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Use of Mobile Phones for Economic Development in Cameroon

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Abstract

Research concerning mobile phones and economic development in Africa has undergone rapid growth in recent years. This paper evaluates the rate at which Cameroonians use mobile phones to carry out their day-to-day business transactions and to a larger extent, investigate the type of business development brought about by mobile phones. It measures the extent to which mobile phones have enhanced business transactions among traders. In all, 100 questionnaires were administered on a face-to-face basis to business people in Buea, capital of the South West Region. The findings reveal that traders in Molyko rely mostly on mobile phones for business transactions (99%). Mobile phones have improved on their businesses by creating more business contacts (25.2%) and have brought trade closer to both producers and consumers. The data equally reveal that the use of mobile phones in business is an effective communication tool among traders (36.4%). Conclusively, the study reduces the gap between traders and consumers, which is a clear reality on the ground despites the challenges accompanying mobile phone use. Consequently, it recommends the full integration of this communication device (mobile phone) in all business transactions in Molyko in particular and other parts of Cameroon in general.

Keywords

Mobile Phone Use, Adoption, Development, Catalyst, Traders

1. Introduction

Everett Rogers (2003) investigated how people adapt to innovation and use new information and communication technologies (ICTs). One of such ICTs is the mobile phone that has gained centre stage as a catalyst for development in different parts of the world, including Africa.

Mobile phones have become ubiquitous in society. The idea of a mobile phone

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began in the 1940s. The first mobile telephone call was made from a car in St. Louis, Missouri, U.S.A on June 17, 1946, using the Bell System's Mobile Telephone Service (Ramjee & Deneire, 2006).

Today, mobile phone technology is developing at an extraordinarily rapid pace and is being applied to an increasingly wide range of human activities as well as the environment in which people live. However, mobile phones bring both benefits and challenges.

Mobile phones are now an important way of accessing the internet, especially in poor countries where connectivity through mobile phone providers is relatively cheap. Business people easily exploit mobile phones to carry out their various transactions (Howard & Nimah, 2009).

Tanjong (2006) says communication technologies like mobile telephony have opened up entirely new horizons for information access and retrieval. The effective use of information technology leads to prosperity and development while a poor use of it yields bad results (Willock, 2002).

Nyamnjoh, Bruijn, & Brinkman (2009) argue that mobile phone use was already wide-spread among wholesalers in 2003 for business purposes (when it was considerable more expensive) than today. Mbarika and Mbarika (2006) support this view when they reveal that mobile phones are used in Africa today more for social than economic reasons.

Whether for social or economic reasons, mobile phones are being recognized as a cheaper means of communication (Rashid & Elder, 2009) compared to fixed phones (landlines), which are expensive to install and use, with huge monthly charges required. They are also cheaper than the internet, which is expensive and difficult to access and use. The convenience in communication and the reduced searching costs and risks from travelling long distances contribute to the adoption of mobile phones for business.

Despite their convenience, mobile phone users face significant challenges. First, mobile phone coverage has not yet sufficiently reached many areas, especially in rural communities. Second, in many countries in Sub-Saharan Africa, a monopoly exists in the mobile phone sector, which increases the costs of adopting and using the technology. Third, the misuse of the technology by scammers and other hoodlums poses security risks.

The challenges of adopting and using mobile phones notwithstanding, the last five years have witnessed a tremendous growth in mobile telephone ownership and use in developing countries (ITU, 2008). No technology has ever spread faster around the globe like the mobile phone. Until the mid-1990s, telephones in poor countries were mostly in cities or urban areas. Some African countries had only a single telephone for every thousand (of) people (Panos, 2005). As of 2007, there were approximately 38 telephone subscribers and 275 mobile subscribers per every 1000 people in Africa (ITU, 2007).

Mobile telephony came into existence in Cameroon in 1999 with the advent of Societe Camerounaise des Mobile (mobilis) now called "Orange Cameroun." Law No. 98/014 of 14th July 1998 governing telecommunication in Cameroon

enabled the introduction of two private mobile operators (Orange and MTN) and the retention of the lone fixed telephone operator, Camtel (ITU, 2001). Within ten years of the first digital service in Cameroon, mobile phone subscription rose significantly and the cumulative annual growth rate continues to be astronomical (ITU, 2011).

Curiously, little scholarly attention has been paid to the growing phenomenon of mobile phones and its effect on the social attitudes of the youth as well as on the economy. Nkwi (2008), has examined the history of the telephone in Buea (Capital of the South West Region of Cameroon), from the colonial to the postcolonial period, and the changing communication landscape the introduction of mobile phones has triggered. He reports that the sociology of mobile phones in the neighbourhoods is very complex and has generated an economy of its own with mostly unemployed youths enjoying the briskness of the business that has ensued. Despite the dynamics of the mobile phone, little has been researched on how people in Molyko (the social and economic hub of Buea) use their handsets as a tool of manipulation and control to assert themselves within the economic and social spaces that they operate. As a social and economic hub, Molykoprovides an opportunity to study the recent development associated to the changing sociology of the mobile phone (Geser, 2004). As Nkwi (2008) argues, it is the economy of the town that is the leading logic behind the boom in mobile phone use in Molyko. It is within this social space of Molyko, presented here in a summary fashion, that this study examines how mobile phones serve as a tool for development among traders.

2. Literature Review

In general, new technologies are perceived as major tools for reviving ailing economies and for assisting developing societies to transform their economies, to overcome problems of poverty and illiteracy, and to improve the quality of life of the people. However, questions remain about the nature of the relationship between new technologies and socioeconomic development. As Rodriguez and Wilson III (2000) argue, although these new technologies appear to be improving economic performance and welfare among the user populations, the link between ICTs and society-wide economic progress has been more elusive.

With the development of complex and modern ICTs, both developed and developing countries are exploring ways to enjoy the many benefits of these technologies (Dutta, 2001; Goodman, 1994; Mbarika, Byrd, & Raymond, 2002; Straub, Loch, and Hill, 2001). Nevertheless, a digital divide continues to widen between developed and developing countries.

Mobile phone coverage in Africa has grown at an overwhelming rate over the past decade. In 1999, only 10 percent of the African population had mobile phone coverage, primarily in North and South Africa (GSMA, 2009). By 2008, 60 percent of the population (477 million people) had mobile phone coverage, and an area of 11.2 million square kilometers had mobile phone service equivalent to the United States and Argentina combined. By 2012, most villages in Africa had

coverage, with only a handful of countries-Guinea Bissau, Ethiopia, Mali and Somalia-remaining relatively unconnected (GSMA, 2008). Today, the story is even better with African countries embarking on the construction of both submarine cables and their terrestrial extensions. Hopefully, this will be an important step to the economic growth and development of many African countries (Steve, 2012).

Still, within Africa, huge disparities remain in the geographic rollout of this coverage, prompting concerns over an intra-African digital divide (ITU, 2008). In 1999, most African countries had no mobile phone coverage, and only Egypt, Morocco, Senegal and South Africa had coverage rates of over 40 percent. By 2008, over 65 percent of the African population had access to mobile phone coverage, with 93 percent in North Africa (Algeria, Egypt, Libya, Morocco and Tunisia) and 60 percent in sub-Saharan Africa. Overall, the expansion of mobile phone coverage has been the lowest in Ethiopia, Somalia and the landlocked countries of Central and West Africa.

Many instances exist in which new technologies like the Internet and mobile phones have been used to improve the basic socioeconomic, educational and health needs of people. In the Philippines, Mirandilla (2007) notes how mobiles phone in rural areas helped to provide access to information on health and sanitation in a remote village, and open up employment opportunities for disadvantaged sectors such as out-of-school young people. Tarawe and Harris (2007) reported on the Malaysian e-Bario project that was established to help provide modern Information and Communication Technologies (ICTs) to a remote and isolated village in the Kelabit Highlands of northern Sarawak, one of the Malaysian states on the island of Borneo.

In regard to how the new technologies might be useful to Africa, Djamen, Ramazani and Soteg Some (1995) explain that electronic networking will not only enable Africans to access global data but will also help the entire world to access information on Africa in Africa. Thus, the present situation in which Africans do not directly control their own data would be reversed. Also, Henten, Olesen, Saugstrup and Tan (2004) underline the benefits associated with the use of the Internet and mobile phones in in Europe, Japan and South Korea. In Africa, Jagun, Heeks, and Whalley (2008) note in their study on mobile telephony and a micro-enterprise in Nigeria that there are three main steps of trading that rely heavily on information. These three steps of trading, outlined below, are the focal stages of trade that can be primarily influenced by mobile phones (Norton & Bass, 1987; Casson, 1997):

- 1) Pre-trade: information acquired prior to trading;
- 2) During-trade: information communicated during trading for items and forms of exchange, as part of negotiation;
- 3) Post-trade: information acquired after trading on agreements and/or maintaining relationships.

The above trading steps emphasize that information plays a key role in shaping and structuring commerce (Williamson, 1975). The timeliness of informa-

tion (speed); effort and resources to obtain trade information (cost); and risk associated with information uncertainties and asymmetries (informed decision-making) characterize the informational challenges associated with trade (Jagun et al., 2007).

Boadi, Boateng, Hinson and Opoku (2007) note that mobile-trade (m-trade) has enabled fishermen in Ghana to "virtually" negotiate the prices of fish with fishmongers before fishing trawlers reach the shoreline. These scholars also mention similar findings among Ghanaian farmers. For the market woman, 'virtual negotiations' may contribute to personalization of services for prospective customers and trading suppliers, which may include price differentiation, reservations and perhaps, special deliveries to customers. Arguably, this may reduce the haggling of prices that characterizes traditional market environments. This potential impact of mobile phones on trade is also partly influenced by the extent of use of mobile phones to communicate information in pre-trade, during-trade and post-trade activities.

However, one of the key concerns about the new technologies is the ability of the greater population in Africa to access the technologies. Although many complementarities exist between ICTs and economic and social progress, there are also some important trade-offs between equity, well-being and the unhindered development of ICTs. Simple claims about the links between ICTs and progress remain undocumented, and may in some cases be dangerously wrong.

If used by members of different segments of the society, mobile phones will be of tremendous help for the economic development of Africa. For instance, in Nigeria and Ghana, mobile phones serve as a virtual office for carpenters, painters and other labourers who post their numbers on handwritten signs advertising their skills and providing contact information for customers who need their services. So, considering the rapid diffusion of mobile phones, there exists a potential impact on socio-economic development if developing countries can harness this technology (Ngange & Tchewo, 2017). This potential impact becomes pronounced when the information needs of micro-enterprises are taken into account. Previous research and literature have focused on various aspects of mobile phone use and mobile commerce. Studies on mobile phones and service quality (Seth, Gupta, & Momaya, 2007), mobile commerce (m-commerce) opportunities (Frolick & Chen, 2004), implications of m-commerce for markets and marketing (Mylonakis, 2004), and analysing m-commerce value chain (Barnes, 2002) constitute some of the focal points of mobile commerce research. Other m-commerce studies have also focused on Asia (Xu, 2003; Kini & Thanarithporn, 2004).

The current research on mobile phones in sub-Saharan Africa (SSA) has covered mobile phones and fisherman and farmers in Ghana (Boadi et al., 2007); cell phone banking in South Africa (Ivatury & Pickens, 2006) mobile phones and development in Nigeria (Heeks & Jagun, 2007; Jagun et al., 2007); mobile phone ownership and social capital in Tanzania and South Africa (Goodman, 2005); and m-commerce implementation in Nigeria (Ayo, Ekong, Afolabiand, & Ade-

biyi, 2007). These studies on m-commerce highlight a number of gaps. For instance, Boadi et al. (2007) state that their study was limited to fishermen and farmers in two specific locations in Ghana; future research on other locations and other groups of occupations (market traders and retailers) is needed to draw firm conclusions.

Heeks and Jagun (2007) suggests that mobile phone use has an economizing effect on supply chain processes but no significant restructuring effect on the organization of supply chains. Future research can further explore the impact of mobile phones on the impact of supply chain in other forms of trading.

There has been a tremendous growth in mobile phone ownership and use globally. Statistics from the International Telecommunication Union tend to suggest that mobile phone subscribers currently constitute 60 percent of the world population. The report also suggests that there are now more mobile phone users in the developing world than in the developed world. In countries like Ghana, it is estimated that, there are 50 mobile phone subscriptions per 100 inhabitants, and further, the ratio of mobile cellular subscriptions to fixed telephone lines is 80 to 1 (Boateng, 2010). The rapid diffusion of this relatively low-cost technology has spurred a development agenda questioning how mobile phones can be harnessed more effectively for socio-economic development in developing economies and other resource-poor contexts.

Transaction cost theory is arguably the most commonly used theory in studying issues relating to assessment of the impact of information and communication technologies (ICTs) on trade (Boateng, 2010). Transaction costs, described as "the costs of running a system" consist of two types of costs: coordination costs and actor motivation costs. Coordination entails all the information and communication related costs before, during and after a transaction. This includes the cost of searching for products, services, sellers, and buyers, and negotiating and ensuring contract compliance and post-contractual agreements. Actor motivation costs entail the costs of having incomplete or asymmetrical information and imperfect commitment in a transaction. These costs affect decision-making and enforcement of compliance mechanisms, and contribute to the loss of contracts and contractual disputes.

From the transaction cost perspective, trading is primarily about information. It involves the sharing and communication of information that leads to the exchange goods and services, and the management of relationships between parties involved. Hence, participants in a transaction seek innovative ways to minimize costs in acquiring, assessing and communicating information for pre-trade, during-trade and post-trade activities.

As a technology, product or service, mobile phones have a potential impact on how trade is conducted. Mobile phones offers opportunities for diverse functionalities and applications, as shown in the **Figure 1**.

3. Trade in Cameroon

In its present digital version (GSM), the mobile phone has broken boundaries in

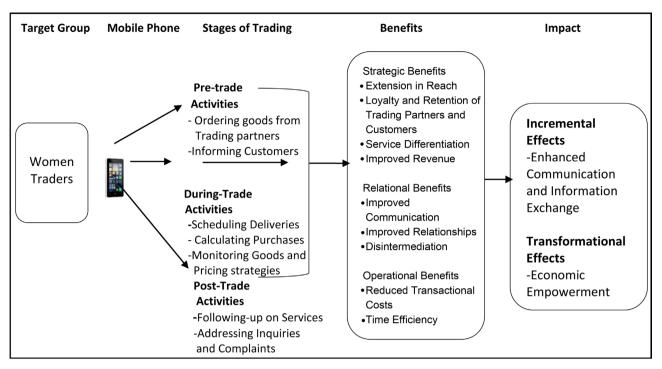


Figure 1. Mobile phones on micro-trading activities of women traders in Ghana. Source: Boateng, 2010.

spectacular ways from 1995, when it was predominantly used for business purposes and its possession was restricted to income earners, most of whom had completed school, and with no gender barrier (Geser, 2006). With its increasing diffusion over the years, certain generational cleavages were dismantled. Of interest here is the increasing popularity of the mobile phone among traders. It has been argued that this phenomenal increase in cell phone appropriation could be explained by the fact that businessmen are more susceptible and adaptable to technological change in order to reduce business barriers. Another reason that explains the proneness of traders to mobile phones is that the globalization of this technology creates new avenues for the traders to communicate among their business associates. The number of youth in possession of cell phones has increased with the drop in phone prices that accompanied the flood of the markets with a variety of brands of phones. In developing societies, the perception of the mobile phone is changing, assuming new meaning that supersede its utility as a medium solely for voice communication.

The introduction of late-night calls for almost free and free SMS in the months of May 2009 in Cameroon, provided an opportunity for business people to communicate freely late into the night in order to improve on their business status, thereby seeing the mobile phone as a great technology for enhancing development. In fact, when late-night calls were introduced, it took just a charged battery and at most 100 frs to call throughout the night. One could therefore communicate with friends, relatives, business colleagues, and parents for as long as the battery permits. Presently, this service has been reviewed, given a maximum of eight minutes for 100 frs. This is far cheaper than call rates during the day, which can be as high as 180 frs/min to a phone within the same network

and higher if one calls a subscriber of a different network.

To Nyamnjoh et al. (2009), because the two principal networks (Mobile Telephone Network (MTN) and Orange) hardly work simultaneously, most people are forced to purchase phones with the option of double SIM Cards or swap these SIM Cards in a single phone without this option.

Within the social context of Molyko, traders, university students and lecturers (since it is a University town), have exploited this service largely to a positive end. Through this service, students share assignments tips, brief friends of their location and the "breaking news" in town; meanwhile documentation operators are called by students for printing and typing of assignments and vice versa, thereby increasing the social networking and boosting the economy of the town.

Conclusively, the introduction of the mobile phone has affected the lives of many in urban spaces, and the preoccupation of this study is to examine how the mobile phone serves as a tool for development among traders in Molyko.

4. Theoretical Framework

Theoretical and empirical research investigating m-commerce adoption factors have predominately used the Technology Acceptance Model (TAM) among other technology adoption models like diffusion of innovation theory (DOI) (Wu & Wang, 2005; Snowden & Spafford, 2006; Bhatti, 2007). The technology acceptance model presents an integrated model to explore the factors that influence consumer adoption and use of m-trade.

TAM theorizes that the acceptance level of any technology is fundamentally affected by the user's perception of ease of use and usefulness (Ajzen & Fishbein, 1980). TAM suggests that user adoption of a new technology is determined by user's intention to use the technology, which in turn, is determined by user's beliefs about the technology. Extant research explains that TAM has increased the perceived ease of use (PEOU) and perceived usefulness (PU)of a technology; this translates into increased behaviour intention (BI), thereby resulting in a higher margin of technology acceptance (Wu & Wang, 2005). Therefore, TAM could be useful in predicting user's intention to adopt new services and applications. In relating TAM to m-trade adoption and use, the different components of TAM are analysed as follows:

5. Perceived Usefulness

The perceived usefulness of a system is defined as the extent to which individuals believe that using the new technology will enhance their task performance (Davis, 1989). There is extensive research on information systems that provide evidence of the significant effect of perceived usefulness on usage intention (Davis, Bagozzi, & Warshaw1989; Venkatesh & Morris, 2000). In terms of m-trade, mobile phones play a key role in enhancing interpersonal communication, which is also a key facet in establishing business relationships, and hence the decision to adopt (Boadi et al., 2007). Therefore, as traders assess the role of mobile phones in social and business communication, their perceived usefulness of mo-

bile phones will influence the intention to accept and adopt m-commerce/trade (Bhatti, 2007).

Based on the discussed literature, it can be hypothesized here that mobile phones have improved business transactions among traders in Molyko.

6. Perceived Ease of Use

Perceived ease of use is an individual's assessment of the extent to which interaction with a specific technology is free of mental effort (Davis, 1989). Davis states further that self-efficacy is one of the means by which PEOU influences behaviour. Applied to m-trade, an easy to use mobile device removes the cognitive impediments of getting information through the device. Thus, the consumer develops a perception of having "some" control over the mobile device. This perceived ease of use also influences the consumer's perceived usefulness of the mobile device.

However, other related research (Davis et al., 1989; Chau, 1996) also argues that the influences of PEOU on PU diminish over time, as user proficiency with a technology increases (Kamel & Hassan, 2003). Kamel and Hassan therefore conclude that the TAM is appropriate in explaining the attitudes and usage intention of users during the early stage of adoption but fails to consider the contextual influences such as culture and technology accessibility and affordability, which can affect the extent of use in post-adoption.

So, based on the discussed literature here, it can be proposed that:

1) Mobile phones do not significantly influence the effectiveness of business transaction among traders in Molyko.

Beyond TAM's basic constructs, perceived ease of use and perceived usefulness, other contextual factors may alter user acceptance of technology (Kamel & Hassan, 2003; Bhatti, 2007). These contextual factors include the availability of enabling technologies for effective, the affordable provision of mobile services, and cultural nuances that influence technology adoption (Boadi et al., 2007).

7. Methodology

A survey was used in this study. This design was chosen because it is a data collection method used to describe, compare, or explain individual and societal knowledge, feelings, values preferences and behaviours, (Fink, 2009). A survey method was preferred because as described by Kerlinger (1973), survey research has a unique advantage among social scientific methods as it is often possible to check the reliability and validity of survey data and also there is replicability of research findings.

The survey method, which over time has been acclaimed as the most appropriate in sampling opinions (Eribo & Tanjong, 2002; Sims, 1989), is effective in sampling opinions on mobile phone among traders in Buea. The population under study was traders in the Molyko neighbourhood (the hub of business activities in Buea) who use mobile phones. A total number of 100 traders were interviewed for the purpose of the study. A purposive sampling and simple ran-

dom technique was used for the study. Purposive sampling (the selection here is based on the researchers' judgment) was used because of the convenience and haphazard nature of the neighbourhood as well as easy accessibility for the researchers to conduct the study. This is in line with a convenient sample, which includes people who are available and willing to take a survey. Bryman and Bell, (2003: p. 105) state that "a convenience sampling is available to a researcher by virtue of its accessibility". A convenient sampling method was also used because it was not possible to get a complete list of all the students and lecturers.

Once this was done, the traders were then randomly selected. Prior to data collection, a pre-test was done with 10 tradersselected from Molyko in April 10th, 2012. It was meant to test and enhance the reliability of the instrument (questionnaire) and validity of the study. The questionnaire was designed with four sections, a total of 33 questions; with 10 closed ended and 23 open ended. Questionnaires were either self-administered or face-to-face instead of other forms like mail, Internet, and telephone survey. The reason for the choice is that self-administered and face-to-face surveys are more feasible in developing countries like Cameroon.

8. Data Collection and Analysis

Data collection was done from May 3-8, 2012. Respondents were met at their business places to ensure that they were the right people. Owners/attendant of business shops, petit business were given one questionnaire each to fill. 70% of the questionnaires were self-administered while 30% of the questionnaires were administered face to face. The response rate was 99% due to physical contact with the respondents, concise and simple nature of the questions as well as the relevance of the subject to the respondents.

The data was analyzed with the help of the Statistical Package for Social Scientist (S.P.S.S) programme at the Communication Research Centre (CRC), University of Buea. Analyses were done following the strict respect of code guide development, coding, data entry and data cleaning procedures.

9. Major Findings

According to the findings, 99% of respondents attest to the fact that they use mobile phones and that the devise has improved their trade dealings through the creation of business contacts. This confirms the realities in Cameroon and Molyko in particular that the mobile phone is the most used of ICTs and has penetrated both rural and urban areas in the country. More of this after the presentation of the respondents' demographics:

Table 1 shows a summary of findings from the 99 traders who were interviewed. The mobile use patterns differ by different trading stages. Ninety-nine traders (99%) claim to use mobile phones in pre-trade activities; 50 used them in post-trade activities and 90 traders used them during-trade activities. Pre-trade activities include ordering goods directly from farmers or through itinerary traders and informing customers on the availability of goods. During-trade

Table 1. Demographic statistics of the 99 traders interviewed.

Age of traders	20 - 46 years (range)	
Age of business	3 - 15 years (range)	
Nature of business	Electronic shops, call box, provision store	
Number of suppliers	5 - 8	
Motivation for getting mobile phone	 Communication gaps and delay in pre-trade negotiation Loss of orders and Travelling risks Unnecessary expenses/overhead costs 	
Functionalities used	Voice calls (66 adopters)Text messaging (16 literateMobile banking services (8)	•
How mobile phone has helped	 Access to business partners and customers Timeliness in order deliveries and increase in revenue Reduced transportation 	
Problems associated with mobile phones usage	Network failure and coverageCost of call tariff and Theft of phones	
Types of phones used	 Nokia: 49 (cheaper and easy to use) Samsung: 11 Alcatel:6 	LG: 4Motorola: 9Techno: 8Others: 4
Number of phones owned by traders	 3 mobile phone on the average, though a few owned 1 A few assistants/workers owned 1 mobile phone 	
Most used network	MTN, because of wider network coverage	
Monthly phone bills	5000 - 10,000 FCFA (Average)	

activities include calculating sales and purchases; use of mobile banking to confirm payments; and calling employees in other marketplaces to monitor the demand for goods and pricing strategies of competitors. Post-trade activities include contacting customers to follow-up on services provided and address inquiries and complaints. Mobile phone tends to be primarily used to communicate and exchange information that relate to pre- and post-trade activities. The factors that affect use include literacy (knowledge of the adopter), operational costs, poor network coverage and theft of mobile phones in the market.

H1: Mobile phones have improved business transactions among traders in Molyko.

Connecting business associates, traders are expected to use any of the above mentioned services for any transaction using the mobile phone. Findings reveal that among these services, call is the most used with 67%, followed by SMS with 16%. It reveals that out of the 99 respondents 67% who are mobile connected traders rely most on calls for their business exchange. Comparing the above findings with the contemporary advancement in information communication technology, it leaves one with no doubt about the results. The above outcome actually affirms the aforementioned hypothesis. For example a survey conducted by Aker (2008) in Niger, reveals that 89 percent of grain traders surveyed preferred calling to obtain price information on the grain markets, rather than lis-

tening to the weekly radio program (Figure 2).

Thus, with this, it is axiomatic that the mobile phone has increased/widen the business scope among traders in Cameroon.

H2: Mobile phone does not significantly influence the effectiveness of business transaction among traders in Molyko.

Thanks to the mobile phone, Cameroonians are able to effectively engage in discussions on trade exchange. According to findings above, 36.4% of respondents agree to the fact that mobile phones can effectively enhance business operations in Molyko. This is followed by 35.4% who say the mobile phone is a very effective communication tool in trade dealings. The findings debunked the aforementioned hypothesis. Goodman (2005) interprets self-report survey data from mobile users in South Africa and Tanzania, observing that mobiles are the most effective communication tool to manage strong business and family ties rather than for maintaining or adding weak ties. By improving communication between firms and their suppliers, mobile phones can enable firms to manage their supply chains more effectively, streamline their production processes and engage in new activities (Hardy, 1980; Roller & Waverman, 2001) (Figure 3).

How often do you use mobile phone services to reach your business partner

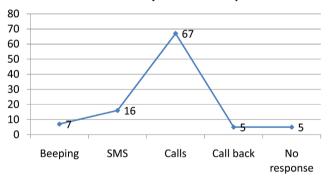


Figure 2. Importance of mobile phones in communication among traders in business dealings.

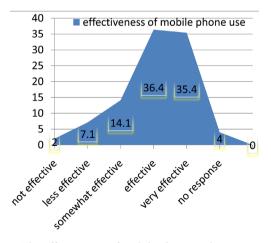


Figure 3. The effectiveness of mobile phone on business transactions.

10. Conclusions

This study opens with the revival of the theory of diffusion of innovation theory of the 1960s by Everett Rogers presenting adaptability and usability of an innovation. Nyamnjoh et al. (2009) argues that mobile phone use was already wide-spread among wholesalers in 2003 for business purposes (when it was considerable more expensive than today). Concluding with the theory, it is important to note here that the question on whether or not, *mobile phones are a catalyst for development among traders* of this research, has been answered affirmatively.

Concerning the goals of the study, the communication tool in question (mobile phone) in today's emerging economy has digitalized the business sector of the country with word such as M-commerce (mobile commerce), M-money (mobile money). According to the findings, 99% of business people own and use mobile phones for their activities. This shows that in order for businessmen to successfully engage in trade and to achieve their desired objectives in business, they must be connected to the mobile phone. It is factual that the mobile phone has made the world a global village in which it is possible for someone to communicate with another irrespective of where both parties are. Kange Williams Wasaloko (2012), publisher of the Summit Magazine, attests that it takes just a phone call to the publishing house in India to give the print command for the production of his magazine. The mobile phone has not only improved trade but has reduced cost of movement, created more links and has facilitated the flow of transactions. Borrowing from the Duncombe and Heeks (2001: p. 18) comment on the relative importance of the phone to other ICTs, they explain that the telephone is "...the information-related technology that has done the most to reduce costs, increase income and reduce uncertainty and risk." Mobile phones support the current reality of informal information systems; they can help extend social and business networks, and they clearly substitute for journeys and, in some cases, for brokers, traders and other business intermediaries. They therefore work "with the grain" of informality yet at the same time help to eat into the problems of insularity that can run alongside.

Conclusively, the findings of this study confirm the uses and gratification theory as propounded by Jay Blumber and Elihu Katz in the 1970s. According to this study, people use the mobile phone for various reasons; some to connect business associates, some to connect with friends and family and others to listen to music. The study sheds light on the uses and benefits of the mobile phone by traders and confirms the diffusion of innovation theory by Everett Rogers (1962). Early adopters (Rogers, 2003) of personal communication devices are likely to be business people, while later adopters may use the devices to pursue personal goals (Wei and Lo, in press). Katz (1999) reports that primary cellular use is from business to personal functions as early as 1992. In Hong Kong, Leung and Wei (2000) found that later adopters were more motivated by intrinsic factors than for instrumental factors.

All in all, the study reveals that regarding micro-trading, traders use mobile

phones for pre-, during- and post-trade activities. This form of usage leads to enhanced communication and enhanced trading processes. The benefits obtained by the trader tend to be partly influenced by the extent of mobile phone usage by the trader and other participants-customers and trading partners-in the value chain. Limited accessibility, be it physical, economic or cognitive (knowledge of adopter), influences the level of usage and extent of benefits obtained.

Based on the findings, it will be important for current "mobiles for development" movement to consider campaigns targeted at educating traders on mobile functions and services-beyond voice calls and text messaging-which may enhance their trading activities. For example, traders to use short messaging services (SMS) to access the market situations, could contribute to extending their market reach. In the context of development, measures to educate or equip traders with skills into economic empowerment have been emphasized (Nkamnebe, 2008). This call for action will require the combined effort of policy makers, practitioners and researchers.

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