



ADOPTION AND UTILIZATION OF NEW MEDIA TECHNOLOGY FOR RURAL OCCUPATION: A STUDY OF FARMERS IN GIDAN-KWANO COMMUNITY OF MINNA, NIGER STATE

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ABSTRACT

The research was a study on adoption and utilization of new media technology among rural farmers in Gidan-Kwano community of Minna, Niger State. The objective was to find out the level of exposure to digital media use in their occupation, their awareness about the importance of the technology, their readiness to adopt the technology amongst others. Survey was adopted while questionnaire and semi-structured interview were the research instruments used. The population of the study was 4000 farmers. Krejcie and Morgan table for sample size determination was used to derive a sample size of 351. Data were analyzed using descriptive statistics and Yin's thematic explanation model. Findings revealed that the major hindrance to the adoption and utilization of new media by top farmers in the study area is that of illiteracy and poverty. This aligned with the reason behind their ignorance of the importance of the technology hence couldn't apply it. Furthermore, some farmers who adopted the use were not comfortable with it due technical challenges in operating the device and other challenges encountered. The study further confirm that findings conducted by several scholars in this area which is illiteracy, poverty, poor power supply, poor network by service providers amongst others is true and therefore, opined that until the findings and recommendations made by scholars are taken seriously by government and relevant institutions, organizations and agencies, researches will continue to move in circles without any significant advancement.

Keywords: New media, Digital device, Mobile technology, rural occupation, Farming.

INTRODUCTION

In recent times, there have been cases of famine and food shortage in various countries of the world. Some are due to natural disasters, bad soil, unfavorable weather climate, while others is as a result of insecurity such that farmers are scared for their lives, abandon their farm lands and farming altogether. The importance of food and agriculture to humans cannot be overemphasized. West et al (2010) refers to it as an important aspect of an economy as it provides invaluable services to society, ensures food security, stability and strengthens countries' economies and its growth. It is in line with the above that Koen et al (2015) notes that there are several reasons why in the future it will be very important for agriculture to be digitally transformed and thus ensure not only the sustainability of the agriculture business individually but also the economic, environmental and social sustainability of society as a whole. The Food and Agriculture Organization (FAO) in 2017, recommends the adoption of digital technologies to enhance farmers productivity. This is the one of the motivation behind this study as it relates to mobile technology use in farming.

Furthermore, in the agricultural sector, digital technologies affect the entire value chain, from suppliers of products to consumers and close links with other industries that require an innovative, adaptable and competitive way of doing business in terms of communication. Ghars et al (2014). On the other hand, it is pertinent to note that digital media technology is a broad term that encompasses several types of new media and communication practices. It is very difficult to create an exhaustive list of all types of digital media but some of the most common digital media include: software, digital images, digital video, video games, web pages and websites, social media, mobile technology, digital data and databases, digital audio such as MP3 and electronic books among several others. The blending of digital media with other media as well as with cultural and social factors is sometimes referred to as the new media. Holifield et al (2003). For the purpose of this study new media shall be limited to the use of mobile technologies to access information from the



internet about farming as well as buying and selling of farm product via social media.

New media is mostly used to represent the use of computers to combine with the various forms of media which is sometimes used interchangeably with multimedia but is more specifically refers to as electronic media that use digital codes rather than analog signal (Omenugha, 2018). With the aid of new media technologies which include computer technology, internet and smart phones, the world has become a "global village", with the quick transfer of information overcoming the challenges of time and distance. The new media is undoubtedly very fast, vast and a powerful mode of communication. It plays a vital role in the development of any community, city or even nation. Rural areas are the integral part of any developed city. In all sphere of rural dwellers right from their livelihood to their healthcare, convoluted government initiatives from traditions to social campaigns etc. to connect rural areas using digital media. Kinsley (2010). In relation to this study, new media which is limited to mobile technology, social media and the internet can be a great tool for farmers to share information and build relationship with customers using platforms such as blogs, Facebook, Whatsapp and Twitter are great tools for business, which can be easily used to share information about products and services. New media is very important in creating awareness about the availability of farm produce and also used in caring for customers satisfactions. These go hand in hand, because people want to know where their food is coming from and want to get involved. Several digital media are of importance in updating customers, for instance, blogs can be used to update customers about crop harvests and are also being used for sales. Kuria (2014). It also provide farmers with a quick and easy way to build relationships as well as interact with people in agriculture which creates much broader agricultural community, so obstacles like physical distance and isolation are issues of the past and taken care of. Digital media is gives farmers and rural businesses voice and provides invaluable networking opportunities for continuous two-way communication with instant feedback. Rural and agricultural

programmes are key development strategies for countries with large and broadly unsophisticated agricultural base.

The spread of digital media, and the wide range of literacy and communications skills necessary to use it effectively, have deepened the digital divide between those who have access to digital media and those who don't. Rural farmers does not only require relevant information to increase farm productivity, but need extension on a diverse range of rural development options including information on markets, value addition and other income opportunities too. Therefore, there is need to find out and establish the information needs, information seeking behaviour, accessibility, adoption and utilization of agricultural information and the challenges experienced in accessing agricultural information from digital media by farmers. But the scope of this study shall be limited to adoption and utilization of digital technology farmers in Gidan-Kwano and the challenges experienced with the use of the technology.

Statement of the Problem

Farming is one of the major and largest occupations of the Gbagyi people of Minna, Niger State. Hence, there is need to improve on it in order to maximize the full potential of the time, energy and resources invested into it. Technology no doubt, is one of the numerous solutions to improve this noble occupation as corroborated by Hollifield & Donnermeyer (2003) and Hilbert (2011) in their studies. They further stated that as useful as new media can be, the limited access, technical know-how, lack of awareness of its application by the rural settlers due to their ignorance and other related factors has badly affected their occupational, economic and social growth. But this study is particular about their farming occupation. It is in line with the position of these scholars mentioned earlier and other studies carried out as reviewed in this work that this study sought to find out if the findings from these scholars is applicable to farmers in Gidan-Kwano the host community of Federal University of Technology Minna, Niger State Nigeria. The study also agree with the fact that given the benefits of the application of new media use then, there is need to engaging rural farmer on the adoption



and utilization of these tools for the development and enhancement of farming in Gidan-Kwano community.

Objectives of the Study

The objectives of the study are to:

- i. Find out their level of exposure to new media.
- ii. Ascertain their readiness to adopt the technology.
- iii. Find out if they are aware of the importance of the technology to their occupation.
- iv. Identify the challenges militating against the use of the technology in their occupation and to proffer solution.

Review of Concepts

Enhancing Rural Occupation through Digital Media

The use of new media according to Keruchiro (2019) is significant as a development tool in terms of building relationship, improving communication, documenting development effort, sharing information in real-time, informing and reaching a wider audience than was possible at any time in history. Perhaps more importantly, new media can empower those who have the skills and abilities to use new technologies by helping them. It is pertinent to note that with the use and enhancement of new media, farmers will be more enlightened and given proper guide on the use or application of fertilizers, the proportion in which the fertilizer should be added, etc. to the nature of the soil, for which crop the soil is more advantageous. Also, the technology will be beneficial to the farmers regarding their overall production, marketing process and sales, which will yield the increment of crops therefore making the farmers to have more profits. Developers are increasingly making use of new technology trends (Suchiradipta et al 2016) to develop and deliver their services as well as complementing existing mobile technologies such as SMS and voice calls.

Utilizing different new media tools in delivering agricultural extension services provides both quick delivery and wider coverage in addition to enabling stakeholders' interaction and knowledge sharing. Social media

platforms such as Facebook, YouTube, Blogs, Wikis and Podcasts offer enormous potential to stakeholders for reaching their audience, but then, the principles of suitability of message content and needs of the audience must be observed for successful delivery (Kinsley, 2010; Gharis et al 2014). With new media and its technologies if properly integrated without doubt will positively change the lives of rural dwellers and as far as their occupation is concerned, it will bring about a whole new opportunities for them in carrying out their daily activities

Review of Empirical Studies

Felicia & Inyioluwa (2020) carried out a study on the adoption and utilization of ICT through Farmers.NgTechnology in Ondo State, Nigeria. The study adopted the survey research method while questionnaire was used as the research instrument. Through purposive sampling technique, 86 respondents who were farmers registered under the ICT initiative (Farmers.Ng) were sampled from the total 18 local government areas in the State. Results from the study revealed that gender, membership of crop society, literacy and experience among others had effect on the respondent's adoption and utilization of the technology for their occupation while the results from the hypotheses of the study showed that: there was significant relationship between the socioeconomic characteristics and the adoption of the market solution technology and also there was significant relationship between the attitude of the respondents and the utilization of the market technology.

This review is related to this study because it investigated the adoption and utilization of ICT by farmers. Although, the method and instrument used in both studies are similar, but this study, adopted a Semi-structured interview in addition to questionnaire to derive more information for the study. Also, the review differs from this study in terms of scope, population and sample size as well as study area, while the reviewed study was conducted in the South-West, this study was conducted in North Central of Nigeria respectively. More so, the review failed to adopt any theoretical framework while this study adopted the Technology Acceptance Model (TAM) and the Uses and Gratification theory as guide.



In another study by Vience & Awit (2020) they examined the adoption and utilization of ICT in Gubugklakah village in Malang Indonesia. Survey was the method while a closed-ended questionnaire based on a 5-point Likert scale was the research instrument used. Also, non-probability based accidental sampling method was used to select respondents for the study while five (5) variables were used as indicators. Furthermore, data were analyzed using the Partial Least Squares (PLS) or soft-modeling. Results from the study showed that Internet Information Literacy (IIL) and Internet Communication Literacy (ICL) significantly determine ICT adoption behavior among rural dwellers in Indonesia. The ICL and Social Influence (SI) variables were considerably high in comparison to other variables; this demonstrates that rural populace may perceive that ICT would facilitate information and communication in a better approach. However, ICT adoption may be affected by the existing perceptions of Information and Communication Overloads (IO & CO respectively). The study concluded that information and communication technologies adoption in rural communities plays an influential role in harnessing the benefits of these technologies for rural development.

Both studies adopted same research method and instrument, but this study, added a qualitative approach to derive more data from respondents. Although both studies adopted a non-probability sampling method, but different approach, while the review adopted the accidental sampling, this study adopted the purposive sampling method. Their view had no theoretical underpinning while this study has a theoretical base. Both studies study differ in terms of study area, while the review was conducted in Indonesia, this study was conducted in one of the States in North Central Nigeria. Both studies also differ in scope, population and sample size. Furthermore, Bhalchandra & Anand (2017) did an evaluation on the role of social media in agriculture marketing and its scope. The research employed a survey method and the tools used were structured questionnaire and interview in which 100 persons were randomly chosen. Finding from the study showed that the age group of farmers were mostly between 30-40 years who have an account on social media and are able to operate effectively mobile phone that has social media installed on it.

Further results revealed that, many officials had their official pages, blogs, and groups on social media that helped to provide information and solving farmer's problems.

The study concluded that most of the farmers are using mobile phones with internet and social media applications in it for innovative practices and information sharing. Adding that, the most popular social media in agricultural marketing is Facebook, YouTube, WhatsApp, Twitter and LinkedIn. Although, people are less trusted on e-buying and e-selling of agricultural commodity on social media, however it has become a useful tool in agricultural marketing because it saves time and cost of the farmers for getting information. The review is related to this study because both have to do with digital technologies and farming. They are also related in terms of methodology and research instrument used but differs in terms of population, sample size and technique. Besides, the researchers failed to adopt any theoretical framework in their study which was not the case in this study. Aliyu & Md-Safiul (2017) conducted a study on overview of social media use in agricultural extension service delivery. The method used was Narrative Textual Case Study (NTCS). This implies that the researchers exclusively worked on secondary data as they reviewed available materials and duly cited them in their study. Evidences obtained in their study revealed that social media is being gradually appreciated in agricultural extension service delivery, as there are many social media platforms to make it easy for them. They revealed that Facebook has the highest popularity worldwide. They also stated that, most of the agricultural stakeholders using social media are versatile users who usually visit only for information seeking. The review is related to this study because it has to do with social media and agriculture. However, the review failed to investigate how it affects rural farmers in their occupation, which is being considered in this study. Both studies also differ in terms of scope and research methodology used.

Theoretical Framework

This study was based on two theoretical frameworks. The Technology Acceptance Model (TAM) was propounded by Davis, Venkatesh, Morris



& Davis in (2003). It has to do with users' acceptance of a technology and commonly used by researchers in technology adoption studies. The basis of this theory is built on the premises that when users are presented with a new technology, three major factors are considered as determinants of key predictors that influence users' decision on how and when to use it. These are namely: Perceived Usefulness (PU), Perceived Ease of Use (PEOU) and Attitude towards User (ATU) respectively. This theory agrees with the fact that when users are presented with a new technology, they do not just automatically accept it until they are convinced or encouraged to do so. A number of factors can influence their decision on whether to accept it or not, as well as how and when they will use it. Applying this theory to this study will help to prove the fact that rural dwellers (farmers) will develop a positive intention of using new media and its technologies if they find it easy to use. The second theoretical framework for the study is the Uses and Gratification theory by Denis McQuail in (1972) the theory has to do with the effects of the media on people. It explains how people use the media for their own need and get satisfied when their needs are fulfilled. In a nutshell, it suggests that media use is motivated by needs and goals that are defined by users themselves and that active participation in the communication process may facilitate, limit, or otherwise influence the gratifications and effects associated with exposure. This theory is relevant to this research because its application will help to analyze how rural dwellers make use of the digital media and its technologies as well as the satisfaction they derive from it.

RESEARCH METHODOLOGY

The research was basically a Survey while questionnaire and semi-structured interview was the research instrument. The population consists of villagers in Sakiya, Jatapi and SabonTiti settlements all under the Gidan-Kwano community of Minna, Niger State which is estimated to be 4000 persons. This information was gotten from the Dagachi (Head) of Gidan-Kwano community, Alhaji AbdulMalik Muhammed. The Krejcie and Morgan table for sample size determination was used to derive a sample size of 351. According to the table, when a population of

study is 4000, the sample size of the population to be used is 351. The purposive sampling adopted allowed the researcher to use respondents that have the required information with respect to the objectives of the study. The researcher made use of selected top farmers of Gidan-Kwano community in Minna, Niger State. An interview was carried out by the researcher with selected top farmers alongside two translators who are vast in both English Language and the local dialect (Gbagyi) to establish better communication between the researcher and the villagers (selected farmers). Data were analyzed using descriptive statistics as well as Yin's thematic explanation model.

Data Presentation

Presentation from questionnaire administered

Although 351 respondents was the sample size for the study, only 345 questionnaires were found legible and useful.

Table 1: Distribution of respondents by Gender

Options	Respondents	%
Male	243	70.4
Female	102	29.6
Total	345	100

Source: Field survey 2020

Information from the table implies that the male folk are more involved in large scale farming than their female counterpart in Gidan-Kwano community in Minna Niger State.

Table 2: Distribution of respondents by age

Options	Respondents	Percentage
Under 17	25	7.25
18-27	80	23.19
28-37	110	31.88
38 and above	130	37.68
Total	345	100

Source: Field survey 2020



Data from the table implies that majority of the farmers in the study area are within the age bracket of 28–38 years of age and above.

Table 3: Distribution of respondents by educational qualification

Options	Respondents	Percentage
Primary	5	1.45
Secondary	60	17.39
National Diploma/ NCE	10	2.9
First Degree & above	3	0.87
No education at all	267	77.39
Total	345	100

Source: Field survey 2020

Information from the table implies that majority of the farmers in Gidan-Kwano community of Minna Niger State have no formal education. However they were majorly guided by research assistants to fill the questionnaire. Those who could read among the farmers also helped to relate the questionnaire to those who couldn't read.

Table 4: Geographical location of respondents within GidanKwano Community

Options	Respondents	Percentage
Jatapi	100	28.99
SabonTiti	95	27.53
Sakiya	150	43.48
Total	345	100

Source: Field survey 2020

It can be inferred from the data on the table above that majority of the sampled population reside in Sakiya being the central of the communities in Gidan-Kwano the study area.

Table 5: Table showing awareness of respondents about social media platforms.

Are you aware of any social media platforms?			Do you have an account on social media?			If 'Yes' which of the social media accounts do you have and make use of?		
Response	Frequency	Percentage	Response	Frequency	Percentage	Response	Frequency	Percentage
Yes	42	12.17	Yes	36	10.43	Facebook	36	64.29
No	303	87.83	No	309	89.57	twitter	0	0.00
						Whatsapp	20	35.71
						Instagram	0	0.00
						Other	Nil	0.00
Total	345	100	Total	345	100	Total	345	100

Source: Field survey 2020



Information from the table above provided insight to the first objective of the study which was to find out the level of exposure of rural farmers to the use of digital media in their occupation. From the data above, it is evident that the awareness level of social media among the farmers in the study area is very low as majority of them are ignorant of this technology and only few of them have and make use of it. This fact aligns with the data obtained about their educational qualification. If they are not educated, they may find the use of certain features on their phone very difficult to operate apart from receiving and making calls.

Table 6: Respondents awareness of the importance/benefits of social media

Options	Respondents	%
Fully Aware	42	12.17
Unaware	303	87.83
Total	345	100

Source: Field survey 2020

Information from the table implies that majority of the respondents are ignorant of the importance and benefits of social media and its technology to their occupation. Hence they never took it seriously nor attempted to give it a try.

Table 7: Readiness of respondents to adopt the technology in their farming occupation

How often do you access your social media accounts for agricultural purposes?			Do you prefer obtaining your agricultural information from social media over other channels?		
Response	Frequency	Percentage	Response	Frequency	Percentage
Frequently	4	1.16	Yes	32	9.28
Occasionally	30	8.70	No	313	90.72
Rarely	2	0.58			
Never	309	89.56			
Total	345	100	Total	345	100

Source: Field survey 2020

Data from the information above revealed the non-readiness of rural farmers to adopt the technology in their occupation. It is glaring that farmers are resistant to change and are not willing to adopt the technology.

Table 8: Showing the readiness of respondents to adopt the technology in their occupation.

How will you rate your level of use of social media for agricultural purpose			Are you willing to adopt the use of social media in your farming business			Do social media fulfill your occupation		
Response	Frequency	Percentage	Response	Frequency	Percentage	Response	Frequency	Percentage
Excellent	1	0.29	Yes	85	24.64	Yes	42	12.17
Good	32	9.28	No	260	75.36	No	303	87.83
Average	2	0.58						
Poor	101	29.27						
Very poor	209	60.58						
Total	345	100	Total	345	100	Total	345	100

Source: Field survey 2020



Table 9: Challenges with the use of the technology

Options	Respondents	%
Experienced some difficulty	303	87.83
No difficulty	42	12.17
Total	345	100

Source: Field survey 2020

Data presented in the above table implies that majority of the respondents are having one difficulty or the other with the use of social media, the reason may be due to illiteracy and inability to read and the more reason they are not keen about its application in their occupation. Furthermore, few respondents who experienced no difficulty with the use of the technology may be attributed to their ability to read and operate their device.

Thematic Data Analysis of data obtained from interview

Qualitative data were obtained from 10 selected members of the population using in-depth interview. The interview guide contained basic questions derived from the objectives of the study, while thematic explanation of the interview was adopted using the Yin explanation building to analyze data from the interview. In an attempt to get more accurate, factual, precise and vital information, the researcher had an interactive session (interview) with selected top farmers in the study area. The thematic data is analyzed below:

Level of exposure of rural farmers on the use of digital media

Responses from interviews with respondents on the subject matter revealed that majority of farmers in GidanKwano community are not exposed to digital media use. Only few of the respondents who are youths admitted that they are aware of the technology and further stated that facebook is the mostly used. From the feedback gotten, it can be deduced that majority of farmers who are adults in the study area were ignorant of social media use.

Importance of the technology to their occupation

Responses gotten from the interview session in this regard revealed that majority of them were not aware of the importance of the technology to their farming business. For clarity, the interviewees were further asked, if they know they can access various government initiatives, grants and other opportunities using this technology and also if they know they can reach a wider customer using this platform. Some confessed, that despite the fact that they were aware of mobile technology, they were not aware of its importance to their occupation which is farming. Further interactions revealed that only few youths in the community were actually aware and know the importance of this technology to their occupation. This implies that majority of farmers in the study area did not know the importance of digital media and its technologies in their occupation.

Level of adoption and utilization of the technology in their occupation

Although some of the respondents were irritated by this question as they do not see any relationship with the adoption of digital media use to their business rather they preferred their traditional method of obtaining information through family, friends and fellow farmers. Some perceived digital media use as mere luxury and nothing more. Furthermore, some of the interviewees declared that they were not going to adopt the technology for their farming while most of them refused to grant the interview as they find it not useful to their present economic needs, while some also claimed they do not have access to smart phones or any other technological devices due to its cost and technicalities in operating it implies that the actual adoption and utilization of digital media and its technologies will be very difficult in the study area as they are resistant to change.

Challenges militating against the use of the technology in their occupation

Response from one of the interviewees showed that unstable power supply and high cost of data as well as costly charges when accessing the internet have been the major challenges encountered and has always been



a major factor militating against the use of this technology. It was also discovered from another respondent in the study area who also lamented about low access to smartphones and other devices. Other factors that have been militating against the use of this technology in the study area include: lack of capital/fund, illiteracy, unawareness of the technology, poor/unstable network and technological know-how, among others.

DISCUSSION OF FINDINGS

In respect to the first research objective of this study which sought to find out the level of exposure of rural farmers on the use of digital media in their occupation, findings show that, majority of the respondents (87.83%) are ignorant of the digital media use, only few of the respondents (10.43%) have android phones and at least a social media account. This indicates that Bhalchandra's et al (2017) finding is not applicable to this study area. According to their findings rural farmers are very much exposed to social media, can effectively operate an android phone, have social media installed on it and use it for information seeking which is not the case here. Furthermore findings obtained from few of the farmers who have access to the device indicated that Facebook and Whatsapp are the most popular platforms, with Facebook being the most used. This was derived from a follow up question from the questionnaire, which was to ascertain the type of social media accounts the respondents have. A few percent of them who are aware of social media, have at least two social media accounts while Facebook and Whatsapp are the most popular with Facebook being the most widely used. This does not align with the findings of Correa & Pavez (2016) that there are high ICT engagements by rural dwellers in remote areas. But in line with Aliyu & Md-saful (2017) and Bhalchandra et al (2017) that Facebook is actually the most popular social media platforms used by farmers. Furthermore, results from the second objective which sought to know if farmers in the study area are aware of the importance of the technology to their occupation showed that majority (87.83%) of farmers do not believe in the importance and benefits digital technology can bring to their occupation. Rather they perceive androids as mere luxury. This does not support the findings of Suchirapita et al (2016) that most farmers were

aware of the benefits of social media and make use of it for innovative practices, as such is not applicable to the study area in Nigeria.

In addition, result from the third objective provides insight to the level of adoption and utilization of the technology in their occupation. Findings show that only a few of the respondents are willing to adopt and utilize the technology for their occupation (i.e. only few respondents have a positive attitude towards the technology while majority have a negative perception towards it). 89.57% of the respondents claimed they have never accessed the social media and that they prefer using other channels than the social media. A follow-up question which intended the respondents to clarify the reason(s) they prefer other channels to obtain their agricultural information over social media was raised. From the responses gotten, majority of the respondents claimed they were not aware of these social medium while some said they do not have access to smart phones due to its cost and technicalities in operating it as most of them are illiterates while others maintained that they preferred to obtain information from their friends and fellow farmers. This finding is in line with Nakweya (2013) that adoption and utilization of technologies is low as farmers have access to other channels over digital technologies. Most challenges encountered by respondents include: illiteracy, poverty, lack of awareness about the technology, poor network, lack of technological know-how, low access to smartphones and other devices, high cost of data and costly charges when accessing the internet, unstable power supply amongst others. The findings corroborate Kuria's (2014) findings which revealed the same challenges faced by farmers in accessing digital technologies.

SUMMARY

This study examined the adoption and utilization of digital media for rural occupation: a study of farmers in GidanKwano community of Minna, Niger State. Four research objectives were advanced for the study. Findings from the study revealed that:

1. Majority of the farmers are ignorant of social media use and its importance to their occupation.



2. Among the few farmers that were aware of social media, Facebook and Whatsapp were the most commonly used. Findings also revealed that those who had access to Facebook and Whatsapp used it occasionally. They also rated their usage for agricultural purposes as good.
3. Majority of the respondents preferred using other channels over the social media for seeking and acquiring agricultural information, as such making majority of them not willing to adopt the use of social media and its technologies for their occupation.
4. Illiteracy, unstable power supply, poor network, high cost of data among others were the challenges faced by majority of farmers in the study area. Most of the farmers perceived smart phones and Androids as luxury due to its huge cost and therefore does not believe it has any significant role in enhancing their business, in fact they prefer their traditional way of going about their business.

CONCLUSION

Based on the findings from the study, the researchers concluded that the major hindrance to the adoption and utilization of mobile technology by top farmers which comprises of adults in the study area is that of illiteracy and poverty. This study confirms that the findings conducted by several scholars in this area which is illiteracy, poverty, poor power supply, poor network by service providers amongst others is true and opined that until the findings and recommendations made by scholars are taken seriously by government and relevant institutions, organizations and agencies, researches will continue to move in circles without any significant advancement. Negative attitude towards the use and adoption digital technology will continue to be the order of the day. In this case, it will be a very difficult task for farmers in Gidan-Kwano Minna to adopt and utilize the technology unless they (major stakeholders) are enlightened, convinced, encouraged and/or trained about the enormous advantages they can derive from the adoption and utilization of digital media for their farming activities and the profit as well as the comfort they can obtain from the effective use of digital media and its technology.

RECOMMENDATIONS

The study strongly advice the Government and relevant agencies to take findings from researches conducted by scholars very seriously and do the needful by implementing the recommendations made accordingly, if they truly desire development and advancement of the nation. This study recommends that:

1. There is need for more awareness and enlightenment programmes on the use of digital media for major stakeholders (top farmers) in GidanKwano community.
2. Government, agricultural agencies and other concerned bodies should provide adequate infrastructures and facilities such as stable power supply, agricultural support, good roads and network communication mast etc. in rural communities to solve the challenges of unstable power and network supply among others.
3. There should be a proper integration and implementation of digital media as a tool for various agricultural operations in rural community.
4. Government should make the agriculture business more lucrative and also provide an enabling environment for rural dwellers to encourage the youths.

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