eastern end of the West African Littoral between Latitudes 4^o and 14^o north of the Equator, and between Longitudes 3^o and 15^o east of the Greenwich Meridian, Nigeria is bounded on the three sides by Francophone Africa - the Republic of Cameroon on the East, the Republic of Benin on the West, and the Niger Republic on the North. To the South is the Gulf of Guinea which forms the Southern boundary of the country.

The total land area of Nigeria is 923,773 square kilometers, an area that is almost double the size of France and more than triples that of the United Kingdom. This area ranks Nigeria thirteenth in size among all African countries. The major rivers of Nigeria are the Niger, from which the country derives its name, and its tributary, the Benue, which jointly divide the country into three unequal parts. Other important rivers of Nigeria are; Anambra, Cross, Congola, Imo, Ogun, Taraba and Sokoto Rivers etc.

Physically, Nigeria is a land of great geographical contrasts. The swamp forests of the coastal belt, the high forests of the middle south, and the savanna belts of the north represent the broad vegetation zones into which the country is divided (Etuk, 2009).

Fig. 1: The Map of Nigeria



i. **Problem Identification or Recognition:** Zaltman and Burger (1975) opined that there is probably no activity in marketing research which is more important than the identification and definition of the research problem. A marketing problem is simply seen as a situation which is perceived by an organization as a source of dissatisfaction to its target market, and for which preferable alternatives are considered possible (Zaltman and Burger, 1975).

Problem identification is the first and one of the most important stages in the research process because it defines exactly what the project is all about. The marketing research process begins when an organization has a problem that requires information. Problem is a situation requiring some type of action. For example, in the case of declining sales, it is enough to say that the purpose of the research is to improve sales.

ii. **Exploratory Investigation:** Its purpose is to develop hypothesis or conjectural statement about the relationships of two or more variables. This may involve talking to inform people in informal interviews or investigating literature that may pertain to the possible areas. Informal interviews could be centered on customers, middlemen and the firm's own staff. Investigating literature implies securing secondary data from other published materials. Such secondary data could be obtained from government publications, private publications, marketing journals, private marketing guide (Anyauwu, 1993).

iii. Research Design: This refers to the method of carrying out the research. It is the plan for how to collect and analyse data. The marketing researcher has the problem of choice between alternative ways of collecting information that will satisfy the research objectives. The marketing researcher must decide on the method of data collection, research instrument and sampling plan.

Data collection may be based on primary data or secondary data. When the researcher has to generate the data, it is called primary data. When the data needed already exist in accessible form, it is called secondary data.

iv. Data Collection: Having decided on what research method to use, the sample size, and the peculiarities of the research, the next step is data collection. Researchers must determine from what source to gather information. Data are usually collected from a sample of the population because it is not economically wise to aim at collecting information from the population or universe. Sample is a part of the population and if it is representative, it will yield information about the larger groups (Anyanwu, 1993).

v. Data Analysis and Interpretation: Data analysis and interpretation involve editing the data to ensure the only answers needed were given by the respondents. According to Okpara (2002) data collected would almost look meaningless and intimidating. Therefore, there is always the need to refine these data so as to convey messages, and disclose major findings. This refinement could be done with the help of information technology tools, tables, charts, graphs, etc.

vi. Report Presentation: This represents the end point and final stage of the research and involves the transmission of the research findings to the relevant audiences. The users of the research findings may be marketing people, engineers, production managers, executives or even other researchers etc. Some of these professional may want only technical information, or just to know about the implications of the findings.

IV. ROLE OF INFORMATION TECHNOLOGY IN MARKETING RESEARCH

The 21st century has properly heralded the global knowledge driven economy and prosperity. The history of the internet shows that it started as an academic and research tool in the 1960s. The World Wide Web (WWW) was also developed by scientists at the European Particles Physics Research Laboratory (CERN) in Geneva. The Marketing researchers continue to play a dominant role in the further development of the internet and Information Technology (IT) in general. The internet and information technology generally have become powerful tools for the marketing researchers in the discharge of their functions of research. It has therefore become unimaginable to have a situation where marketing researchers would not have access to the global information network.

The globalization of information has been of tremendous advantage to research efforts in the marketing research. The literature survey search is no longer as tedious as it used to be about two decades ago, when dependent was entirely on printed material (hard copy). Marketing researchers can now access millions of pages of information on the internet including electronic books, world public library, journals, abstracts, etc. Electronic library facilities are available, such as the African Vital University

Library, the African Digital Library etc. The African Journal Online (AJOL, 2000), a completely electronic journal for publications from the African continent can be subscribed. This assists marketing researchers to gather information of any nature.

Information technology is becoming a global trend. Marketing researchers in various locations in the world can participate on a research project without physical contact.

V. SOME INFORMATION TECHNOLOGY TOOLS FOR MARKETING RESEARCH

Information technology presents various tools that can aid marketing researches. They include the following:

i. The internet: Perhaps the most dramatic new technology surrounds the development of the “Information super highway” and its bed rock, the internet. The internet is a vast and burgeoning global web of computer networks, with no central management or ownership. It was created during the late 1960s by the U.S. Department of Defence, initially to link government labs, contractors, and military installations.

Today, the internet links computer users of all types around the world. Anyone with a PC and Modem or television and set-top “web box” and the right software can browse the internet to obtain or share information on almost any subject and to interact with other users.

ii. Online Marketing Research: Online marketing research is conducted through interactive online computer systems, which links researcher with consumers electronically. A modem connects the consumer’s computer or television set-top. “web machine” with various services through telephone lines. There are two types of online marketing research channels, commercial online services and the internet.

iii. Computer Networks: Perhaps the most dynamic change in marketing research technology in recent years is the move away from mainframe computers that serve as the center of information processing toward network systems that allow many users to access information at the same time. The information need to complete the tasks is stored in huge databases controlled by the Central computer (the server). Networks connect people to people and people to data.

iv. Virtual Private Network (VPN): A Virtual Private Network (VPN) is a private data network that creates secure connections or “tunnels” over regular internet lines. The idea of the VPN is to give the company the same capabilities at much lower cost by using shared public resources rather than private ones (Nickels, Mchugh and Mchugh 2002)

v. Information Technology (IT) Parks: Information Technology parks are provided by the idea of “Localized knowledge spillovers”. The key argument in this literature is that firms operating near sources of information such as marketing research firms can introduce innovations at a faster rate than rival firms located elsewhere. Information Technology (IT) parks can also provide specific support information/data services needed by the marketing research organization.

VI. DISCUSSION OF FINDINGS

In the study, the researcher discovered that the information technology played very important role to carryout successful marketing research. The development of information technology tools such as internet, online marketing research, computer networks, information technology parks, virtual private networks etc. assist marketing researchers a lot to carryout research that provide management with relevant, accurate, valid, and current information.

However, marketing researchers are encountered with a lot of problems such as inadequate funds to carryout effective research study, the reliability of primary data and unwillingness of certain interviewees in responding and accepting fruitful discussions and meetings, especially as this involves human beings being unpredictable constituted problems to the researchers.

VII. RECOMMENDATIONS

Based on the research findings, the following recommendations are made:

- i. The management, companies or sponsors of any marketing research study should provide adequate funds to the researchers to guarantee valid, relevant and accurate outcome for sounds decisions making.
- ii. The respondents should be adequately educated on the intended purpose and usage of the research study embarks upon by the marketing researchers.
- iii. The latest information technology tools should be provided to researchers to ensure accurate relevant and valid outcomes.

VIII. CONCLUSION

The study has revealed that the Information Technology (IT) has played a tremendous role in marketing research. The marketing researches require the service of information technology to formulate policy to meet marketing research needs.

Information technology helps marketing researchers by allowing them to use new methods and tools such as the internets, online marketing research, computer networks, Virtual Private Network (VPN), Information technology parks etc.

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