

## Digital Media and Information Dissemination in Tertiary Institutions in Akwa Ibom State, Nigeria

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### Abstract

This study digital Media and Information Dissemination in Tertiary Institutions Akwa Ibom State, Nigeria sought to determine the extent to which electronic media (e-mail, voice-mail, picture message, and live calls) influence organizational communication in tertiary institutions in the study area. The study adopted the descriptive survey design. Four specific objectives, and a research question were raised and translated into a research hypothesis for testing at .05 level of significance. Conceptual and empirical review of literature indicated that digital media is likely to affect organization communication among staff of tertiary institutions at horizontal and vertical communication patterns. A researcher made instrument called Digital Media Interaction Scale (DMIS) with reliability coefficient of .87 using cronbach Alpha was 752 respondents representing 10% of the study population was used. They were selected using stratified and random sampling techniques where the five governments owned tertiary educational institutions in the study area formed strata. Data collected were analyzed using percentages and Analysis of Variance (ANOVA). The results show that digital communication media have significant influence, ensure more effective and transactional organizational communication at diverse degrees of intensity and reach depending on authority structure and line staff within the institutions examined. Based on the findings of the study, it is recommended among others that staff of tertiary academic institutions should be encouraged to use digital communication media to boost effective and efficient communication.

### Introduction

Organizational Communication is effective to the extent that organizational members can transmit instructions, ideas and feelings upwards, downwards, and sideways within and without the organization. Digital media facilitate good communication, which is essential to effective running of any tertiary institution. Digital media assure institutional and personal communication at horizontal and vertical levels. Ibe-Bassey (2000) and Wilson (2005) identified digital media commonly used for information dissemination among institutional members to include e-mail, voice - mail, picture message and live calls. Udoh (2007) asserted that these Communication Media are electronic information resources capable of facilitating transactional communication and interaction among humans and machines within and outside organizations. It is an effective and efficient means of information dissemination. Etuk (2008) described information dissemination as the process of transmitting a message from a sender to a receiver, the interpretation and digestion of the content of the message by the receiver and the receiver's behavioural reactions to the meanings attached to the message. It is the means through which members of an organization relate to one another by interchanging ideas, facts, feelings through the use of words, symbols, pictures and illustration, or a combination of these information formats as in the multimedia approach to information dissemination. In tertiary institution digital media are vehicles carrying ideas, facts and feelings through use of words, letters, memoranda, symbols and bulletins, posters, cartoons, illustrations, graphs and drawings. It is the active roles played by a sender and a receiver of information that make organizational communication effective. Digital Communication media had been identified (Chaffey, 2006) as most effective and versatile means of disseminating information in co-operate organizations. Hence, the topic: Digital Media and' Communication in Tertiary Institutions defines the assessment of the influence of digital media such as E-mail, Voice-mail, picture message and live calls on the attainment of effective communication in tertiary educational institutions in the study area.

Digital media when effectively selected and efficiently utilized ensure proper dissemination of information; facilitate message quality, reach, and temporal utility to satisfy the information needs of academic community. In this era of media and information boom, staff of tertiary academic institutions is meant to be communicators capable of using recent forms and formats of digital media to achieve the gains of good communication in academic institutions. Desirable level of institutional communication is informative, behaviour modifying, free from delay, distortion, message lost and line - loss. Such an effective communication

in tertiary institutions facilitates positive school climate, human, industrial and media relations, and conflict free academic environment. Poor communication is germane to organizational conflict and institutional crisis.

It is likely persistent that corporations and public academic institutions give out much information in which the message or new s point is lost to view. Denga (2008) and Wilson (2005 ) agreed that most oh the disputes and crisis in tertiary academic institution would have been controlled if concerned and necessary members of the institutions were adequately communicated, Members of academic institutions and necessary others in the society are interested in effectively communicated information, especially if such messages convey ideas relating to their personal and corporate interests. Digital media disseminate information in ways and formats that appeal most to the targeted audience (Udoh, 2007). Digital media are utilized in academic tertiary institutions for horizontal or lateral communication and vertical communication.

Chaffey (2006) reported that e-mail is an effective corporate information media that ensures accountability and objectivity in disseminating messages. Anderson (2007) described e-mail as one of the instant forms of institutional communication. It is a facility through which people communicate messages electronically to any point in the world. Lawal, Nkereuwem and Edem (2008) stated that the speed of e-mail communication is so high that the ordinary paper communication is referred to as the snail mail: Effective use of e-mail for conservation in tertiary institution requires that the encoder spend some time in understanding e-mail a' a corporate communication tool. E-mail has advantage over telephone communication speed by provision of sending attachments with an e-mail that contains important documents or even a presentation to clarify the message (Black, 2004). E-mail is convenience and prevents organizations from keeping file and folders filled with papers and it makes important correspondence portable.

E-mail significantly reduces institutions shipping and postage costs. Aside from cost of internet connection, email is free. Through e-mail organizations can send messages, files, videos, documents and presentations without paying anything. However, Anderson (2007) advised organizations replying on e-mail as a significant source of information that all the institution emails and important information can be lost with a sample hard drive crash. The institutions information with an incorrect email address cans windup in someone else's inbox. This indicates e-mail vulnerability, accessibility to hacker and lacks voice inflection or emotion that can help with proper interpretation. Most e-mail information often carries external communication, which to management interacts with outside institutions in the form of advertising or public relations efforts. E-mail is also used in institution of higher learning to facilitate horizontal communication, which involves exchange of information among people occupying the same level in the organizational hierarchy. Chaffey (2006) reported that academic institutions use digital communication strategies such as e-mail, voice and picture messages as well as live calls at varying degrees of intensity and frequencies. Chaffey further stated that most academic institutions use e-mail to achieve deliverability level of 85.5% to 95% and open rate, of 50% to 45% on form sales. Click through rate of 9% to 10%. Form completion of 45% to 50% and achieve overall outcome conversion of 22.5% to 25% on outward communication objectives.

Lewin (2009) asserted that live calls as a form of digital communication fuel the growth and effectiveness of academic institutions and its parts. Live calls messages, rather than being limited, controlled, and a source of power, appear to be instrumental for greater effectiveness. Live-calls widely disseminate messages and make information available to

Organization and its members. Most lives calls made by institutions in Nigeria are through phones. Lives-calls encourage closer contact with client, students, associates of the institutions and staff. In a study conducted by Johnson (2010), 325 University of Lagos staff was surveyed, with 276 responses received (overall response rate of 85%). Most staff was using a combination of different digital communication modes in a given week (68%). The staff under study agreed to have received most live-calls from persons in the institution without regard to formal lines of authority (52%), live-calls from formal lines of authority (37%) and live calls from outside but in connection with their official duties (11%). Udoh (2007) described live-cal as most effective format adopted by educational institutions in terms of speed, availability, accessibility, spread and emotion that can help proper interpretation of the message. Etuk (2008) asserted that live-calls boost formal and informal communications that derive its existence from social and personal interests of people within academic institutions with relatively fewer messages from the formal requirements of such institutions. Live-calls are the most outstanding form of oral communication used for interaction amongst members of academic institutions. It is the commonest form of mediated communication among members of modern organizations. Davidson (2012) asserted that lie-calls arc strengthened by the elimination of complete missed calls, through the voice mail systems which allow people to efficiently route phone calls.

Williams (2009) asserted that voice mail system is preferred by institutions as it is far cheaper than using human labour to ensure that all incoming calls are answered. A well - implemented voicemail system provides the academic community and patrons the option to immediately leave a message at any time, rather than wait on hold or be forced to navigate the s stem. The stimulant to use of voicemail is the institutions ability to provide the sender a prompt reply. Lewin (2009) stated that a well-implemented voicemail system can provide

benefits to the user and the institutions, users of voicemail should be provided with the option to immediately leave a message at an time than wait on hold or be forced to navigate the system. Ebong (2011) reported that efficient use of voice-mail allows institutions to lower staff expenses while maintaining information satisfaction among its academic patrons. In academic institutions voice mail are used as voice answering and voice messaging. Voice mail assists institutions administration as it is capable of accepting calls when the caller party is unavailable. This is to ensure that organization will never miss a single call, especially those of great importance. Wood (2013) reported that innovative use of voice mail integrates picture message to act as voice inflection for proper interpretation of the message.

Edem (2000) asserted that institutions use picture message to indicate the expressive quality common among members of the institution. Expressive qualities communicated by academic institution, include ideas, feelings, emotions and moods. Among the line staff vertical communication exists in picture message and often conveys idea, skill, illustration and general graphics, the display sometimes reflect product design, work design and process component design such that could guide subordinates to perform their work. Such messages flow from the top management down-ward. Wood (2013) asserted that picture messages hen disseminated horizontally basically, express individual or group feelings, emotions and moods that are more or less unofficial.

Udoh (2007) described picture message as digital communication strategy capable of enhancing adequate feedback, clarity of message, sincerity, and peculiarity in channel selection and avoidance of information overload. Digital communication variables (e-mail, voicemail, picture message and live calls) are common tools used in the coordination of tertiary academic institutions in developed and developing nations (Wilson, 2005). Digital communication tools are strategic measures to eliminate or control communication. The study to examine the influence of digital media on effective communication in tertiary academic institutions in Akwa Ibom State.

### **Problems of the Study**

Most of the crisis in tertiary academic institution in Akwa Ibom State had been traced by earlier works to poor communication system or communication breaks down. Poor communication and information dissemination among organization members in this era of media and information boom is implicating on the media selection and utilization skills of tertiary institution members. Effective selection and efficient use of digital information resources are capable of facilitating effective communication in tertiary educational institutions. The question now is, what is the influence of digital media utilization on effective communication in tertiary institutions in Akwa Ibom State? The problem of poor communication would be greatly reduced or controlled if the extent of influence of information dissemination in tertiary educational institution is known. This uncertainty on the influence of digital media utilization on effective communication in tertiary institutions in Akwa Ibom State had created gab in knowledge which this present study sought to fill. The study therefore examines the influence of digital media utilization on effectiveness of organizational communication in tertiary educational institutions in Akwa Ibom State, Nigeria.

### **Methods**

A descriptive survey design was used in the study. Stratify and random sampling techniques were used in view of the large size of the study area. Five governments owned tertiary academic institutions in the study area formed the strata where 10% of the total population of 7521 staff in the institutions were selected at random for the study. The sample size of the study was 752 respondents constituting academic and non-academic staff. The researchers administered structural questionnaires were used for data collection. The instrument had a four point summated scale with the weight of 4 - I . Very effective (VE) = 4. Effective (E) 3, Ineffective (I) = 2 and very ineffective (VI) = 1. This gives a maximum of 16 points and minimum of 4 for each media used. The questionnaire called Digital Media Interaction Scale (EMIS) was subjected to trial study on 100 staff that was not part of the final study. Cronbach Alpha Statistics was used to establish the reliability coefficient of 0.87. The instrument was validated by 2 experts in test and measurement and 2 experts in communication Arts from university of Uyo, Akwa Ibom State.

Descriptive statistics of percentages was used to answer research question while Analysis of Variances (ANOVA) was used in testing the hypotheses.

### **Purpose of the Study**

The purpose of this study was to examine the influence of digital media utilization on effectiveness of organization communication in tertiary academic institutions in Akwa Ibom State

### **Research Question**

How does the use of digital media affect the effectiveness of institutional communication in tertiary academic institutions in Akwa Ibom State?

### Research Hypotheses

H<sub>0</sub> There is no significant influence of the use of digital media on effectiveness of organizational communication in academic institutions in Akwa Ibom State, Nigeria.

### Result and Discussion of Findings

A descriptive statistic of percentage was used to analyses data collected based on the research question as presented on Table I.

**Table I:** Simple Percentage Analysis on How the Use of Digital Media Affect Communication Effectiveness in Academic Institutions in Akwa Ibom State, Nigeria.

S/N	Variables	Level of effectiveness measured in percentage			
		Very Effective	Effective	Ineffective	Very Ineffective
1	e-mail	61.5%	23%	15%	0%
2	Voice mail	80%	20%	0%	0%
3	Picture message	40%	30%	20%	10%
4	Live calls	50%	33%	17%	0%

The fact that institutional users of digital media derived diverse degrees of effectiveness from the use of the digital media examined in the study showed that utilization behaviour of the staff determined the levels of organizational communication effectiveness in institutions under study.

The Post Hoc Scheffes Jest traced the significant difference to group 3 and I and group 3 and 2 as well as group 4 and 3 as presented on the Table 2.

**Table 2: POST HOC (SCHEFFES TEST)**

PAIRED GROUP	MEAN DIFFERENCE	CRITICAL VALUE	REMARKS
2 VS. 1	1.1151	6.20970	NS
3 VS. 1	7.7483	6.0970	S
3 VS. 2	7.388	6.20970	S
4 VS. 1	03668	6.20970	NS
4 VS. 2	0.3603	6.20970	NS
4 VS. 3	6.2729	6.20970	S

Scheffes Test indicating groups that differ to account for the significant influence of use of electronic media on effectiveness of organizational communication in the academic institutions examined.

Respondents in the tertiary academic institutions in Akwa Ibom state agreed that e-mail contributed 23% to 61.5% of effectiveness in the communication processes in their institutions. This showed that tertiary academic institutions differ in their levels of effectiveness in the use of e-mail in their official communications. The finding is in line with the work of Anderson (2007) which identified e-mail as one of the instant and effective forms of organizational communication media. The ability of e-mail utilization to elicit significant level of organizational communication effectiveness is unconnected with the fact that efficient use of e-mails ensures the dissemination of urgent messages among members of organization with speed and accuracy. Efficient users of e-mail for communication in tertiary institutions have agreed in this study that e-mail adopted for official communication had yielded up to 61.5% of effectiveness. The post hoc test traced significant influence of e-mail utilization on effectiveness of communication in tertiary institutions that use e-mail along with picture message (group 3 and 1). This is indicating that effectiveness in official communication in tertiary institution is sensitive to proper use of e-mail for information dissemination.

The institutional users of voice mail for official communication experienced 20% to 0% levels of effectiveness in the dissemination of official messages. This means that some staff of tertiary institutions used voice mail better than others. This is an indication that effectiveness in communication at tertiary education level is sensitive to skills and interest of the staff in the use of voice-mail for official communication. The study data analysis showed that a combination of voice-mail with picture message elicited significant influence on the effectiveness of official communication in tertiary academic institutions in Akwa Ibom State. This finding also agreed with Ebong (2011) assertion that effective use of voice mail allows institutions to lower staff expenses

while maintaining information satisfaction among its academic patrons. This study finding is indication that use of voice - mail can significantly influence communication effectiveness in tertiary institutions.

The picture message elicited between 30% to 40% degrees of effectiveness in organizational communication in the tertiary academic institutions under study. The low parentage in effectiveness in the use of picture message (30 to 40%) is likely due to the fact that the users had little skills in virtual literacy. This perhaps makes the use of picture message less common means of disseminating information among staff of tertiary institution examined in this study. This finding ascertained that proper use of picture message had significant influence on effectiveness in organizational communication. It agreed with the work of Edem (2008) that asserted that institutions use picture message to indicate expressive quality common among members of the institutions.

Data analysis of scores collected on use of live calls yielded 33% to 50% degrees of effectiveness in the dissemination of official messages in tertiary institutions in Akwa Ibom State. Use of live calls for official communication in tertiary educational institution indicated significant influence on effectiveness of organizational communication. This finding is obvious as the post hoc test indicated that live calls were significantly effective means of official message dissemination in tertiary institutions especially when used along with picture message (group 4 vs group 3). The sensitivity of formal communication effectiveness to use of live calls in institutions of higher learning in the state is likely linked to the ease with which people use live-calls for communication. This finding of significant influence of live calls on effectiveness of information dissemination in tertiary educational institutions agreed with the report of Lewin (2009) that live-calls as a form of digital communication fuels the growth and effectiveness of information dissemination in academic institutions, departments and divisions. It indicated that efficient use of digital media elicited significant level of effectiveness in institutional communication in the study area.

Table 3. Analysis of Variance (ANOVA) Summary of Digital Media Utilization on Effectiveness of Organizational Communication in Tertiary Educational Institutions in Akwa Ibom State.

SOURCES OF VARIANCE	SS	DF	MS	F	P-VALUE
Between groups	9409	3	3136.33	2.8217	2.61
Within groups	832508.8	749	1111.49		
<b>TOTAL</b>	<b>841917.8</b>	<b>752</b>			

Table 3 showed that the calculated F (2.82 17) was greater than the critical F (2.61) at .05 level of significance at 3 and 74 degrees of freedom. The null hypothesis was rejected. There was significant influence of digital media utilization on effectiveness of organizational communication in tertiary academic institutions Akwa Ibom State.

### Conclusion

The Post Hoc Test traced the significant influence of digital media utilization on effectiveness of information dissemination in academic institutions to variance in the use of e-mail and picture messages. Voice-mail and picture message; live-calls and picture message. This study showed that picture message was the least used of all the digital media examined in the study in term of effectiveness as communication tool in tertiary institutions in the study area. It was therefore concluded, that effectiveness in official message dissemination in tertiary academic institutions was sensitive or responsive to the skills of staff in the utilization of digital media examined.

### Recommendations

- The following recommendations are put forth:
1. Picture messages should be encouraged among top management staff and the subordinate.
  2. Intercom should be provided for effective live calls to fasten active and effective communications
  3. Staff of tertiary institutions should be encouraged to use digital communication media to boost effective and efficient communication.
  4. All staff should he encouraged to make use of e-mail to avoid delay in communication.

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