

Improving the Productivity of Rural Populace through Multimedia and Hypermedia Information Tools in Oluyole Local Government Area of Oyo State, Nigeria

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Abstract

The paper examined multimedia and hypermedia information tools as improving agents for the productivity of rural populace in Oluyole Local Government Area of Oyo State, Nigeria. The research design used for the study is survey. Quota random sampling technique which is purposive in nature was used to select a sampled population of 30 respondents from seven (7) major settlements in the local government. A self-constructed research instrument tagged "Enhancing The Productivity of Rural Populace" (EPRP) was used by the researchers to collect data. The reliability co-efficient of the instrument is 0.77 percent. Statistical package for social science (SPSS) was used to analyze the data collected. Part of the findings of the study revealed that the respondents were engaged in more than one source of livelihood and that despite the fact that they were engaged in different sources of livelihood their productivity is still at a very low ebb as majority of them failed to employ multimedia and hypermedia to their work. The study concluded that the application of multimedia and hypermedia information tools had direct positive impact on the productivity of the respondents. The study recommended the following amongst others. The local and state governments should open up the sampled rural community especially in terms of infrastructural development that would make them to be at par with urban centre and that the Ministry of Information and National Orientation Agency (NOA) should make it a duty to embark on periodic sensitization of the sampled rural populace on the benefits of multimedia and hypermedia especially as it affect their productivity.

Introduction

General economic recession, unemployment and underemployment, ubiquitous poverty and low standard of living are some of the unpleasant realities of the information driven age. General poverty and low standard of living which are attributable to low productivity are ubiquitous problems of the age irrespective of geographical location. This means that urban dwellers are not exempted from these problems. However, the problems are more pronounced in rural than urban setting since an estimated 51 percentage of Nigeria's population and most countries in Africa are in the rural areas (World Bank, 2011). Moreover, since the bulk of food items that are used to sustain the urban populace usually come from the rural setting, the need to accord high priority to issues that border on the productivity of the rural dwellers cannot be over emphasized. Rural populace refers to a group of people who live or reside outside a city mainly in rustic environment. The dwelling place of the rural populace is described as rural society or settlement. A rural place could as well be described as a place with low population, high level of illiteracy and lack of commercial institutions. (Olawoye, 1987, 2002, encyclopedia Britannica, 2007, Alfred, Ewuola, Adebajo and Mundi, 2010). Similarly, Mgbada (2010) described rural setting as being close to nature; characterized by farming and farming related occupation, low population density, homogeneous community, strong social control, low standard of living, strong social cohesion etcetera.

In an investigative study carried out on the livelihood activities of the rural dwellers in the southeast Nigeria, Ifeanyi-Obi and Matthews-Njoku (2014) identified 20 livelihood activities out of which two are dominants namely farming (mean=3.7) and trading (mean=2.9). in a related study carried out earlier by Oyesola (2007) on rural dwellers in Akinyele Local Government Area of Oyo state, Nigeria, the rural people were involved in trading (51.7%), crop farming (49.2%) and crop/food processing (34.2%) as their major economics livelihood activities. Other livelihood activities include: livestock farming (11.7%), butchering (7.5%), carpentry (14.2%), civil service (10.8%) and commercial motorcycling (6.7%). The study equally revealed that the rural dwellers were engaged in more than one economic

activity. This corroborates the report of World Bank (World Bank, 2003). Productivity is a state of excellence. It is a state of fruitfulness and fulfillment in a given task or vocation. It is doing something uniquely and special from what others have done. Productivity is creativity in action. It is putting one's best in a particular assignment. (Babalola, 2014; Babalola and Abifarin, 2014; Babalola, Abifarin, and Ahmed, 2015). Productivity is the profitable, proficient and efficient allocation of input for the anticipated output in such a way that waste is minimized or eradicated completely. Productivity would engender profitability and employability for any group of people including the rural populace. Productivity is the hallmark of human existence and any group or nation or group of nations that is unproductive becomes moribund (Babalola, 2014) for the rural dwellers to play their traditional role of providing adequate food and ensuring food security for both rural and urban dwellers, the rural populace in Nigeria and in other nations of the world must be highly productive. They need to jettison crude farming method and embrace mechanized and modern farming methods. (Falusi, 2014 and Egharevba, 2015). Similarly, the need for enhanced productivity and optimisation of soil nutrients for maximum soil and food security has been suggested (Osunde, 2015).

Nigeria has a good number of policies and programmes which are intended towards accentuating the productivity of the rural dwellers because of the critical role that rural dwellers play towards ensuring food security of the nation. Part of the programmes that Nigeria has for the rural populace is the rural community information services. It is disheartening, however, to observe that in spite of these laudable programmes that the country has for its teeming rural population, the productivity and standard of living of the rural community have continue to depreciate rather than appreciating. A major factor that has been adduced for low productivity and poor standard of living of the rural populace is ignorance. The rural populace suffers from acute low productivity, social and economic retrogression due to ignorance which is a direct consequence of either inadequate or complete lack of current and appropriate information (Issa, 1998, Alfred, 2001 and Harande, 2009).

If the productivity of the rural populace in Nigeria would receive a boost in this information driven epoch, rural dwellers need to avail themselves of the potentials of information and communication technology (ICT). The rural dwellers would need current information on a variety of issues such as: texture of soil, methods of irrigation, quality seeds and seedlings, land tenure system, plant and animal diseases, prevention of plant and animal diseases, security, marketing of farm products, transportation, recreation, legal and ethical issues, medical care, infrastructural development, political and cultural information etcetera. Information is power. The rural populace would need to be properly informed on the afore-listed issues and a host of others if their productivity would receive a boost. Information could be specially selected, packaged, programmed and tailored to meet their specific needs. This is referred to as Selective Dissemination of Information (SDI). Such information is specially designed to ensure the development of rural dwellers (Aboyade, 1990). Information could also be provided in such a way that the rural dwellers are updated with current development, current discoveries and new knowledge that are germane to their optimum productivity. With such knowledge the rural dwellers are made to be firmly armed with relevant, current and up to date information as opposed to obsolete information. This is called Current Awareness Services (CAS). Both SDI and CAS are veritable sources of information that could be provided to the rural dwellers towards alleviating their suffering, reducing poverty and maximizing their productivity amongst other things. SDI and CAS could be provided to the rural dwellers in this information driven age through the multimedia and hypermedia information tools. The indispensability of information and communication technology (ICT) in enhancing the productivity of any professional or a group of professionals in this information driven epoch cannot be over-emphasised. It would be hard if not completely impossible to experience any major breakthrough in agriculture, medicine, commerce, education, researches etcetera without the utilisation and adoption of the gamut of opportunities that are accruable from ICT.

We live in a multimedia world surrounded by complex images, movement and sound. Multimedia and hypermedia information tools are part and parcel of ICT. Multimedia are divided into computer based and non computer based. Computer based multimedia learning stations have been used since 1966 and non-computer multimedia methods have been around even longer. The emphasis in this paper is computer based multimedia and hypermedia instructional tools. Definitions for multimedia and hypermedia defy consensus. People find the two concepts either too close to distinguish between or too slippery to get words around (Moore, Myers & Burton, 1994, Tolhurst, 1995). Multimedia put succinctly refers to a

combination of media. The media can be still pictures, sound, motion video, and animation and or text items combined in a product whose purpose is to communicate information. Hypermedia refers to linked media. The combination of media such as video and audio with text makes them multimedia; the ability to navigate from one media/information element to another makes them hypermedia. Multimedia and hypermedia systems come in a variety of hardware, software and media configurations and until recently, were usually classified according to their primary storage equipment: interactive videodiscs (IVDS), compact disc-read-only memory (CD-ROM), digital versatile discs (DVD), and other technologies, including compact disc-interactive (CD-I), digital video interactive (DVI), and photographic compact discs (photo CDs). The benefits accruable from the adoption of multimedia and hypermedia as information tools in disseminating information to the rural dwellers appear to be inexhaustible. They include the following amongst others.

- Motivation. Hypermedia and multimedia programmes offer such varied options that most people seem to enjoy using them (McCarthy, 1989).
- Flexibility. Hypermedia programmes can draw on such diverse tools that they truly offer something for excellent performance for people in all works of life including rural dwellers.
- Development of creativity and innovative skills. Ample access to hypertext and hypermedia tools opens up a multitude of creative avenue for learners including the rural dwellers. (Turner and Dipinto, 1992)
- Greater comprehension and retention of learned materials. When pictures are accompanied by spoken words rather than written words learners especially the rural dwellers exhibit greater comprehension and retention (Mayer and Moreno, 1998).
- Cost effective. Hypermedia programmes cost less.
- Enrichment of learning. It enriches and adds value to learning. This is obvious when multimedia is integrated into traditional instruction.

The indispensability of multimedia and hypermedia as veritable tools for information delivery and enhanced productivity has been variously confirmed. In different researches carried out on Greek beekeepers, it was established that there is a significant positive relationship between the profitability and productivity of the beekeepers and the applied hypermedia and multimedia management information skills (Batzios, Haritou and Katos, 1989; Batzios, Salampasis and Androulidakis, 2014). It should be added that the rise of distributed multimedia and hypermedia systems in the present information epoch presents unending opportunities for almost all fields of human endeavour such as education, health care, business, agriculture, library and information etcetera.

Therefore, adopting multimedia and hypermedia systems in providing information to the rural dwellers of Oluyole Local Government Area of Oyo State, Nigeria is a right step in the right direction in this information driven age. Oluyole Local Government has a total population of 203,461 (National Population Census, 2006) and has the following big settlements: Olomi, Onigambari, Odo Ona Elewe, Odo Ona Kekene, Onipe, Aiyetoro, Aba Ajao, Oja Ibadan, CRIN, New Garage Idi Ayunre, Ojo Ekun, Olowa, Busogbooro, Alata, Onidajo, Jayeoba, Sanyo, Aiyegun, Olode and Latunde, out of which purposeful random sampling was used to pick seven (7). The choice of Oluyole Local Government is purposive. The researchers believe that if the right information is provided through the right channel-multimedia and hypermedia systems, the productivity of the rural populace in this local government would receive a boost. If their productivity receive a boost, they could be in vantage position to supply food for the whole citizens in Oyo State and other parts of Nigeria. In other words, this local government could ensure food security for the whole of Oyo state if they are properly informed. The study, therefore, examined how the productivity of the rural dwellers in Oluyole Local Government Area of Oyo State, Nigeria could receive a boost through the application of multimedia and hypermedia systems.

Statement of the Problem

It has been observed that an estimated 51% of Nigerians live in rural areas (World Bank, 2011). This situation is not different in other parts of Africa. For the rural populace to play successfully their nature given role of supplying food to the urban dwellers, they must be highly productive. In other words their productivity must transcend the subsistence to mechanised level. Ironically, majority of the rural dwellers are not so productive. Low productivity might be due to ignorance, lack of exposure, lack of awareness, or

and deficient media of information provision. The study therefore, examined how multimedia and hypermedia information tools could be used to boost the productivity of rural dwellers in Oluyole Local Government Area of Oyo State, Nigeria.

Objective of the Study

The main objective of the study is to examine how multimedia and hypermedia information tools could be used to enhance the productivity of rural populace in Oluyole Local Government Area of Oyo State, Nigeria. The specific objectives are to:

1. Identify the livelihood activities of the rural populace in Oluyole Local Government Area of Oyo State.
2. Ascertain the level of the productivity of the rural populace in Oluyole Local Government Area of Oyo State, Nigeria.
3. Determine the level of application of multimedia and hypermedia among the rural populace of Oluyole Local Government Area of Oyo State, Nigeria.
4. Ascertain the effect of the application of multimedia and hypermedia on the productivity of the rural populace of Oluyole Local Government Area of Oyo State, Nigeria.

Research Questions

To achieve the afore-stated objectives, the following research questions were raised and answered.

1. What are the livelihood activities of the rural populace in Oluyole Local Government Area of Oyo State, Nigeria?
2. What is the level of the productivity of the rural populace in Oluyole Local Government Area of Oyo State, Nigeria?
3. What is the level of the application of multimedia and hypermedia among the rural populace of Oluyole Local Government Area of Oyo State, Nigeria?
4. What is the effect of the application of multimedia and hypermedia on the productivity of the rural populace of Oluyole Local Government Area of Oyo State, Nigeria?

Scope of the Study

The study covers the livelihood activities, the level of productivity and the effect of the application of multimedia and hypermedia on the productivity of the rural populace in Oluyole Local Government Area of Oyo State, Nigeria.

Research Methodology

The research design used for the study is survey. Quota random sampling that is purposive (judgmental) in nature was used to select 30 respondents from each of the seven (7) villages used for the study. The villages used are: Onigambari, Odo Ona Elewe, Aiyetoro, Aba Ajao, Latunde, Ojo Ekun and Alata. These villages were purposively selected due to their strategic location, population density and the occupation of the dwellers. Out of the 210 copies of the instrument administered 170 (81%) were retrieved and used for analysis. The researchers employed self-constructed research questionnaire instrument tagged "Enhancing the Productivity of Rural Populace" (EPRP) to collect data from the respondents. The instrument was subjected to both content and face validity tests. The reliability co-efficient of the instrument is 0.77 percent. Statistical Package for Social Science (SPSS) was used to analyse the data collected

Data Presentation

Data are presented with simple statistical tools of percentages, tables and frequency counts. Oluyole Local Government Area of Oyo State has an area of 648.19km² and a population of 203,461 (102,371 Male and 101,090 Female) according to 2006 National Population Census.

Table1: Response Rate

S/N	Name of village	Total population	Copies of Instrument Administered	Copies of Instrument Retrieved	Percentage (%)
1	Onigambari	7,900	30	30	100
2	Odo Ona Elewe	10,020	30	30	100
3	Aiyetoro	10,300	30	20	66.7
4	Aba Ajao	9,000	30	20	66.7
5	Latunde	5,903	30	25	83.3
6	Ojo Ekun	11,000	30	17	56.7
7	Alata	7,800	30	28	93.3

In table 1, all the 30 copies of the questionnaire administered in Onigambari and Odo Ona Elewe villages were retrieved making the response rate of 100 percent respectively. In Alata, 28 (93.3 %) copies of the instrument administered were retrieved; 17 (56.7 %) copies of the instrument administered were successfully retrieved in Ojo Ekun.

Answers to Research Questions

1. What are the livelihood activities of the rural populace in Oluyole Local Government Area of Oyo State, Nigeria?

Table 2: Livelihood Activities of the Rural Populace

S/N	Livelihood Activities	Frequency	Percentage (%)
1	Farming	155	91.1
2	Trading	120	70.6
3	Butchering	50	29.4
4	Tailoring	40	23.5
5	Carpentry	30	17.6
6	Mechanical Engineering	20	11.8
7	Hunting	70	41.2
8	Driving	20	11.8
9	Civil Service	40	23.5
10	Others	22	12.9

In table 2, the livelihood occupation that attracted the highest population of the rural dwellers is farming as indicated by 155 (91.1%) respondents followed by trading 120 (70.6%) respondents. Mechanical engineering and driving had the lowest respondents of 20 (11.8%) respectively. Other livelihood activities that could not be categorized under a particular occupation attracted 22 (12.9%) respondents.

1. What is the level of the productivity of the rural populace in Oluyole Local Government Area of Oyo State, Nigeria?

Table 3: Level of the Productivity of the Rural Populace

S/N	Level of Productivity	Frequency	Percentage (%)
1	My productivity has been very high in the past 3 years	20	11.8
2	My productivity is high at times and low at times	70	41.2
3	My productivity has been on average throughout the year	50	29.4
4	My productivity has been very low throughout the year	120	70.6
5	There has not been any significant increase in my productivity in the past 3 years	140	82.4

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4	My productivity has been very low throughout the year	120	70.6
5	There has not been any significant increase in my productivity in the past 3 years	140	82.4

In table 3, it is obvious that the productivity of majority of the respondents has been at a very low ebb. Out of the 170 respondents 120 (70.6%) indicated that their productivity has been very low throughout the year while 140 (82.4%) respondents affirmed that their productivity has not witnessed any significant increase in the past three (3) years

1. What is the level of the application of multimedia and hypermedia among the rural populace in Oluyole Local Government Area of Oyo State, Nigeria?

Table 4: Level of the Application of Multimedia and Hypermedia Among the Rural Populace

S/N	Level of Application of Multimedia and Hypermedia	Frequency	Percentage (%)
1	I apply multimedia and hypermedia systems in all my daily routine	37	21.8
2	I seldom apply multimedia and hypermedia systems to my work	162	95.3
3	Multimedia and hypermedia system have become part and parcel of my life	49	28.8
4	I have phobia using multimedia and hypermedia	137	80.6
5	I have no knowledge of multimedia and hypermedia and I do not use them	79	46.5

It is clear from Table 4 that the level of the application of multimedia and hypermedia by majority of the respondents is low. Some respondents, 162(95.3%) rarely applied multimedia and hypermedia; 137 (80.6%) respondents indicated that they have phobia using multimedia and hypermedia; 79 (46.5%) do not have knowledge of multimedia and hypermedia and do not use them; while 49 (28.8%) respondents indicated that multimedia and hypermedia have become part and parcel of their lives

1. What is the effect of the application of multimedia and hypermedia on the productivity of the rural populace in Oluyole Local Government Area of Oyo State, Nigeria?

Table 5: Effect of the Application of Multimedia and Hypermedia on the Productivity of the Rural Populace

S/N	Effect of the Application of Multimedia and Hypermedia on Productivity	Frequency	Percentage (%)
1	Since I have been applying multimedia and hypermedia my productivity has increased greatly	42	24.7
2	My mode of operation has been faster and very fascinating in the past 3 years that I have been applying multimedia and hypermedia	47	27.6
3	I get pleasure; happiness and joy in my work due to the application of multimedia and hypermedia	51	30
4	There is no difference in my productivity before I started applying multimedia and hypermedia and after I began to use it	5	2.9
5	I get new idea and I become more knowledgeable in my work since I have been applying multimedia and hypermedia tools	44	25.9

In table 5, there is a direct positive connection between the application of multimedia and hypermedia and the productivity of the rural populace. Some respondents 44(25.9%) indicated that they have been able to get new ideas and they have become more knowledgeable since they have been applying multimedia and hypermedia; 51 (30%) gets pleasure, happiness and joy in their work due to application of multimedia and hypermedia; while 5 (2.9%) respondents indicated that they do not see any difference in their productivity since they have been applying multimedia and hypermedia and before they began to apply them to their work.

Discussion of Findings

Findings of the study revealed that majority of the rural dwellers in Oluyole Local Government Area of Oyo State, Nigeria were engaged in more than one livelihood activities. What could be described as overlapping propensities were evident in the livelihood activities of the rural dwellers. This corroborates the findings of Oyesola (2007), Ifeanyi-Obi and Matthews-Njoku(2014) who discovered in their various findings that rural dwellers were engaged in a lot of menial jobs for survival. Moreover, it is possible that the rural dwellers got themselves involved in more than one livelihood activities due to the poor or uncertain dwindling incomes from the various livelihood chores (Oyesola 2007, World Bank, 2011). Moreover, the level of productivity of majority of the rural dwellers is low. It means that their standard of living is equally low which in consequence shows that majority of the people in the rural areas would not be able to meet their basic necessities of life like shelter, clothing and food. Even if they are able to meet their basic necessities of life, they might be able to do this quantitatively and not qualitatively. No wonder many people in rural area live in squalor and are sickness prone. The findings of this study confirm the earlier findings of Mgbada (2010) who affirmed the poor standard of life of the rural dwellers. Furthermore, majority of the respondents do not apply multimedia and hypermedia tools to their work. Many of the respondents do not use the gadgets out of phobia; some rarely attempted using them at all; while others lacked knowledge of multimedia and hypermedia and do not bother to use them. The term "rural" itself implies "rustic" and "crude". The rural people are still primitive. Many of the sampled respondents are ignorant of the potentials of multimedia and hypermedia systems. They do not know and they do not bother to know the potentials that are associated with the adoption of multimedia and hypermedia especially as it could affect their productivity. Ignorance, illiteracy, paucity of knowledge and phobia of change could be described as psychosomatic diseases that are plaguing the lives of majority of the rural dwellers that were sampled for the study.

Ignorance constitutes a serious divide between the rural and urban dwellers and is also a serious widener of lacuna between the socio-economic status of the rural and urban dwellers. If this trend is not checked, as the socio-economic status of the urban dwellers continue to appreciate, that of the rural dwellers (especially in developing countries like Nigeria) would continue to depreciate at a very rapid rate. The findings of this research agree with the earlier findings of Issa (1998), Harande, (2009), Alfred, Ewuola, Adebajo and Mundi (2010). It is clear from the findings of the research that multimedia and hypermedia systems have positive direct impact on the productivity of the rural dwellers. This is indicated in the responses of the respondents who bothered to apply multimedia and hypermedia instructional gadgets to their daily routine. The findings of this research further revalidate the earlier findings of Batzios, Haritou and Kaitos (1989); Batzios, Salampasis and Androulidakis (2014) who discovered in their various researches that multimedia and hypermedia had profound positive impact on the productivity of Greek beekeepers. It is not possible to shy away or waive aside issues that bother on productivity of an individual or a group of people. Productivity is the core of human existence. A group of people or organisation that is unproductive is inadvertently inviting retrogression if not extinction (Babalola, 2014). Moreover, if the rural dwellers of Oluyole Local Government Area of Oyo State, Nigeria are productive, they would be able to produce food that would feed not only Oyo State indigenes but other citizens in other parts of Nigeria. The need to apply multimedia and hypermedia instructional gadgets to the daily routines of the sampled rural dwellers in this information driven epoch cannot be over emphasised. This is because if the rural dwellers in the area sampled for study and other rural areas of Nigeria would not be left behind in the scheme of things in this age that has been described as "the age of change," they must of necessity adopt, adapt and utilize multimedia and hypermedia instructional gadgets to their daily routine.

Conclusion and Recommendations

It is apt to conclude from the findings of this study that the application of multimedia and hypermedia information tools had tremendous positive impact on the productivity of the rural dwellers in Oluyole Local Government Area of Oyo State, Nigeria in the light of the study, the following recommendations are made:

- The local and state government in conjunction with the ministry of agriculture and rural developments should do everything possible to open up the rural communities in the sampled local government to the mainstream of the society (especially the urban areas) through the provision of infrastructural facilities like good roads, schools, hospitals, electricity, water, media center etcetera.

- The Ministry of Information in conjunction with the National Orientation Agency (NOA) should make it a serious duty to send their trained officials to the rural settlement in the sampled local government area to give periodic training and sensitisation of the use and benefit accruable from multimedia and hypermedia information tools
- The state and local governments should also provide Current Awareness Services (CAS) and Selective Dissemination of Information (SDI) to the rural community from time to time.

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