An Assessment of the State of E-Commerce in Kenya
Peter Misiani Mwencha, John Kuria Thuo, Stephen Makau Muathe

Article information:
To cite this article:

For Authors
If you would like to publish your conceptual/theoretical and empirical research articles, case studies and book reviews with EAJCR, please use for authors information about how write your work and submission guidelines. Please, visit http://www.eajcr.org/for-authors/

About Eastern Africa Journal of Contemporary Research (EAJCR)
The Eastern Africa Journal of Contemporary Research (EAJCR) (ISSN 2663-7367) is both an online (open access) and print double-blind peer-reviewed quarterly journal published by the Directorate of Research and Publications of Gretsa University, Kenya.

EAJCR aims at advancing the frontiers of knowledge by publishing contemporary multidisciplinary conceptual/ theoretical and empirical research articles as well as case studies and book reviews.
An Assessment of the State of E-Commerce in Kenya

Peter Misiani Mwencha  
School of Business, Kenyatta University, Kenya  
E-mail: mwencha@hotmail.com

John Kuria Thuo  
School of Business, Gretsa University, Kenya  
E-mail: jkuriathuo@gmail.com

Stephen Makau Muathe  
School of Business, Kenyatta University, Kenya  
E-mail: muathesm@yahoo.com

Abstract
The rapid growth of electronic commerce (e-commerce) across the globe has led to a growing demand for better understanding of this phenomenon. While the assertion in the popular press is that there seems to be an understanding among Kenyans that online shopping activity is fundamentally different from that in a conventional ‘brick-and-mortar’ stores retail environment, there is need to empirically examine this issue more comprehensively. This exploratory study sought to establish the state of e-commerce in Kenya by examining the online shopping attitudes, behaviors and usage patterns. This was done by exploring the underlying motivations, beliefs, attitudes, and feelings on e-commerce among key decision-makers in selected firms and subsequently presenting an overview of the current state of affairs as well as future prospects. The study was qualitative in nature and the primary data collection was undertaken by conducting key informant interviews with 12 purposively selected respondents from six e-commerce firms using a semi-structured interview guide, thereby providing adequate insight into the e-commerce sub-sector in Kenya. Relevant secondary data was also collected via extensive documentary analysis. Qualitative content analysis of the interview responses revealed six key themes, namely customer perceptions, usage diversity, prevailing attitudes, usage drivers, market development and market prospects. The study has important theoretical, managerial and policy implications on e-commerce in Kenya.

Keywords: e-commerce, Online Retailing, Online Shopping, Retail Environment

1. Introduction
The rapid adoption of the Internet has given rise to the concept and practice of electronic commerce (e-commerce), which has become big business in the world today (Alyoubi, 2015). E-commerce has made it easy, fast, and convenient for consumers to shop for apparel, cosmetics, groceries, and other consumer products online (Paul & Rosenbaum, 2018). As a result, there has been an explosion in the number of organizations that are selling goods and services online (Ranganathan & Ganapathy, 2002; Mathew & Mishra, 2015; Gao, 2015). Due to the increasing popularity of online shopping, there is a growing demand for understanding the motives and behavior of online shoppers (Kettunen et al., 2018). This knowledge and understanding of consumers (i.e. customer segments, customer preferences, potential customers,) is a very important asset for e-commerce firms (McLean & Blackie, 2004; Fauska & Kryvinska, 2013).
While there seems to be an understanding that online shopping behavior is fundamentally different from that in a conventional retail environment (Ranganathan & Ganapathy, 2002), there is a dearth of credible information regarding e-commerce (Nielsen, 2017). As a result, e-commerce managers are making decision without being well informed, leading to costly mistakes and even failure of numerous e-commerce firms.

An extensive review of e-commerce literature related to information systems (IS) adoption/usage theories and other relevant online consumer behavior models identified five main concepts/variables as playing an important role in business-to-consumer (B2C) e-commerce in Kenya. These constructs are: i) customer perceptions, ii) usage, iii) customer satisfaction and iv) demographic characteristics. This is summarized in Table 1.

**Table 1: Key Concepts Associated with E-Commerce/Online Shopping Adoption and Usage**

<table>
<thead>
<tr>
<th>Concept</th>
<th>Theory</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Customer Perceptions</td>
<td>Theory of consumption values (TCV), Innovation Diffusion Theory (IDT) Perceived Risk Theory (PRT)</td>
<td></td>
</tr>
<tr>
<td>3. Customer Satisfaction</td>
<td>Expectation-Confirmation Theory (ECT), Expectation (Dis) Confirmation Model (ECM)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Oliver (1980; 2010)</td>
<td>Bhattacharjee (2001a)</td>
</tr>
<tr>
<td>4. Demographic Factors</td>
<td>Expectation (Dis) Confirmation Model (ECM)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bhattacharjee (2001a)</td>
<td></td>
</tr>
</tbody>
</table>


2. **Focus of the Study**

This study sought to provide an in-depth understanding of the online shopping attitudes, behaviors and use patterns in Kenya by exploring the underlying motivations, beliefs, attitudes, and feelings regarding e-commerce from the perspective of key decision-makers in selected firms. The study also aimed at presenting an overview of current state of online shopping in Kenya and the future prospects of e-commerce. To this end, the following research questions guided the study:

(i) What are the general perceptions of e-commerce by internet users in Kenya?
(ii) What factors contribute towards the choice/usage of an e-commerce service?
(iii) What are the different/Various ways in which consumers use online shopping websites?
(iv) What are the barriers to online retailing/shopping growth or development in Kenya?
(v) What measures could be taken in order to increase the uptake and sustain the usage of online retailing services in Kenya?
(vi) What are the future prospects of e-commerce in Kenya?
3. Methodology

3.1 Research Design

This exploratory research was qualitative in nature and was designed as an in-depth interview, an unstructured and direct technique of obtaining insights in which a single respondent is probed by a skilled interviewer on a one-on-one basis to uncover underlying motivations, beliefs, attitudes and feelings on the topic of inquiry (Harris, 1996). This technique is popular with marketing researchers because it has a broad array of techniques which allows the researcher to collect both attitudinal and behavioral data from the respondent that can be used to support marketing decisions (Sokolow, 1985). Thus, primary data collection was undertaken by conducting key informant interviews with 12 purposively selected individuals from six e-commerce firms using a semi-structured interview guide. On the other hand, secondary data was collected via extensive relevant documentary analysis.

3.2 Sampling

Non-probability sampling was used to select participants for the key informant interview. The key informants for this study were selected using purposively sampling technique, a non-random technique that does not need underlying theories or a set number of informants (Bernard 2002; Tongco, 2007). The informants, who were regarded as expert sources of information (Marshall, 1996), were drawn from six online retailing firms that agreed to participate in the study. These individuals were selected due to their influential roles/occupations within the firms. The basis for selection was (i) their level of activity on the website, (ii) having adequate information about online retailing and (iii) willingness to participate in a follow-up interview (see Campbell, 1955). The distribution of interviewees is depicted in Table 2.

Table 2: Distribution of interview participants

<table>
<thead>
<tr>
<th>No</th>
<th>Role/Occupation</th>
<th>Number of Interviewees</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Online retailing entrepreneurs/owners</td>
<td>2</td>
</tr>
<tr>
<td>2.</td>
<td>Consultants working for the online retailing firms</td>
<td>2</td>
</tr>
<tr>
<td>3.</td>
<td>Managers of the online retailing firms</td>
<td>7</td>
</tr>
<tr>
<td>4.</td>
<td>Employees of the online retailing firms</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

Source: Research data (2018)

In total, the researcher conducted twelve (12) in-depth semi-structured interviews with two key decision-makers from each of the six firms who varied in terms of their occupations. They included owners/CEOs (2), senior managers (7), employees of these online retailers (1) as well as consultants (2) who were identified with the help of the online retailing firms as being particularly knowledgeable and accessible.

3.3 Data Collection Instrument

Data was collected through an interview guide that was composed of 9 open-ended questions that allowed for interviewees’ comments. The questions were adopted from previous studies but were reworded to suit the context of the current study. The interview schedule was delivered to the selected participants prior to the actual interview to give them ample time to prepare.
The face-to-face interviews lasted about 40 minutes with each respondent and tried to capture explicit and implicit knowledge of the subject matter. Informed consent was obtained from all participants.

3.4 Validity and Reliability of Measures
For the key informant technique, the main threats to validity or credibility that were identified were addressed through the methods recommended by Creswell and Miller (2000). These methods include method and data triangulation (see Easterby-Smith et al., 2002), peer review/evaluation of the interview guide and subsequent themes for clarity (Creswell & Miller, 2000) and member checking aimed at obtaining feedback from a few key informants (Cho & Trent, 2006).

On the other hand, the main threats to reliability/dependability were the lack of standardization of the interview process, the choice of informants/informant bias as well as interviewee/participant bias (Saunders et al., 2009). One of the techniques used by the researcher to build reliability with regards to interview standardization was usage of an interview schedule to guide the interview process. Informant bias resulting from the nature of the individuals who were approached and agreed to be interviewed was another threat of reliability that was identified. This aspect was overcome through the criteria used to select interview participants which required a careful delineation of the types of people who served as informants (LeCompte & Goetz, 1982).

3.5 Data Analysis
Content analysis, a widely used qualitative research technique (Hsieh & Shannon, 2005), was used to manually analyze qualitative data from twelve key informant interview transcripts. Specifically, the researcher employed directed content analysis which allows for the use of key concepts/variables identified from existing theory or prior research as initial coding categories in a qualitative study (Potter & Levine-Donnerstein, 1999; Hsieh & Shannon, 2005). For this study, these concepts/variables were drawn from the review of literature related to information systems (IS) adoption theory and other relevant online consumer behavior perspectives.

The coding categories were then operationalized using definitions that are based on the theoretical review as recommended by Hsieh & Shannon (2005). For this study, a total of ten pre-determined codes categories were adopted from seven previous studies (usage, perceived attributes, perceived risk, perceived value, customer perceptions, customer satisfaction, demographic factors, industry prospects, challenges/problems, and policy recommendations). Through the inductive coding method, these initial/preliminary codes were used to group/cluster raw data from the transcripts for further analysis so as to make meaning and draw insights for further analysis (Ary, Jacobs & Sorensen, 2010). Table 3 shows the codebook with the ten codes as well as the definitions given to each.
Table 3: Code book for qualitative data analysis

<table>
<thead>
<tr>
<th>No.</th>
<th>Code/Variable</th>
<th>Operational Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Usage</td>
<td>The utilization of one or more features of an online retailing service by registered users within a certain timeframe. It could be browsing or actual purchase. Users’ perceptions regarding the online retailing service’s functional features, properties, and qualities.</td>
</tr>
<tr>
<td>2.</td>
<td>Perceived Attributes</td>
<td>The transaction-related risks that consumers face as a result of using online retailing services.</td>
</tr>
<tr>
<td>3.</td>
<td>Perceived Risk</td>
<td>The consumer's evaluation of the benefits of online retailing usage.</td>
</tr>
<tr>
<td>4.</td>
<td>Perceived Value</td>
<td>The subjective opinions/beliefs/judgments of an individual regarding an online retailing service based on prior user experience.</td>
</tr>
<tr>
<td>5.</td>
<td>Customers’ Perceptions</td>
<td>The customer’s overall positive evaluation of the online retailing service following initial usage or based on all prior interactions/encounters and experiences with the online retailing service.</td>
</tr>
<tr>
<td>6.</td>
<td>Customer Satisfaction</td>
<td>Any personal characteristics/attributes of consumers that tend to remain static throughout an individual’s lifetime, or evolve slowly over time. This includes age, gender, race, education, income, lifestyle, etc.</td>
</tr>
<tr>
<td>7.</td>
<td>Demographic Factors</td>
<td>Forecasts/predictions regarding future developments of the online retailing industry. Could be poor or bright.</td>
</tr>
<tr>
<td>8.</td>
<td>Industry Prospects</td>
<td>A hindrance/barrier to online retailing industry growth or development</td>
</tr>
<tr>
<td>9.</td>
<td>Challenges/Problems</td>
<td>Written policy advice prepared for decision makers regarding a specific issue.</td>
</tr>
</tbody>
</table>

Source: Research data (2018)

Once coding of the transcripts was completed and all items with a particular code placed together, the sets of items were reviewed to ensure that they belonged together since some may fall in more than one category. At this stage, the researcher also started considering how the codes could be merged into broader categories/themes (Ary et al., 2010). Thematic coding methods were considered since they are often used for reducing text data into convenient summary categories or themes used to draw conclusions about a sample (Krippendorff, 1980; Weber, 1990; Jackson & Trochim, 2002).

In line with the constant comparative method (Ary et al., 2010), the clustered data underwent thematic analysis whereby similar data was further labeled and analyzed so as to create meaning and thereafter merged into broader categories or emerging themes. Here, the researchers relied on a combination of qualitative analysis methods to determine and classify the themes as suggested by Ryan & Bernard (2003). They entail the use of observational techniques such as identifying and sorting of words and key phrases and checking for repetition, similarity, and differences in expressions or statement.

After sorting the data into broad categories, the researchers carried out further analysis of the various categories to determine whether some could be merged into themes (Ary et al., 2010).
Consequently, additional thematic analysis of the transcripts was carried out manually in order to establish the key themes. In this study, the interview information was sorted into six broad themes: (i) customer perceptions, (ii) usage diversity, (iii) prevailing attitudes, (iv) usage drivers, (v) market development and (vi) market prospects.

Table 3: Summary of major themes

<table>
<thead>
<tr>
<th>No</th>
<th>Theme</th>
<th>Description/Operational Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Customers’ Perceptions</td>
<td>Subjective opinions/beliefs/judgments regarding an online retailing service</td>
</tr>
<tr>
<td>2</td>
<td>Usage Diversity</td>
<td>Types/nature and extent of usage/utilization of online retailing services</td>
</tr>
<tr>
<td>3</td>
<td>Prevailing Attitudes</td>
<td>Favorable/Unfavourable opinions, thoughts, and feelings regarding online retailing services</td>
</tr>
<tr>
<td>4</td>
<td>Usage Drivers</td>
<td>Determinants of online retailing usage</td>
</tr>
<tr>
<td>5</td>
<td>Market Development</td>
<td>Possible ways of increasing and sustaining the usage of online retailing services</td>
</tr>
<tr>
<td>6</td>
<td>Market Prospects</td>
<td>Economic/business potential of the online retailing sub-sector (industry category)</td>
</tr>
</tbody>
</table>

Source: Research data (2018)

4. Results and Discussion

The findings of data collected during the key informants’ interviews are summarized into the six major themes and are presented in the form of narratives.

4.1 Theme No 1: Customer Perceptions

The comments regarding e-commerce amongst the different participants of the study revealed words such as “convenience”, “wide product assortment”, “product quality”, “price” and “credibility” that were frequently used to describe how they viewed the online retailers. Indeed, all the participants agreed that convenience is highly regarded by online shoppers. The following comments attest to this belief.

“Online retailing provides convenience as buyers get whatever they purchase without moving…. online shopping experience also takes away the headache associated with traditional in-store shopping. They [online retailing websites] are very convenient for price comparison purposes”.

“I loved the convenience of getting the television set delivered to my doorstep without leaving the comfort of my house!”.

Another important perception was usefulness. Several quotes from various interviewees confirm this:

“Online shopping services are very useful for price comparison....it helps one purchase products after viewing a variety without having to waste time walking around”

With regards to the perceived ease of use, a quote from a respondent confirms this:

“The websites and mobile apps are generally very easy to use”. According to the respondent, one reason for this is “modern payment methods such as M-Pesa which make it easy to transact though it comes with some level of risk which most Kenyans are aware of and have found ways to overcome”.

**Eastern Africa Journal of Contemporary Research (EAJCR)**
4.2 Theme No 2: Usage Diversity
It was interesting to note the multi-faceted/diverse usage behavior of respondents: while some used the websites primarily for price comparison, others went further and used them for purchasing items such as books, electronics (television sets and mobile phones) as well as tickets for events. These were some of the comments:

“I used Jumia to look at the price range of a laptop that would fit my budget as well as look at the specifications of that laptop”.

“I was looking for products I wanted to purchase [but] I was also selling some goods on OLX”.

“I used Mzoori.com, Rupu.com, Jumia, and OLX to look for products for purchase and was also selling some goods on OLX”.

However, one response that stood out was from a respondent who had not shopped online for more than three months who said this:

“...I only use online retailing stores when I am seeking to buy high-cost items because I get an opportunity to compare prices across different e-commerce stores. I do not do this frequently that’s why I cannot do this (use the websites) every now and then... “I want to see and feel and test (them) before purchasing”.

When asked whether there are any goods they wouldn’t purchase online, one respondent mentioned electronics, clothes, and furniture (especially sofas). According to the respondent, food was another item that they would not purchase online “due to its perishability”. This confirmed that people are more likely to buy non-consumables online as opposed to perishables.

4.3 Theme No 3: Prevailing Attitudes
The responses highlighted the mixed opinions and feelings with regards to satisfaction (or dissatisfaction) with online retailing services. Those respondents who did not have a favorable attitude attributed their negative attitudes to a variety of factors including product unavailability, delays in delivery, issue with payment modes, mistakes during delivery and poor customer service. As various respondents observed:

“The inconsistency in product availability coupled with the lack of accurate information on some websites has made online users form a negative impression towards online retailing services”.

This point was emphasized by other dissatisfied informants:

“Quite a number of online retailers cannot guarantee proper inventory management – you order an item online but you cannot have it (delivered) because it is out of stock”.

“I’m very dissatisfied. I have not been able to purchase anything because what’s available is not within my budget range”

Compare that with those who responded in the affirmative:
“I am very satisfied...we have come a long way in terms of e-commerce in Kenya. However, it can be quite costly to roll out these services”

“I’m very satisfied with online retailing in Kenya because of how fast it is growing and the convenience it brings. It’s starting to be more and more appreciated as people become busy with fast/complicated lifestyles”.

4.4 Theme No 4: Usage Drivers
Overall, the interview findings indicated that convenience, product assortment/variety, price (i.e. deals & discounts) and credibility are the most important drivers of online retailing usage. All the respondents agreed that when these aspects are missing, it becomes difficult to enhance or even sustain usage of an online shopping service. Indeed, the growth in electronic payment services such as credit cards and mobile money offered reliable and flexible payment options which have also contributed to the growth of adoption and usage of online retailing. Majority of those interviewed confirmed that M-Pesa is the main mode used for payment when shopping online because it reduces financial risk which had made many prospective customers shy off from shopping online. One of the respondents interviewed confirmed this by stating that:

“Mpesa is easy to use, unlike credit cards which can be abused after the purchase... there is a chance of personal details getting in the wrong hands, especially for those using visa cards to make payments”.

The respondent also pointed out the performance risk involved in online shopping:

“There are chances that delivery does not occur as promised e.g. delivery within 24 hours turns to delivery after 72 hours”.

With regards to social value, the next quote demonstrates one respondent’s positive perspective:

“Online retailing provides a platform where people can be able to comment or review their experiences or products/services. That way shopping decisions are made based on that social value”.

4.5 Theme No 5: Market Development
While the respondents attested to the emerging trend towards shopping online in Kenya, most acknowledged that the sector was growing at a slower pace than expected and that more needs to be done to develop the sector in Kenya. In this regard, they suggested several possible strategies that could be employed in order to increase uptake and sustain the usage of online retailing services. One respondent who works as an internal consultant for one of the online retailing firms had three key recommendations:

“Increase the product range and ensure that products are always in stock; delivery to homes would increase the convenience of this value chain; ensure that the regulatory frameworks for protecting customers privacy are enhanced and there is judicial recourse if these are compromised”.
On the other hand, respondents who were owners of e-commerce outlets gave the following suggestions aimed at increasing uptake of online shopping:

“Online retailers should build trust; avail a variety of products; offer good prices for products; avail all information on one page; offer return policies; allow cash on delivery and offer warranties”.

“There’s need for more regulation from government to reduce the risks associated with online shopping. To be specific, the country urgently needs data privacy laws to protect consumers’ sensitive data”.

These remarks point toward the fact that online retailers cannot afford to ignore the risks associated with using their services, as ignoring them carries significant reputational risk through word-of-mouth as a result of negative customer experience.

4.6 Theme No 6: Market Prospects

Last but not least, the respondents gave an analysis of the economic/business potential of the online retailing industry in Kenya. Most respondents affirmed that the current levels of online retailing activity in Kenya are a fairly strong indicator of its huge potential. For the most part, the consensus was that the prospects for online retailing in Kenya are bright and going by recent developments and trends, it may soon become a viable sales channel. The following quotes/remarks highlight the positive disposition of the respondents on e-commerce prospects.

“It is growing at a very fast pace compared to the rest of the region...online shopping in particular as a trend is picking up and has a bright future. This is because more internet users are turning to online shopping especially due to its convenience”.

“Online retailing is gaining momentum; while we have already achieved good progress, a lot more needs to be done to ensure security while transacting, product variety and value-added services”.

“Online shopping is an industry that is growing in Kenya and people are beginning to embrace it. However, a few things need to be worked on and it will turn into a lucrative industry including sorting out the last-mile delivery and numbering of buildings in cities and towns”.

This optimistic view is borne out by numerous reports that tout Kenya as a regional leader in e-commerce, the current challenges notwithstanding.

5. Conclusions and Recommendations

5.1 Conclusions

The purpose of this study was to assess the state of e-commerce in Kenya by examining online shopping attitudes, behaviours and use patterns in Kenya through exploring the underlying motivations, beliefs, attitudes and feelings on the topic of e-commerce from the perspective of key decision-makers in selected firms and presenting an overview of the current state of affairs as well as future prospects. As highlighted in detail under the findings of the study, the state of
e-commerce in Kenya is robust given the positive insights under customer perceptions, usage diversity, prevailing attitudes, usage drivers, market development and market prospects.

5.2 Recommendations of the Study

The study has important theoretical, managerial and policy implications.

5.2.1 Theoretical Implications

This study makes an important methodological contribution to marketing and IS research as it is amongst the few empirical studies that have used the qualitative content analysis technique to evaluate the underlying motivations, beliefs, attitudes, and feelings of key e-commerce decision makers in Kenya. By so doing, it provides empirical evidence/new knowledge about the motivations, beliefs, attitudes, and feelings relating to e-commerce, thereby contributing to the better understanding of the phenomenon of e-commerce. In particular, it sheds more light on four variables (customer perceptions, usage, customer satisfaction, and demographic characteristics) as playing an important role in business-to-consumer (B2C) e-commerce in Kenya.

5.2.2 Managerial Implications

The findings also offer valuable insights for managers of online retailers looking to increase uptake/usage of their services. First, it establishes that convenience, product assortment/variety, price, and credibility are the most important drivers of online retailing usage. In addition, it specifies the products that are more likely to be purchased online such as books, electronics, tickets for events amongst others. It also lists measures online merchants and retailers will need to implement to enable them signal to customers the security of online financial transactions on their platforms such as encrypting information, using trust marks and allowing for alternative payment methods. Third, in order to improve customer experience while online, the study suggests that merchants should focus on improving the functional attributes of their services, more so with regards to product quality, service performance, and product assortment/variety.

5.2.3 Policy Implications

The study makes important policy suggestions that are geared towards creating an enabling environment for e-commerce developers and entrepreneurs. First, in order to spur the development of e-commerce in Kenya, policymakers need to put in place clear guidelines for regulating online activities and behavior of both users and online merchants. In this regard, one of the key measures could be to enact privacy laws aimed at safeguarding personal information of online users from misuse, thus fostering customer confidence in online shopping. Secondly, there’s need to create an enabling environment for e-commerce firms. This can be done by addressing a number of pertinent issues including improving e-commerce infrastructure and providing the right incentives for newly established online firms.

References


