POVERTY REDUCTION WITH MOBILE PHONE BUSINESS IN THE IKWERRE RURAL AREAS OF RIVERS STATE, NIGERIA

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Abstract
The study dwelt on poverty reduction with mobile phone business in rural areas of Ikwerre Local Government Area of Rivers State, Nigeria. Copies of the questionnaire were used in eliciting data from 33 rural mobile phone business operators. Data collection was with both the random and purposive sampling methods. Purposive sampling was used because the number of mobile phone business operators in the area has not been enumerated. Field data were analyzed with descriptive statistics of frequency, mean and percentage. Results indicated that the respondents were more of male (63.64%), single (54.55%), of the mean age of 32.21 years and generally educated. Phone call was the highest (66.67%) kind of business activity engaged by respondents. Respondents made a reasonable mean net income of N19,586.36 ($125.55) per month. Incomes earned were used in enhancing their socio-economic status in such areas as acquisition of personal telephone, participation in contribution (ntu), purchase of radio, video machine, television and opening of bank account. The main constraints of the business in their order of severity were harassment by revenue agents, high cost of rent and insufficient capital. For mobile phone business to effectively reduce rural poverty, the study recommends reduction of levies by revenue agents, reduction of the cost of rent and the provision of micro-credit to operators.

Keywords: Poverty reduction, Mobile phone, Income, Rural area

I n t r o d u c t i o n

In Nigeria, poverty is more pronounced among its rural dwellers accounting for 70% of the rural population than the urban areas with a poverty level of 58% of the population (National Millennium Development Goals Report, 2004). Poverty is a state of being unable to fulfill the basic needs of life at all or properly as a result of poor economic status (Ukpongson and Ajaero, 2005). Bindir (2004) listed the consequences of poverty to include a state of powerlessness, helplessness, despair and marginalization, deviant behaviours such as violence, armed robbery, thuggery, insecurity and vulnerability to risks and stress.

It is the desire to reduce the consequences of rural poverty through the creation of more avenues for income generation that this study was conceptualize to explore the contribution of mobile phone business in addressing poverty reduction among the rural dwellers of the study area. Mobile phone which is also known as cellular phone, cell phone and hand phone is a devise that can make and receive telephone calls over a radiolink whilst moving around a wide geographic area. It does so by connecting to a cellular network provided by a mobile phone operator, and allowing access to the public telephone network. The first hand-held mobile phone according to Federal Communication Commission (undated) was demonstrated by Dr. Martin Cooper an American engineer of Motorola in 1973, using a handset weighing about one kilogramme. In 1983, the Dyna TAC 8000 X (Dynamic Adaptive Total Area Coverage) was the first to be commercially available at the cost of $3,995.00. Between 1990 and 2010, worldwide mobile phone subscriptions grew from 12.4 million to over 4.6 billion penetrating the developing economics and the bottom of the economic pyramid.

According to the International Telecommunication Union (2006), Africa has the world's fastest growing mobile phone subscription. In view of the fact that the study of Sood (2006) has also shown that in the developing world, there is evidence that many emerging mobile phone users are found in rural areas would mean that exploiting the business opportunities associated with mobile phone would go a long way in raising the socio-economic status of the rural poor. Derivable business outlets of mobile phone which are within the reach of the resource- poor rural dwellers include phone calls, retail of recharge cards, wholesale of recharge cards, repair of mobile phone, sale of mobile phone, sale of mobile phone accessories etc. The resource – poor rural dweller can start to tackle poverty by venturing into mobile phone business in line with the assertion of Perkins (2010) that in the rural area, a small investment in a phone has first created a business opportunity. This assertion is corroborated with the findings of Sife, et al (2010) that mobile phone contributed in improving rural livelihood and reduced poverty in Morogoro region of Tanzania.

The rural area is that geographical local environment which is not urban in nature. Nwosu, (2005) saw the rural area as the countryside, where life is simple and close to nature. The rural area needs development in order to raise the socio-economic status of its inhabitants. Rural development involves a transformation process that seeks to modify and gradually change human behaviour and the socio-economic conditions that exist at the beginning to a more preferred situation or what ought to be at a later point in time. The overall objectives of rural development according to Eze (2005) are improvement and equity in income distribution, increase in productive employment,

improvement in food production and food security and provision of basic infrastructures and empowerment of the rural people.

The research problem of this study was to assess the extent to which jobs could be created with mobile phone associated business activities as a means of addressing the poverty problem of the study area. The objectives of the study therefore determined the current personal characteristics of respondents, the type of mobile phone businesses that were carried out, the net income of mobile phone businesses, contributions of income of mobile phone to socio-economic lives and constraints of mobile phone businesses in the area.

Methodology

This study was carried out in Ikwerre Local Government Area (KELGA) of Rives State, Nigeria. KELGA is bounded in the North by Imo State, in the West by Emohua Local Government Area, in the East by Etche Local Government Area and in the South by Obio/Akpor Local Government Area. KELGA is located at the north eastern zone of Rivers State. The Rivers State itself is located in latitude 4^o 45' 0" North and Longitude 6^o 49' 60" East. The state is situated at 598 kilometers (193^o) South of the approximate centre of Nigeria and 488 kilometers(189^o) South of the capital, Abuja (Rivers State, 2012). Indigenous occupation of the people of KELGA is farming. Mobile phone business activities are common in many parts of KELGA as additional means of income to that from farming. Major communities of KELGA are alphabetically arranged as Aluu, Apani, Elele, Igwuruta, Ipo, Isiokpo, Omademe, Omagwa, Omanwa Omuagwor, Omurelu, Ozuaha and Ubima.

The population of this study was made up of people who are currently involved in any form of mobile phone business in the area. Random sampling procedure was used in selecting six out of the thirteen major communities of the study area.

In view of the fact that the study area does not have a record of the member of mobile phone business operators, the purposive sampling method was further adopted in selecting five respondents each from the communities of Aluu, Omuagwor, and Ubima, while six respondents each were sampled from those of Elele, Igwuruta and Isiokpo. Higher number of samples were drawn from these three last areas because they seemed to have a higher number of mobile phone business points. This was how the 33 respondents which constituted the sample size of the study were selected. Data from respondents were elicited with the questionnaire. Analyses of field data were achieved with the descriptive statistics involving the use of frequency, mean and percentage.

Results and Discussion

The results of socio-economic characteristics revealed that 63.64 % of the respondents were males, while 36.36 % were females (Table 1). This finding tend to imply that males were more involved in mobile phone business than women in the study area. The highest age range of the respondents was 31-40 years which amounted to 45.45 %. The average age of mobile phone business operators in the study was 32.21 years. The study further revealed that apart from the 12.12 % of the respondents who were below the age of 21 years, the rest 87.88 % were between the age of 21 years and above. This finding connotes that most mobile phone business operators in the study were in their active and productive age categories. Investments channeled in the development of persons of these categories of age will have the tendency of yielding efficient results because they are strong, active and productive. Given this understanding, investing in mobile phone as a job creation outfit in the study area would be productive in addressing unemployment and poverty problems.

Table 1: Distribution of Respondents According to their Personal Characteristics.

Characteristics	Frequency	Percentage (%)	Mean
Sex			
Male	21	63.64	
Female	12	36.36	
Total	**33**	**100.00**	
Age Range (Years)			
Less than 21	4	12.12	
21 – 30	9	27.27	32.21
31 – 40	15	45.45	
41 and above	5	15.15	
Total	**33**	**100.00**	
Marital Status			
Single	18	54.55	
Married	15	45.45	
Total	**33**	**100.00**	

Educational Level			
None	0	0	
Primary	9	27.27	
Secondary	16	48.48	11 years
Tertiary	8	24.24	
Total	**33**	**100.00**	
Occupation			
Full-time mobile phone business.	22	66.67	
Part-time mobile phone business.	11	33.33	
Total	**33**	**100.00**	

Source: Field Survey, 2011

Further personal characteristics of the respondents revealed that 54.55 % of them were single while 45.45 % were married. Although this result showed that both the married and singles were involved in mobile phone business, single persons were more in number than the married. The results tend to imply that efforts directed at job creation with mobile phone will make more impact among the singles than those married. Educationally, the highest level attained by the respondents was secondary level (48.48 %). The study clearly indicated that all the respondents possessed one level of education or another. This finding is justifiable because education is an important factor for success as a mobile phone operator considering the fact those mobile phone activities has much to do with number works, reading and understanding of network instructions. The possession of a basic education is therefore needful for a successful operation of a mobile phone business.

The study further revealed that full-time mobile phone business was a primary source of occupation for as much as 66.67 % of the respondents. The rest 33.33 % of the respondents were part-time mobile phone business operators. This meant that mobile phone business has a good poverty reduction potential as it has provided full-time occupation to this proportion (66.67 %) of respondents. This assertion agreed with the findings of Okello (2011) where 91 % of male and 83 % of female respondents accepted that mobile phone increased business income and made the operation of other businesses easier in the rural areas of Kenya.

Table 2: Distribution of the kind of Mobile Phone Business Activities in the Area (n = 33).

Mobile phone business	Frequency	Percentage %
Phone call	22	66.67
Retail of recharge cards	10	30.30
Whole sale of recharge cards	2	6.06
Repair of phone	5	15.15
Sale of handsets and accessories	4	12.12

Source: Field Survey, 2011. Multiple responses were used.

Table 2 showed that phone call business was the highest mobile phone business activity with 66.67 % response. This was followed by retail of recharge cards as indicated by 30.30 % of the response. These findings were in agreement with that of Kenneth (2007) which indicated that the greatest impact of mobile phone in job creation is in the making of calls and sale of recharge cards to GSM users. Although the retail of recharge cards was the second to the highest activity in this study, it was the highest (10.6 %) in the study of Sife, et al (2010) in Morogoro region of Tanzania. Whole sale of recharge cards (6.06 %) and sale of handset and its accessories (12.12 %) respectively were the least activities among the respondents. This may have been caused by the fact that higher capital investments were required in their operations, as these respondents were resource-poor rural mobile phone business operators.

Table 3: Distribution of Respondents According to their Perception of Monthly Net Income from Mobile Phone Business.

Income (In Naira) N	Frequency	Percentage (%)	Mean (X)
Less than 7,500.00	0	0	
7,500.00 – 15,000.00	10	30.30	
15,100.00 – 22,600.00	16	48.48	19,586.36

22,700.00 – 30,200.00	4	12.12	($125.55)
More than 30,200.00	3	9.09	
Total	**33**	**100.00**	

Source: Field Survey, 2011. *One United State dollar ($)= N156.00 as at October 2011.*

The results in Table 3 indicated that the mean monthly income of the respondents was N19, 586.36 ($125.55). This mean monthly income is higher than the current national minimum wage of workers which is N18,000.00 per month. Further analyses showed that they earned an average of $4.19 per day. This implied that these respondents were living above the international poverty line because they are earning more than $1.26 per day (Poverty Threshold 2011). This finding connotes that mobile phone could be used for creation of jobs. This assertion is in line with study of Rheingold (2006) that job creation is the best opportunity GSM has ever brought to Africa because many mobile phone business operators have become bosses of their own.

Table 3 further revealed that the highest range of income in the study was N15,000.00 – N22,600.00 as shown by 48.48 % of the responses. Interestingly, the study showed that some respondents, although as low as 9.09 % earned a net income of more than N30,200.00 per month. The implication of this finding agrees with study of Yusuf and Alam (2011) in Bangladesh that mobile phone business is profitable and therefore can be used in tackling the problem of unemployment. Mobile phone businesses would be useful in poverty reduction in rural areas. This implication agreed with the earlier findings of Bhavnani, et al (2008) and Sife, et al (2010) that mobile phone aids business activities.

Table 4: Contributions of Income of Mobile Phone Businesses to Socio-economic lives of Respondents (n = 33).

Items Acquired	Frequency	Percentage (%)
Radio	23	69.70
Television	16	48.48
Video	17	51.51
Telephone	33	100.00
Bicycle	5	15.15
Motor cycle	2	6.06
Construction of block/zinc house	2	6.6
Gathering of building materials	3	9.09
Opened bank account	13	39.39
Participation in contribution (ntu)	25	75.75
Hiring of farm land	5	15.15
Purchase of planting materials	10	30.30

Source: Field Survey, 2011. Multiple responses were used.

Table 4 indicated that the purchase of personal telephone was the highest (100%) contribution of mobile phone business income to the socio-economic lives of the respondents. The impact of mobile phone on socio-economic lives of rural dwellers according to Bhavnani, et al (2008) included growth in productive activities, job creation, tax revenue, job search and Gross Domestic Product (GDP). In addition, according to Fox (2011), mobile phone carries huge economic potentials in under-developed parts of Africa because in 2005, for every additional 10 mobile phones per 100 people in developing countries, GDP rose by 0.5 %. Increase in the use of mobile phone among farmers in Oyo State Nigeria has been known to lead to increase in contacts between the farmers and Agricultural Extension Agents (Bolarinwa and Oyeyinka, 2011).

Participation in contribution (ntu) was the next (75.75%) to the highest item achieved by the respondents with the income they made from their mobile phone business. Contribution (ntu) is a rural money saving scheme where an individual decide to save certain amount of his income in a daily, weekly or monthly bases for a particular period of time with another person or a group of persons. At the end of the period, the total amount so contributed is received enblock and used for higher investment. The other type of contribution is where a group of persons decide to contribute a given amount of money to each member of the group in succession over a given period of time, usually a month. The other aspect of contribution is where a group of people decide to make financial contributions according to their capabilities. The money so raised is loaned to interested members and outsiders on an interest basis. At the end of a period, usually a year, the accruing capital and interest are distributed to members according to their financial commitment. Participation in contribution (ntu) is generally remarkable for capital accumulation for investments in expansion of production enterprises, diversification of income and purchase of valuables among rural dwellers in Nigeria.

Table 4 has further shown that respondents also invested more of their income from mobile phone businesses in the purchases of radio, video machine and television sets. These items have been known to be useful for transmission of information even to remote ruralities where network is available. Information on agricultural extension, health care, environmental sanitation and other services are brought to the door steps of rural dwellers with these media facilities. Findings in this section of the study have shown that mobile phone business is a good tool for addressing poverty problems in the rural setting. This assertion agreed with the finding of Adeyinka et al (2007) that focus should be shifted to the utilization of the Global System for Mobile Communication (GSM) for the development of rural economies in Africa, with Nigeria inclusive.

Table 5: Constraints of Mobile Phone Business Operators (n-33).

Constraint	Frequency	Percentage (%)
Stealing	6	18.18
Insufficient Capital	23	69.70
High cost of rent	28	34.85
Harassment by revenue agents	33	100.00
Record keeping	5	15.15
High transportation cost	10	30.30

Source: Field Survey, 2011. Multiple responses were used.

Table 5 showed that the harassment by revenue agents of the local government council was the highest constraint as indicated by 100 % of the response. Further probing with the respondents showed that they were being over taxed by the council agents. High cost of rent on business premises was indicated as the second to the highest constraint as shown by 84.85 % of the response. Insufficient capital was the third constraint as accounted for by 69.70 % of the response. Record keeping posed a lesser (15.15 %) problem because the findings on personal characteristics have shown that the respondents have acquired certain levels of education which has made records keeping a simpler exercise to them.

Conclusions and Recommendations

This study has shown that the poverty status of people in the rural areas could be reduced with mobile phone business opportunities. Making of phone calls, followed by retail of recharge cards were the two main types of mobile phone operations carried out by the respondents. Mobile phone business yielded a profitable average net income per month which has placed the operators above the international poverty line. Incomes of respondents were well utilized in acquiring items which depicted better socio-economic status of the people. Harassment by revenue agents, high cost of rent and insufficient capital were the major constraints of respondents. The study recommends reduced financial levies on operators, reduction of the cost of rent and provision of adequate micro-credits, for effective mobile phone business activities in our rural areas.

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