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Anderson Nafinji Yohanna

American University of Nigeria, anderson.yohanna@aun.edu.ng

Kenneth David Strang

Walden University, kenneth.strang@gmail.com

Narasimha Rao Vajjhala

American University of Nigeria, narasimharaonarasimha@gmail.com

Ferdinand Che

American University of Nigeria, ferdinand.che@aun.edu.ng

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B2C Decisions in Multi-Dialect Markets: Proposed Sequential Mixed-Method Multiple Case Grounded-Theory Study

Research-in-Progress (Developmental Paper)

Anderson Nafinji Yohanna
American University of Nigeria,
Yola, Nigeria.
anderson.yohanna@aun.edu.ng

Kenneth David Strang
Walden University,
New York, USA.
kenneth.strang@gmail.com

Narasimha Rao Vajjhala
American University of Nigeria,
Yola, Nigeria.
narasimharaonarasimha@gmail.com

Ferdinand Che
American University of Nigeria,
Yola, Nigeria.
ferdinand.che@aun.edu.ng

Abstract

This paper is a conceptual proposal for conducting a mixed-method multiple case study on a consumer behaviour topic in an emerging nation. Government administrators and marketing managers need current, reliable consumer behaviour models to serve the public and to achieve a profitable return on investment in Nigeria. There is a shortage of online consumer behaviour research in some highly populated emerging economies in Africa, such as in Nigeria, especially concerning the influence of demographic and socio-cultural factors. The purpose of this study will be to produce a visual, conceptual model of consumer decision making factors for the unique socio-cultural population. The purpose of this study is to scientifically explore the ground truth of Nigerian consumer online purchasing decisions to build a practical model for e-commerce stakeholders. The results of this study should be interesting for other researchers due to the novel sequential mixed-method grounded theory and multiple case study literal replication design. Nigerian e-commerce marketing managers and policymakers in the population could benefit financially from this extension to the body of knowledge.

Keywords: Mixed-Methods Research Design, E-Commerce, E-Business, Africa, Nigeria, Consumer, Developing, Emerging, Socio-Cultural, Decision-Making.

1.0 Introduction

Global e-commerce sales in Business-to-Business (B2B), Business-to-Consumer (B2C), and Customer-to-Customer (C2C) value chains in developed countries have

reached \$ 3.35 trillion USD (Prashar, Vijay, & Parsad, 2017). Consequently, e-government policy makers and marketing managers have benefited from a great amount of scholarly research about online consumer behaviour (Carter & Yeo, 2017; Groay, 2018; Harwood & Garry, 2017; Kostyk et al., 2017; Lin et al., 2018; Pappas 2017; Samuel et al., 2015; Shang & Wu, 2017).

Marketing managers and e-government policy makers require consumer behaviour models for different yet related reasons. Marketing managers need modern consumer behaviour models to ensure products are designed for meeting consumer needs and wants. This has a social benefit because if large companies design products that do not meet consumer needs, the entire investment could be wasted concerning the product design effort, the manufacturing labour, the sales distribution chain costs, and the early harvesting activities. From a macro multi-company global perspective, ineffective consumer behaviour models could result in company losses, unemployment increases, and gross domestic production losses. This creates an exponential cost to society. Likewise, e-marketing policy makers require consumer behaviour models to regulate markets, in order to apply and revise trade agreements, and to manage national macro-economic factors related to the producers and selling chain mediators. In other words, there is a supply chain dependency at the national and global level dependent on organizations using correct consumer behaviour models to be efficient in their activities, otherwise we all suffer when big companies fail or waste resources. This applies to developed, emerging and somewhat to undeveloped nations.

Academically, there is a gap in the scholarly body of knowledge concerning online consumer behaviour models for highly populated developing economies (Prashar et al., 2017), particularly in African countries such as Nigeria (Adeyemo, 2013; Fawole & Ozkan, 2018; Foluke, 2018; Lamboll et al., 2018). Some empirical articles of consumer behaviour in Africa conflict with hypothesized models (Ogundari & Ojo, 2005; Thiendou, 1993) while others lack the statistical detail to replicate the study (Fawole & Ozkan, 2018; Foluke, 2018; Larson et al., 2011) or to lend credibility for generalizing the results to the underlying populations (Adeyemo, 2013). Many consumer behaviour surveys are fatally flawed because participants are asked to think of a positive or negative purchase (there may be none or they were skewed to one side of the satisfaction continuum) or results from specific products/services are generalized to divergent population contexts through meta-analysis, uncontrolled experiments, or non-equivalent replications. An important practitioner problem is that contemporary social

science models may not adequately explain the online behaviour of the unique social cultures in emerging highly populated African economies.

Part of this problem may be that consumer models and theories were developed in western cultures with measurable social behaviour differences, such as the USA, Australia, and European countries (Boldi et al., 2011; Huang et al., 2013). A good example is the well-known power of behavioural intent to predict behaviour which may be effective for marketing to proactive individualistic, ego-focused capitalistic societies but ineffectual for appealing to reactive collectivistic, passive social cultures. In many African countries, people speak several dialects, generally derived from Arabic or French, but often English is a second, third or fourth language (USDCCS, 2018). In Nigeria for example, Hausa, Berom, and other native languages are commonly spoken with English being learned in school (Adeyemo, 2013). Survey research executed in Nigeria generally requires translation from English into a native language, with some loss of validity being possible, and, with the aforementioned social, cultural differences, reliability is also questionable. Furthermore, with the rapid rise of the population combined with wireless smartphone use and consumerism driven by western marketing ideologies, there is likely to be uncertainty associated with investing heavily in products predominately designed on contemporary American or European consumer ideals.

A preliminary Nigerian consumer survey using empirical models published in the literature revealed that some elements of contemporary theories could not be proven (Adeyemo, 2013). Participants in a recent study about Nigerian farmers indicated most would continue to use a software product even if they did not believe it was easy to use or, paradoxically, they were not satisfied with it (Fawole & Ozkan, 2018). Hypothetically, this could be due to a socio-cultural dimension such as acceptance of government power leading to a feeling of a lack of choice over alternatives or possibly a lower tolerance of risk exacerbated by civic turmoil, corruption, and terrorism. Additionally, Nigerian participants may lie or agree with academic research surveys in contrast to their true beliefs due to social desirability, fear or simply a lack of understanding of questions.

Hence, a grounded truth paradigm to guide future Nigerian research is warranted instead of replicating established consumer behaviour models published in the social sciences body of knowledge. That is not to say that all published research will be invalid for underexplored societies; instead, the authors claim that existing theories and models may inform a scientific ground truth exploration of what and how factors impact current

consumer behaviour in the highly populated emerging economy of Nigeria — a country that is also experiencing terrorism, natural disasters, civic unrest, and corruption (Fawole & Ozkan, 2018). A grounded theory, ethnographic, or case study approach would be appropriate in a research design following the positivistic or pragmatic ideology of the authors. The goal of this study is to scientifically explore the ground truth of Nigerian consumer online purchasing decisions to build a practical model for e-commerce stakeholders informed by potentially relevant theories as well as developed from important socio-cultural factors conceptually representing the unique population behaviour.

2.0 Literature Review

Government administrators and marketing managers need current, reliable consumer behaviour models to properly serve the public and to achieve a profitable return on investment in Nigeria. There is clearly a shortage of online consumer behaviour research in some highly populated emerging economies in Africa such as in Nigeria, especially concerning the influence of demographic factors, including gender and culture as moderating variables (Samuel et al., 2015). Many highly populated countries in Africa, such as Nigeria, Liberia, Mozambique, Congo, and others have experienced decades of civil unrest, including terrorism and corruption, along with natural disasters (Bremmer, 2017; Zobel, 2011), which have forced people to change and prohibited research.

Consequently, the study of the demographic and psychographic profile of consumers in highly populated emerging African economies could help online retailers and local governments to better understand their clients (Khare, 2016). Some demographic factors, such as gender and age, are key aspects of marketing segmentation; hence, the influence of these factors on online shopping behaviour and continuance must be examined. Understanding the cultural profile of consumers can also help in understanding online consumer behaviour given the complex interrelationship between stimuli, emotion, and behaviour (Khare, 2016).

Psychographic factors, including social pressure and enjoyment, can influence the online consumer's intention to purchase or repurchase (Khare, 2016). Consumer emotions are also quite important in determining online consumer behaviour and

continuance. For instance, Lievonen (2017) found that positive emotions increase post-consumption satisfaction and, in this process, has a positive impact on post-purchase intention. Lievonen (2017) further stated that negative emotions could influence the decision of consumers to repurchase online. Online retailers need to focus on creating an emotional attachment by emphasizing consumer pleasure, community relationships, and hedonic choice (Lievonen, 2017). The design of a website could influence consumer's product involvement positively, thereby influencing consumer emotions and hedonic value.

Previous studies have found varying results about the influence of demographic factors on online consumer behaviour and purchase intention. For instance, Al-Maghrabi et al. (2011) stated that the type of Internet usage might also vary depending on demographic factors, such as age and gender. Al-Maghrabi et al. (2011) give the example of age stating that younger users are likely to use the Internet for communication and creative activities as compared to older users who are likely to use this for online shopping. However, the advent of smartphones and social shopping could have changed this pattern. Hence, understanding the influence of demographic factors, mainly age and gender, could help online retailers in devising strategies through market segmentation. Chen and Ma (2016) identified another major challenge facing online retailers: Online consumers may become dissatisfied with the products or services after receiving them and would like to return or cancel the purchase. Online retailers need to address this issue as this could directly influence both the trust and perceived risk among online consumers. Several factors influence customers' return satisfaction, including the availability, speed, logistics, and cost of the return (Chen & Ma, 2016). Online retailers could address these factors to ensure lower levels of perceived risk and higher levels of trust among online consumers. Similarly, positive reviews and recommendations on online discussion forums could help reduce the risk perception among online consumers.

Perceived benefits of online shopping could include cost savings, wider choice, customer service, and time savings (Chin & Goh, 2017). Another factor that could influence the online shopping continuance is the post-purchase service offered by online retailers (Lievonen, 2017). Customers expect timely delivery of the purchased items and also expect post-purchase service and support. All these factors could contribute to positive emotions in the online shopping process. Perceived enjoyment

contributes to the consumer's behaviour intention positively by influencing the customer's attitude through enjoyment and pleasure (Chin & Goh, 2017).

3.0 Research Approach and Methods

The authors possess a post-positivistic pragmatic ideology, meaning they seek triangulated scientific evidence to assert or extend the body of knowledge using a practical research design. This type of ideology could be carried out through deductive techniques by replicating validated consumer behaviour models or inductive techniques such as extending theories or developing new concepts to interpret rich mixed data. A purely constructivist research philosophy is beyond the scope of this study, such as using phenomenology, ethnography, Delphi consensus building, or emancipated narrative thematic description. Since these techniques require participants (not researchers) to interpret their meaning which counters the goal of scientifically analysing the data using practical theories that may be generalized by e-commerce stakeholders, namely marketing managers and government policymakers.

In post-positivist pragmatic researcher ideology, the most commonly accepted methods include case studies (single or multiple), surveys, observation, experiments, quasi-experiments, grounded theory, operations research, and action research (Creswell, 2009). Additionally, mixed methods, along with their relevant embedded techniques, are also regularly appearing in scholarly research. The method selected for this study must allow for a great depth of mixed data collection and complex interpretation. The goal is to scientifically explore the ground truth of participant decision making to build a practical model for e-commerce stakeholders informed by potentially relevant theories as well as developed from important socio-cultural factors conceptually representing the unique population behaviour. Mixed data will be needed to understand the observable, measurable as well as cognitive or tacit factors impacting participant decision making in the unique population social culture. Language and socio-cultural knowledge references may be barriers to accurately collecting as well as interpreting the data. For this reason, multiple sources must be used to collect the evidence, and, preferably, objective complementary techniques ought to be used to interpret the data in a practical generally accepted body of knowledge taxonomy.

The unit of analysis is the factor relationships affecting online purchase decision making at the individual level of analysis, within, not between, groups. Based on that, the relevant body of knowledge is grounded in the behavioural sciences, namely

decision making. In order to meet the goal of developing a practical e-commerce model using rigorous scientific methods, a researcher may collect observable as well as tacit mixed data types to represent human decision making in the unique population socio-culture. More than one participant and perhaps more than one study may be necessary. A phased or multiple site study with triangulated data collection and complementary techniques would be scientifically rigorous and relevant to achieve the goal.

In this study, this narrows down the spectrum of generally accepted techniques to a mixed-method research design using grounded theory or a multiple case study.

In summary, following a post-positivist pragmatic ideology, the research design can be described as a sequential mixed-method approach starting with the grounded theory technique focused on the decision-making body of knowledge followed by multiple case studies of consumers at several unique population socio-culture sites. In this customized approach, the results of the grounded theory research will be analysed in parallel with the data collected in every case study, not interpreted separately. This means that, once the grounded theory research has been completed, no participants will be interviewed at that time. Instead, the structured taxonomy will be developed to inform the open-ended interview questions, archival documents, or other materials needed. Then a multiple case study will be developed, using the grounded theory findings, to develop structured questions, open-ended interview questions, and document/data requests related to the research goal and a priori findings. Multiple case study subject matter expert Yin (2013) stated that the first step is to develop the theory to support data collection, which corroborates the proposed method in this study given that the grounded theory phase will occur before the first case is selected and before any data-collection protocol is developed. Then the first case study will be completed and fully analysed. This is the key difference between case studies and other positivistic techniques like surveys or observation methods. Additional cases will be completed and analysed until the desired saturation size limit is reached.

Positivistic approaches start with a priori deductive hypotheses or questions, along with a subjective (or commonly practiced) confidence level (e.g., a common practice is to use 95%). This information is substituted into a formula that is often called the z-score equation, based on the Central Theorem Limit and usually the Normal Distribution. The result of the z-score equation determines how many participants or objects need to be sampled. The a priori deduction is instrumental to the positivistic sampling technique outcome because it requires the researcher to guess the likely significance effect size

(common practice is to use 50%) or to estimate the effect size through a pilot study (Keppel & Wickens, 2004).

A z-score sample size formula is shown in the above equation, where μ is the population mean, σ is the population standard deviation, X is the mean of the sample, and Z is again the z-score based on the chosen confidence level (e.g., 95% in his case). Another variation of the z-score sample size equation based on the statistical proportion formula is shown in Equation 1 (Keppel & Wickens, 2004).

Equation 1: $n = Z^2 \times P(1-P)/E^2$; where Z is the confidence level z-score, P is 50%, E is the error margin.

In this equation the sample size would be 384, if following the general practice of applying a 95% confidence, (Z of 0.95 = z-score of 1.96), which corresponds to a margin of error equal to the significance level of 0.05 (complement of 95%, $1 - 0.95 = 0.05$), and an effect size guess of 50%.

$$z = \frac{\chi - \mu}{\sigma/\sqrt{n}}; \text{ therefore } \rightarrow n = \left(\frac{\sigma * z}{\chi - \mu} \right)^2 = \left(\frac{13.2 * 1.96}{155 - 152.4} \right)^2 = 99.02 \triangleleft (\text{Eq.1})$$

The problem is that this sampling technique is not practical for pragmatic research designs where researchers employ grounded theory, multiple case studies, and other rich mixed data collection techniques. The sample size for a single case study is one participant or object (e.g., human, animal, equipment, structure, place, etc.), which is done to allow the deep rich collection of complex data. It would not be practical to deeply interview and collect corroborating or conflicting evidence from these many participants while still meeting the scope, time, cost, and quality constraints of this project. Notwithstanding this issue of sample size, grounded theory and multiple case studies must somehow set a sample limit; otherwise, the study could become infeasible or fail to meet time constraints. In this study, it is clear that the multiple case study phases will correspond to the sample size because the grounded theory technique will stop in sequence once the first case study begins. While there are benchmarks for the multiple case study sample size being 10 but potentially ranging from 4 to 20, contemporary subject matter experts recommend using a dynamic data saturation cut-off (Yin, 2013). The data saturation cut-off is reached when no significant new information is found after analysing the data from a case, where significance in this context means practical to the goal of the study and draft model developed.

The data collection will be done using interviews on site, which will feature structured and open-ended questions (derived from the grounded theory phase). Additional

documentation may be requested (this will be determined after the grounded theory phase during the development of the interview protocol before visiting the first case study site). All authors will participate in the case study phases to leverage their multiple perspectives and language skills. Hardcopy and observational data will also be collected, when available, at each case study site and missing documents will be requested to be delivered by mail, phone call, text, or email (according to the data types). All authors will participate in the analysis of each case study data. Whenever interpretations are required, an inter-rater statistic (Cohen, 1968) will be calculated to ensure that a measure of reliability is generated to report to improve the credibility of the results. The final overall analysis of all cases will be done by all researchers. The aim in the final phase will be to produce a visual, conceptual model of consumer decision making factors for the unique socio-cultural population.

4.0 Anticipated Contributions of the Study

This on-going research is anticipated to make a contribution to a growing body of IS literature on the adoption of AIS by farmers. The next step in this study is to present this proposed research design and preliminary literature review to a panel of peers to obtain constructive feedback. Then the study will be revised as necessary, and the data collection will be executed using available funds. From a generalization standpoint, the results of this study ought to be very interesting for other researchers due to the novel sequential mixed-method grounded theory and multiple case study literal replication design. In particular, other researchers and university students could benefit from reading the novel mixed-method research design. It may seem like a complicated approach but we assert our explanation is explicit in that we articulate what experienced scholars implicitly do within a research design. Therefore, emerging scholars will benefit from an explicit research design. Articulating the design is actually the purpose of this paper because the study is not yet entirely completed. When the study is completed, we anticipate Nigerian e-commerce marketing managers and government policy makers in the population could certainly benefit financially from this extension to the body of knowledge—annual online shopping e-commerce is estimated to be valued at USD 12 billion in Nigeria and projected to reach USD 75 billion by 2025 (USDCCS, 2018). More so, it is likely that stakeholders around the world will be curious about these unique results and approaches because knowing how to design online products or services to promote online buying decisions in highly populated

emerging economies will increase profits in the value chain. The potential stakeholder value chain benefit from this research is clear when considering Nigeria is the most populous country in Africa having almost 200 million people, and it has the seventh-largest populous in the world (USDCCS, 2018). The researchers intend to complete the data collection by May 2020. The analysis of the data, discussion of the findings, and the recommendations should be completed by November 2020. The results will be disseminated through a peer-reviewed journal publication.

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