The Challenges Facing Road-Side ‘m-Preneurs’
in Leap-Frogging the Constraints of ICTs in
DCs: A Nigerian Case Study

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Abstract

Studies have shown that the number of mobile telecommunications operators in Nigeria has been on the increase since the first Global System of Mobile Telecommunications (GSM) licence was granted to MTN (Mobile Telecommunications Network) in 2001.

With the increase in mobile telecommunications operators also has come an unprecedented increase in subscriptions. According to the Nigerian Communications Commission (NCC) data, between 2001 and 2006 for instance, mobile telephone subscribers in Nigeria jumped from 266, 461 to 32.3 million indicating an increase of 12, 030.18 %.

One of the major by-products of the huge increase in mobile telephone subscription in Nigeria is the advent of the road-side MOBILE ENTERPRENEURS or ‘m-Preneurs’. The sight of these road-side operators (also popularly called ‘mobile engineers’) is common in most commercial cities and villages of the country. These operators, some of whom are university graduates who have taken to self employment for one reason or another, can be found operating under umbrellas, under trees and road-side shacks, under over-head bridges and in some cases, in shared shop outlets.

In this paper, we investigate the challenges facing this group of young operators especially in their effort to deliver quality services to their burgeoning clients.

The paper also explores some possible solutions to the challenges facing the operators and suggests ways of quality improvement.

Keywords: m-preneur, m-commerce, leapfrog, constraints, Nigeria, e-commerce, road-side operators
1.0 Introduction

The information and communication technology (ICT) evolution has changed the face of businesses globally. In the area of telecommunication technologies (especially mobile telecommunications), the impact on business transactions has been exponential.

Mobile telephony has caught the fancy of Nigerians, young and old. With a tiny handset on their hands, they can communicate seamlessly (and with high fidelity and clarity), with the rest of the world! Gone are the days when a telegram sent from a loved one living and studying in London (UK) or Houston (US) for instance, would be read by a proud and “blessed” father in front of his cheering crowd of kinsmen. And these telegram messages, in most cases just a few lines long, came once in six or more months. How time has changed!

Today, Nigerians living in the diaspora call and talk to their loved ones, including the very old ones (who, by the way, own and operate their own mobile gadgets).

The advent of mobile telecommunications technologies in the country has empowered a growing number of young Nigerians to depend on their resourcefulness, innovation, talent and ingenuity in creating a more independent life and subsistence for themselves.

Nigeria liberalised mobile telephony in 2001 when the first GSM (Global System of Mobile Telecommunications) licence was granted to MTN (Mobile Telecommunications Network) Nigeria and ECONET Wireless Nigeria. According to the figures published by both the Nigerian Communications Commission (NCC) [1] and the National Bureau of Statistics (NBS) [2], prior to this liberalisation exercise, there were only 266,461 subscribers in the country (representing a teledensity of 0.4). Between then and 2006, this numbers increased to 32.3 million. Furthermore, the figures have continued to rise exponentially to 139.1 million in 2014 and 154,529,780 as at December 2016.

2.0 Review of Literature

Various studies have looked at the development of m-Commerce practices in various sectors of the Nigerian economy. Some looked specifically at the inhibiting factors of the technologies of the Internet in the banking and finance industry. In their study for instance, Chiemeke et al identified insecurity, inadequate operational facilities including telecommunications facilities and electricity supply as some of the major factors inhibiting the growth of Internet is the banking industry [3].
Ayo et al investigated the implementation of m-Commerce in the Nigerian banking sector and established that while most Nigerian banks offered some forms of m-Banking services, “the level of patronage, quality of cell phones, lack of basic infrastructure and security issues” posed a major threat to its wide scale implementation [4].

Exploring how small business performance in Nigeria can be boosted using m-Commerce, Okolo and Obidigbo noted that the flexibility, convenience and ubiquitousness of the mobile technology would help the small and medium sized enterprises (SMEs) operating in the country [5].

Figures have shown that with the increase in mobile telecommunications operators also came an alarming increase in subscriptions. The ever-growing popularity of the mobile telephony industry in Nigeria, coupled with a corresponding jump in the number of subscribers have created a niche market for an emergent group of road-side entrepreneurs.

As a matter of fact, one of the most positive stories to emerge from Nigeria is that a lot of unemployed Nigerians, especially the young, talented and enterprising ones, have latched on to these technologies to eke out subsistence for themselves without recourse to white collar jobs, be they from government or private sector. One of those technologies is in the area of mobile telecommunications.

The attractiveness of mobile telephone is one major reason a lot of people get hooked to it. There is, for example the characteristic of mobility. Unlike the PSTN (publicly switched telephony network) which restricts the users’ movement, one can move about with one’s mobile handset and still communicate.
There is also the flexibility it affords its users in accessing goods and services regardless of location, or time [6]. Others include convenience, ubiquity/immediacy, real time, context awareness, personalisation [7, 6, 8, 9].

While m-Commerce can be employed for various purposes (mobile banking, mobile reservation, mobile payment, mobile marketing, etc), the question becomes: is every user of mobile technology in buying or paying for goods and services also an m-Preneur? The simple answer to that is no. For, there is a huge difference between one who buys and one who offers goods and services for sale.

One of the major by-products of the huge increase in mobile telephone subscriptions in Nigeria is the advent of the road-side ‘technologists’, ‘engineers’ and merchants popularly known locally as ‘m-preneurs’.

Available literature also identified some of the major problems confronting m-Commerce operators like the road-side m-preneurs including the issues of suitable tax laws, clear regulatory frameworks, and infrastructure [10, 13].

2.1 Who is an m-Preneur?

An m-Preneur, simply put, is an individual or body corporate who sells products and or services including exchange of information or ideas for money, using the mobile telephony technology and other mobile digital devices (such as i-Pad, Tablet, PDAs, etc). It is important to add that all the activities of an m-preneur should not necessarily start and end in the mobile wireless technology. But, as long as a big chunk of the activities and transactions are mediated by or conducted using the mobile wireless telecommunications technology, such an individual engaging in such transactions is regarded as an m-preneur.

m-Preneurship is similar to n-preneurship (or net-entrepreneurship). The only basic difference being that the latter has to do more with ICT-mediated internet activities via the use of static personal computers (pcs) than mobile telecommunications–based gadgets.

Lennon [11] observed that there are many types of m-Commerce services that are emerging in the markets today. These include mobile entertainment, like purchasing ringtones and games, mobile banking that allow consumers to conduct financial transactions from their mobile devices, and mobile brokerage that gives consumers the opportunity to buy and sell stocks from any location.

The road-side variant of m-preneurship is the type that relies, to a large extent, on the road users for quick, sometimes on-the-move services rendered to customers who are in transit. Of course, some of the services, like after-sales and after-repairs services, may continue even after the client has left the scene.
2.2 Factors Driving \textit{m-Preneurship} in Nigeria

There are conflicting assessments of the impact of mobile commerce (m-Commerce) in Nigerian economy. While some researchers insist that the advent of mobile telecommunications technology in the country has brought in some positive, salutary effects, others contend its impact is negative.

According to Okolo et al, while internet penetration impacted positively on Nigeria’s gross domestic product (GDP), mobile penetration had negative and statistically insignificant effects on the country [12]. Their argument is hinged on the premise that while mobile penetration aids m-Commerce in Nigeria, it negatively affects Nigeria’s trade balance and economic growth due to huge reliance on imports of mobile technologies.

As has been observed, there is a huge jump in the number and geographical spread of the people being attracted to the use of mobile technologies in Nigeria. This widespread ownership and use of mobile phones has created an increasing need and demand for professionals who can repair and service mobile phones and other digital mobile devices in the country.

On the other hand, the number of well-established companies catering for this huge demand for repairs and maintenance of damaged or malfunctioned gadgets are very few in the market. Investigations into their major motives show that they are primarily driven by the quest for survival and independence. There is a high level of unemployment (especially youth unemployment) in Nigeria.

The other thing that drives a lot of Nigerian youth to seek survival and salvation on their own is the growing unemployment rate in the country. According to figures released by the National Bureau of Statistics [2], Nigeria’s unemployment rate grew from 10.4 percent in the first quarter in 2015 to 13.9 percent in the third quarter of 2016 resulting to a total of 1.5 million unemployed Nigerians.

The rising numbers of unemployed Nigerians have been cited as being responsible for the high incidence of poverty, crime and insecurity in the country. On the other hand however, one major contributory factor to the growing numbers of \textit{m-preneurs} in Nigeria is high unemployment situation in the country.

Our study shows that the score recorded by those who attributed their being in the business to the fact that they were unemployed was 288. As can be seen in the table below, other notable reasons include “Quick Returns”, “Expanding Markets” etc.
Table 1: Scores Recorded for Respondents’ Reasons for Becoming m-Preneurs

<table>
<thead>
<tr>
<th>Variable Code</th>
<th>WHY I STARTED THIS BUSINESS</th>
<th>TOTAL SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>W1</td>
<td>Increasing number of mobile phone users</td>
<td>259</td>
</tr>
<tr>
<td>W2</td>
<td>Few blue chip companies servicing the market</td>
<td>46</td>
</tr>
<tr>
<td>W3</td>
<td>Few job opportunities (Unemployment)</td>
<td>288</td>
</tr>
<tr>
<td>W4</td>
<td>Expanding market (Job Security)</td>
<td>246</td>
</tr>
<tr>
<td>W5</td>
<td>Poorly paid job options</td>
<td>225</td>
</tr>
<tr>
<td>W6</td>
<td>I have the expertise to do the job</td>
<td>286</td>
</tr>
<tr>
<td>W7</td>
<td>More lucrative than other jobs</td>
<td>271</td>
</tr>
<tr>
<td>W8</td>
<td>Job satisfaction</td>
<td>248</td>
</tr>
<tr>
<td>W9</td>
<td>Quick returns</td>
<td>320</td>
</tr>
</tbody>
</table>

The high rate of underemployment among age “25-34” years showcased the difficulty associated with youth and graduate unemployment. This is particularly worrisome because this category falls within the very active labour force population. Policies that will address youth and graduate unemployment phenomenon in the country are, therefore required.

3.0 Research Methodology and Results

There is a yawning lack of empirical research in the area of m-preneur, particularly in Nigeria. This therefore meant that most of the empirical materials used in this investigation are in the areas of m-Commerce, e-Commerce, Telecommunications and Internet technologies. From this perspective therefore, this research work is considered exploratory.

The author conducted field surveys in two states in the South-East of Nigeria. The states are Enugu and Ebonyi. Using their capital cities of Enugu and Abakiliki respectively, we administered questionnaire copies to randomly selected members of road-side dealers in mobile devices including Cellular Phones, i-Pad, Tablets and other digital wireless devices.

With a return rate of over 70%, 85 of the 120 questionnaires administered were collected and analyzed using SPSS software. The results of the analyses helped in throwing more lights on some very important challenges confronting this group of upstarts struggling to raise their heads in the turbulent Nigerian business terrain.

In order to elicit from the respondents the level of “severity” or otherwise of the impact of the challenges confronting them in their business operations, we used a four-response-set Likert Scale ranging from “Very Low” to “Very High”. Values
were also assigned to the response sets as follows: 1 for “Very Low”, 2 for “Low”, 3 for “High” and 4 for “Very High”.

To Calculate the Rankings of the Responses (for instance, for Variable “C6”), we used the following equation:

\[ C_6 = \sum[(ax4) + (bx3)] - \sum[(cx2) + (dx1)] \]

(where \( C_6 \) = “Lack of Constant Supply of Electricity”, “a” = “Very High” and “d” = “Very Low”.)

\[ = \sum[(80 \times 4) + (3 \times 3)] - \sum[(1 \times 2) + (1 \times 1)] \]

\[ = (320 + 9) - (2 + 1) \]

\[ = 329 - 3 \]

\[ = 326 \]

(This process was repeated for all the Variables in order to find their scores).

An analysis of the scores generated by this measurement mechanism shows that these operators have five dominant factors inhibiting the development of their business endeavours. As can be seen in Fig. 1, these dominant challenges are:

- Lack of Constant Supply of Electricity (326)
- Lack of Government Support (316)
- High Cost of Equipment (304)
- Lack of Bank Support (319); and
- No Standardised Quality of Service (240).

![Challenges and the Levels of Impact](image-url)

**Figure 2: Impact of Challenges on m-Preneur Operations**
The issue of “Lack of Regular Supply of Electricity” (or what some of them called ‘epileptic power supply’) has continued to undermine the efforts of a lot of business activities in the country. So important is this issue in the country that a lot of politicians use it as an electioneering campaign issue promising to make the supply uninterruptible if elected.

For the Road-Side *m*-Preneur, irregular supply of power eats deeper into their income than any other consideration. This is because most of them have to buy or hire stand-by generating sets in order to keep their businesses running. In some cases, they might have electricity supply for only three or four days in a week. Even so, as is the case in a lot of places, when the power is supplied, it would not be strong enough to power some of the equipment they use due largely to low current resulting from illegal connections.

To buy a small 1.5kva-capacity generator, one needs to cough out something in the neighbourhood of 70,000 of the local currency (the Naira). Then, to adequately and constantly fill a generator of that capacity with petrol or diesel would eat up a thousand or two (on the average) of the local currency a day.

<table>
<thead>
<tr>
<th>Variable Code</th>
<th>Challenges Facing Your Operations</th>
<th>Impact Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1</td>
<td>No Standardised Quality of Service</td>
<td>240</td>
</tr>
<tr>
<td>C2</td>
<td>No Conflict Resolution Mechanism</td>
<td>120</td>
</tr>
<tr>
<td>C3</td>
<td>High Cost of Equipment</td>
<td>304</td>
</tr>
<tr>
<td>C4</td>
<td>No basic entry qualifications</td>
<td>170</td>
</tr>
<tr>
<td>C5</td>
<td>High Cost Undercutting Practices</td>
<td>213</td>
</tr>
<tr>
<td>C6</td>
<td>Lack of Constant Supply of Electricity</td>
<td>326</td>
</tr>
<tr>
<td>C7</td>
<td>No Health and Safety Regulations</td>
<td>88</td>
</tr>
<tr>
<td>C8</td>
<td>No Formal Certification before Entry</td>
<td>117</td>
</tr>
<tr>
<td>C9</td>
<td>No Organised Regulatory Body</td>
<td>33</td>
</tr>
<tr>
<td>C10</td>
<td>Poor Work Environment</td>
<td>113</td>
</tr>
<tr>
<td>C11</td>
<td>No Regulatory Laws</td>
<td>102</td>
</tr>
<tr>
<td>C12</td>
<td>Lack of Government Support</td>
<td>316</td>
</tr>
<tr>
<td>C13</td>
<td>Lack of Banks Support</td>
<td>319</td>
</tr>
</tbody>
</table>

Our investigation also shows that most of the respondents also identified lack of professionalism and regulation on the free-for-all nature of their practice. There are no rules of engagement as anybody can set up a business at any time without requisite qualifications beyond the six or so months of apprenticeship. As can be
seen in Fig. 1 and Table 2, a good number of these operators feel strongly about “No Formal Certification before Entry” (149 points) as well as “No Organised Regulatory Body” (120). These are some of the reasons which gave rise to “No Standardised Quality of Service” (264) as some of them do not pay adequate attention to the Quality of the services they render to their clients.

Contrary to Adi’s [14] conclusion that there is indeed high competitive pressure in the Nigerian telecommunication industry, the kind of competition among mpreneurs is the one brought about by “High Cost of Undercutting Practices”. This occurs when customers patronize those who are more likely to charge them less for services provided rather than the quality of the services rendered.

As shown in Table 3 (below), we also sought to find out the types of business activities they engaged in.

<table>
<thead>
<tr>
<th>S/N</th>
<th>BUSINESS ACTIVITY</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA1</td>
<td>Installation of Software/Applications on Digital Devices</td>
<td>65</td>
</tr>
<tr>
<td>BA2</td>
<td>Maintenance services and repairs</td>
<td>80</td>
</tr>
<tr>
<td>BA3</td>
<td>Installation of Multimedia (Music, Video, Pictures, etc)</td>
<td>88</td>
</tr>
<tr>
<td>BA4</td>
<td>Formatting/Flashing/Reconfiguration of Digital Devices</td>
<td>58</td>
</tr>
<tr>
<td>BA5</td>
<td>Unlocking of Digital Devices</td>
<td>55</td>
</tr>
<tr>
<td>BA6</td>
<td>Troubleshooting Digital Devices</td>
<td>60</td>
</tr>
<tr>
<td>BA7</td>
<td>Sale of New/Used Mobile Digital Devices</td>
<td>100</td>
</tr>
<tr>
<td>BA8</td>
<td>Sale of Hardware &amp; Accessories</td>
<td>100</td>
</tr>
<tr>
<td>BA9</td>
<td>After-Sales/Repair Support Services</td>
<td>100</td>
</tr>
</tbody>
</table>

The result shows that these operators engage in four dominant categories of activities, namely:
- Repairs/Maintenance;
- Installation of Software/Applications;
- Sales of new and used devices; and
- After-sales Support.
4.0 Conclusions and Recommendations

There is no doubt that these young operators are determined to succeed in their chosen ventures. However, their level of determination alone is not sufficient to guarantee success. Given the number and magnitude of the challenges they have to contend with, the authorities should step in and help alleviate some of these operational bottlenecks.

One of the best ways to achieve this is through the provision of the necessary infrastructure like electricity. The government should also provide affordable and reliable Internet backbone, wireless connectivity, broadband and fibre-optic cables so as to make connectivity really seamless.

Furthermore, there is the need for the enactment of laws to regulate, control and define the rules of engagement for the operations of this group of very important operators. The laws when enacted, should also be able define the standards for measuring quality of performance; perform conflict resolution mechanisms, and create basic entry qualifications into the industry and well as acceptable conditions of service for the operators.

The banks need to liberalise their loan systems with a view to providing the loans needed by these operator to enable them expand their businesses and provide more employment opportunities to the teeming youngsters in the job market.

5.0 References


