University of Nebraska - Lincoln
DigitalCommons@University of Nebraska - Lincoln

Library Philosophy and Practice (e-journal) | Libraries at University of Nebraska-Lincoln

USABILITY EVALUATON OF USERS' EXPERIENCE ON SOME EXISTING E-COMMERCE PLATFORMS

AKINBOWALE NATHANIEL BABATUNDE

OLUWAKEMI CHRISTIANA ABIKOYE

OLANREWAJU EMMANUEL FALAJU

Follow this and additional works at: http://digitalcommons.unl.edu/libphilprac

 Part of the Library and Information Science Commons

USABILITY EVALUATON OF USERS' EXPERIENCE ON SOME EXISTING E-COMMERCE PLATFORMS

Babatunde Akinbowale Nathaniel[1)], Abikoye Oluwakemi Christiana [2)], Falaju Emmanuel Olanrewaju[2)]

[1)] Department of Computer Science, College of Communication and Information Technology, Kwara State University, Malete, Nigeria.

[2)] Department of Computer Science, Faculty of Communication and Information Sciences, University of Ilorin, Ilorin, Nigeria.

ABSTRACT

Internet has become increasingly popular nowadays. Several million of websites have been built and used for electronic buying and selling. Many designers have begun to focus their attention on whether these platforms can really be used to the satisfaction of users. Hence, the need to evaluate users' experience on E-Commerce platforms. This research compares five platforms (Jumia, Ali-Express, Konga, Amazon and Jiji) based on users' review through the use of online questionnaires for evaluating the platforms. From the data retrieved, Jumia, Konga and Ali Express recorded a total number of 105, 67 and 45 respondents representing 47.29%, 31.08% and 20.27% of the used sample population respectively. Amazon and Jiji recorded 2 and 3 respondents respectively accounting for 0.9% and 1.35% of the total population size. Attention should be given to attractive and easy-to-Navigate E-Commerce platform designs for users to have good user experience.

Keywords:

E-Commerce, Evaluation, Usability, User Experience, User Interface, Questionnaire, Human Computer Interaction.

I. INTRODUCTION

The continuous advancements in information technology have resulted in significant increase in both the number of Internet users and the number of e-commerce websites. E-commerce is "an emerging concept that describes the process of buying, selling, or exchanging products, services and information via computer networks, including the Internet" [12]. E-Commerce has many advantages, such as reducing costs, extending existing distribution channels, and extending existing business models. Usability which is an important factor in Human Computer Interaction is the extent to which a product can be used by users to achieve specified goals with effectiveness, efficiency, and satisfaction in a specified context of use [13]. The development of information and knowledge oriented society has greatly led to the creation and usage of many websites. Online Surfing is a kind of interactional behavior, so usability can be seen as an important factor in the use of websites. Users' tasks should be supported efficiently on usable E-Commerce platforms. Usability evaluation techniques assist to check whether a platform is usable or not [13]. This paper presents the evaluation of some E-commerce platforms using online questionnaires to check their usability by users.

II. LITERATURE REVIEW

The term usability was coined out from the term user friendliness and ease of use in the early 80s because the term suffered from a vague and unclear definition that focused mainly on the aspect of comfort in product use [2]. E-Commerce is a wonderful proving ground for web usability. However, due to the highly competitive environment E-Commerce websites and platforms commonly face little problems on how to please the first timers on the platform [13].

The international standard on ergonomics of human-system interaction, ISO 9241-210 defines user experience as "a person's perception and responses that result from the use or anticipated use of a product, system or service". According to the ISO definition, user experience includes all the users' emotions, beliefs, preferences, perceptions, physical and psychological responses, behaviors and accomplishments that occur before, during and after use. The ISO also list three factors that influence user experience: system, user and the context of use.

User experience is an approach to product development that focuses on physical, sensual, cognitive, aesthetic and emotional experience of product use by the users [4][8]. It enlarges the classical notion of usability which is focused on user's tasks and accomplishments (effectiveness, efficiency and satisfaction of the user-product interaction) by a more holistic approach which focuses on aspects such as the user's fun, affect and emotions evoked by the human-product interaction [15] [7] [6]. Although the notion of user experience has been widely adopted by practitioners and researchers [7], the concept is still elusive, ill-defined and lacks wide acceptability and empirically confirmed measures [14].Basically three (3) different types of usability evaluation methods exist namely; Inspection, testing and inquiry. In the Inspection approach, usability specialists and sometimes software developers, users and other professionals examine usability-related aspects of a user interface using heuristic evaluation, cognitive walkthrough or action analysis [13]. The testing evaluation approach which employs the use of performance measurement, co-discovery learning, remote or retrospective testing, allows representative users to work on typical tasks using the system (or the prototype).The evaluators however use the results to measure how the user interface supports the users to perform their tasks [13]. For Inquiry method, usability evaluators obtain information about users' likes, dislikes, needs, and understanding of the system by talking to them, observing them using the system for real work (not for the purpose of usability testing), or letting them answer questions verbally or in written form. Inquiry methods include field observation, focus groups, interviews, questionnaires etc [13].

RELATED WORK

[3] conducted a systematic literature mapping. It aimed at evaluating and interpreting all relevant publications related to mobile usability and mobile learning with emphasis on mobile devices like smartphones and tablets. The authors divided these publications in four categories: m-learning applications, guidelines and frameworks, specific aspects of m-learning, and finally analysis and tendencies of mobile learning. Based on this classification, the authors concluded that there were no guidelines, frameworks or tools that evaluate educational factors and usability in mobile learning applications. Therefore, they proposed an initial model to develop and evaluate mobile learning applications, considering learning aspects and the student experience.

[10] presented a step by step systematic review about usability techniques in software development methods when agile methodologies are used. The technique for conducting a systematic review is based on selecting of search parameters carefully, writing of research questions, downloading primary articles, selecting related papers, extracting and summarizing information from them and finally analyzing results. After implementing this strategy, 307 articles were downloaded, and from them, 32 were selected for the systematic review. The result of the analysis of data discovered three (3) things, complementary evaluation techniques are the most common techniques in software development methods when agile methodologies are used. Secondly, most articles applied usability evaluation techniques only in the implementation stage and finally these techniques are mostly used as part of case studies.

[11] performed a systematic review on usability heuristic methods for smart mobiles. The motivation behind the study was that smart mobiles are growing fast in the world causing an increase in the significance of shapes and interfaces for this type of mobiles. Another motivation was that many of the hypotheses about interaction of computers which are known by many users may not be valid for smart mobiles. The strategy for conducting a systematic review was based on analyzing the existing heuristic methods and mapping them to the ten heuristics of [9]. They also defined additional method proposed for smart mobiles. The findings of the systematic review are; firstly, the study indicates that usability heuristics for smart mobiles are still in initial stage. Secondly, most of these methods are traditional, and did not consider the characteristics of smart mobiles such as small-screen limitations and usage environment. Lastly, the study provides guidelines on the state of the art of heuristic techniques for evaluating interfaces of smart mobiles

[1] discussed about remote asynchronous usability testing which involves users reporting usability problems directly. Most studies of this approach employ predefined tasks to ensure that users experience specific aspects of the system, whereas other studies use no task assignments. Yet the effect of using predefined tasks is still to be uncovered. The paper reports from a comparative study of the effect of task assignments and instruction types on the problems identified in remote asynchronous usability testing of a website for information retrieval, involving 53 prospective users. The result shows that users solving predefined tasks identified significantly more usability problems with a significantly higher level of agreement than those working on their own authentic tasks. Moreover, users that were instructed by means of examples of the usability problems identified significantly more usability problems than those who received a conceptual definition of usability problems.

Earlier research has employed different user testing techniques in the evaluation of the usability of E-Commerce platforms, methods such as observations and/or questionnaires [5]. The results of these studies were useful in providing an idea regarding common usability problems that were identified on University websites. However, there has been no literature that compares issues identified by different user testing methods in the evaluation of the usability of university websites in terms of the types of usability problem that can be identified by them.

III. METHODOLOGY

This aspect covers a detailed explanation of the methodologies used in getting the required information for the research work to be completed.

The research design used for this study is the use of questionnaires so as to examine users experience on existing E-Commerce platforms. The qualitative approach was chosen because the study does not try to generalize, instead it aims for receiving a deeper knowledge of users experience when using e-commerce platforms and web sites.

RESEARCH STRATEGY

The research was performed to get users review on usability evaluation of users experience on some existing E-Commerce interfaces. Therefore, the population for this study comprises of the general public. Although, there are many possible research strategies (survey, case study, experiment, history and archival analysis), factors such as research questions, focus on contemporary events and control over behavioral events are to be considered before choosing a research strategy. The research questions of this study seek to answer how questions such as how user navigate through the various platform in question and also their experience during the process. In this project, survey was used in the collection of data.

THE POPULATION OF THE STUDY

The population size of the study is made up of 300 respondents.

This study focuses on Nigeria, a country that accounts for about 2.57% (2018) of the world's total human population. The number of Internet users is put at 4 billion plus, while Internet penetration is 53% (Internet World Statistics as at December 31st, 2017). There are lots of E-Commerce platforms with online review feature but our focus shall be on the five (Jumia, AliExpress, Amazon, Konga and Jiji) major E-Commerce platforms used by Nigerians.

SAMPLE AND SAMPLING TECHNIQUE

The sampling for this study consists of the general public who make use of the internet as basic criteria for shopping online.

DATA COLLECTION INSTRUMENT

Data was collected through the use of structured digital questionnaire. Specifically, the questionnaire was designed to collect data on users experience when using the E-Commerce platforms. The questionnaire construct presented in table 4.0 was designed using online free data collection software known as Google form. Adoption of digital questionnaire eliminated the use of papers, reduction in errors and also facilitates easy data computation and result analysis. It was also believed that the questionnaire will provide an opportunity for respondents to answer at their own leisure. The questionnaire was administered in the month of June, 2018.

Table 4.0: Questionnaire Administration Construct

CONSTRUCTS	QUESTIONS
Demography Section	Sex Age Bracket
Basic Details Section	How often do you use the internet? What do you use the internet for?

Skip Logic	Have you ever bought anything online before? *(If yes, the respondent can proceed with filling the questionnaire and if not, the form will be closed)* On what platform did you buy the items from? *(The 5 major platform that will be used for this questionnaire will be Jumia, Konga, Jiji, Ali-Express and Amazon).*
Search	What is the relevance of the search result? Is the search actually fast? How would you rate the search filter?
Navigation *(SA, A, D, SD, U)*	Is the interface intuitive, that is, can you use it without going through prior lessons? Were the features easy to access?

METHOD OF DATA ANALYSIS

Data generated through the digital questionnaire was exported/downloaded from the google form server and was analyzed using Microsoft Excel and Statistical Package for Social Sciences (SPSS, Version 22).

Highlight of results were given along with data analysis in order to give clarity of results and make easy the drawing of conclusions on the information gathered.

IV RESULTS

This section focuses on the computational analysis of the data collected from several respondents and interpretation of research questions as well as Test of Hypothesis. The data are based on the number of completed and submitted questionnaires by the respondents. The data are presented in tables and the analysis is done using the chi-square test. In course of administering this questionnaire, 300 questionnaires were administered and 222 respondents actually made one purchase or the other on one online platform.

Table 4.1: Demographic information of respondents based on Gender

Gender	Frequency	Percentage (%)
Male	122	55.0
Female	100	45.0
Total	**222**	**100**

Source: Online survey, June, 2018

Table 4.2: Demographic information of the respondents based on age and gender

Demographic Information	Female		Male		Total	
	Freq	Percent (%)	Freq.	Percent (%)	Freq	Percent (%)
Age						
15 - 20 years	7	7%	7	5.74%	14	6.31%
21 - 26 years	65	65%	89	72.95%	154	69.37%

27 - 35 years	22	22%	23	18.85%	45	20.27%
36 - 45 years	6	6%	1	0.82%	7	3.15%
46 and Above	0	0%	2	1.64%	2	0.90%
Grand Total	**100**	**100%**	**122**	**100%**	**222**	**100%**

Source: Online survey, June, 2018.

Table 4.3 Information on how often does respondent use the internet?

How often do you use the internet?	Female		Male		Total	
	Freq	**Percent (%)**	**Freq.**	**Percent (%)**	**Freq**	**Percent (%)**
Everyday	71	71%	100%	82.0	171%	77.0
More than once a day	26	26%	19%	15.6	45%	20.3
Once a day	2	2%	1%	0.8	3%	1.4
Once a month	1	1%	2%	1.6	3%	1.4
Grand Total	**100**	**100%**	**122**	**100%**	**222**	**100%**

Source: Online survey, June, 2018

Tables 4.1 and 4.2 shows the information based on gender and the one based on age and gender respectively. Table 4.3 depicts how respondent use the internet. The male had higher internet usage of 122 than their female counterpart with 100 out of the total population of the overall respondents.

ANALYSIS OF RESEARCH QUESTIONS

Research Question I: What does the respondent use the internet for?

This section highlights the pattern of the respondent use of the internet and a summary of this is presented in table 4.4. The pattern of exposure includes, blogging, e-shopping, gaming, social networking, browsing e.tc. From the table generated after analysis, it was noticed that 37.74% of the general respondent do social networking followed by 32.26% which is the second largest pollution in the table of respondents that does e-shopping. However, notice that we have about 310 males in table 4.4. This is because the question was in multiple-choice where respondent had the choice of picking more than one option.

Table 4.4: What do the respondents use the internet for?

	Female	Percent (%)	Male	Percent (%)
Blogging	31	12.60	27	8.7

e Shopping	81	32.93	100	32.26
News	19	7.72	21	6.77
Gaming	21	8.54	36	11.61
Social Networking	92	37.40	117	37.74
Browsing websites	1	0.41	0	0
Educational Activity	0	0.00	1	0.32
Study	0	0.00	1	0.32
Research	0	0.00	2	0.65
Crypto Packages	0	0.00	1	0.32
File Download	0	0.00	1	0.32
Live streaming	0	0.00	1	0.32
Office Activities and Academics	0	0.00	1	0.32
Scholarships Search	0	0.00	1	0.32
Job Search	1	0.41	0	0
Grand Total	**246**	**100**	**310**	**100**

Source: Online survey, June, 2018.

Research Question 2: Relevance of Search Result

Five (5) major platforms (Jumia, Ali-Express, Amazon, Konga and Jiji) were used to evaluate user's experience while excellent, fair, good and poor were used as metrics to determine their relevance.Questions asked were plotted against the various platforms. Respondents' rating of search filter is based on their daily interaction on the platform of their choice. From table 4.5 below, it is shown that the ratings for Jumia had respondents with the highest number for excellent ratings. Also, going through the ground total it can be deduced that most respondents gave a check to good search filter which was the highest number of frequencies.

Table 4.5: The Search Result is Relevant

	Excellent		**Good**		**Fair**		**Poor**		**Total**	**Percent**
	Freq	**%**	**Freq**	**%**	**Freq**	**%**	**Freq**	**%**		
Jumia	63	69.2	40	32.5	2	33.3	0	0	105	47.2973
Konga	11	12.1	52	42.3	3	50	1	50	67	31.0811
Ali-Express	15	16.5	28	42.3	1	16.7	1	50	45	20.2703
Amazon	1	1.1	1	1.1	0	0	0	0	2	0.9009
Jiji	1	1.1	2	1.6	0	0	0	0	3	1.3514
Total	**91**	**100**	**123**	**100**	**100**	**6**	**2**	**100**	**222**	**100**

Source: Online survey, June, 2018.

Research Question 3: Is the search actually fast?

The major factor that determines how fast a search is relies on the internet speed from the Internet Service Provider and search optimization of the platform. The table below shows detailed information about how

fast searching for products can be on these platforms. From analysis on table 4.6 Jumia has 47.2973%, Konga had 31.0811 % Ali-Express had 20.3%, Jiji 1.35% and Amazon 0.90%.

Table 4.6: The search filter is fast?

	Yes		No		Total	Percent (%)
	Freq	%	Freq	%		
Jumia	103	48.13	2	25	105	47.2973
Konga	64	29.91	3	37.5	67	31.0811
Ali-Express	42	19.63	3	37.5	45	20.2703
Amazon	2	0.93	0	0	2	0.9009
Jiji	3	1.40	0	0	3	1.3514
Grand Total	**214**	**100**	**8**	**100**	**222**	**100**

Source: Online survey, June, 2018.

Research Question 4: Is the interface intuitive

Intuitive in this research explains how the user can surf through any of the E-Commerce platform without prior tutorials or guide. This however, is very important in user testing and how long they are willing to spend on the E-Commerce websites.

Table 4.7: The interface is intuitive?

	Yes		No		Maybe		Total	Percent (%)
	Freq	%	Freq	%	Freq	%		
Jumia	100	48.0769	4	40	1	25	105	47.2973
Konga	63	30.2884	4	40	0	0	67	31.0811
Ali-Express	41	19.7115	2	20	2	50	45	20.2703
Amazon	2	0.9615	0	0	0	0	2	0.9009
Jiji	2	0.9615	0	0	1	25	3	1.3514
Grand Total	**208**	**100**	**10**	**100**	**4**	**100**	**222**	**100**

Source: Online survey, June, 2018.

In table 4.7, a total number of 105 Jumia respondents represented 47.2973 % of the population, 67 respondents representing Konga had 31.0811%, 45 respondents representing Ali-Express had 20.3% approximately, 2 respondents only represented Amazon with 0.90% and finally Jiji had 3 respondent which represented 1.35% approximately of the total number of respondents.

Research Question 5: Do you have easy access to features like search and other sub menu like categories, add to cart and pay out?

Easy access to major navigation tab is crucial when making purchase on any E- Commerce platform. In addition to this every user coming on board to use a particular platform for E-Shopping, must have every detail spelt out in plain so as to have good understanding of the navigation flow of the website.

Table 4.8: Respondents have easy access to features on the platform?

	Yes		No		Total	Percent (%)
	Freq	%	Freq	%		
Jumia	102	47.8873	3	33.3333	105	47.2973
Konga	63	29.5774	4	44.4444	67	31.0811
Ali-Express	43	20.1877	2	22.2222	45	20.2703
Amazon	2	0.9389	0	0	2	0.9009
Jiji	3	1.4084	0	0	3	1.3514
Grand Total	**213**	**100**	**9**	**100**	**222**	**100**

Source: Online survey, June, 2018.

From the analysis on table 4.8, a total number of 105 Jumia respondents represented 47.2973 % of the population, 67 respondents representing Konga had 31.0811%, 45 respondents representing Ali-Express had 20.3% approximately, 2 respondents only represented Amazon with 0.90% and finally Jiji had 3 respondent which represented 1.35% approximately of the total number of respondents. The conclusion drawn from the questions asked and analysis the analysis suggests that Jumia has a good method of getting feed backs from customers who have one way or the other made use of the platform for any purchase in time past.

Research Question 6: How fast is the loading of the product page?

The faster the internet speed and presence of an optimized website, the faster the loading of the product page. However, traffic on the website might cause a slow page load.

Table 4.9: The product page loads quickly?

	Strongly Agree		Agree		Disagree		Total	Percent (%)
	Freq	%	Freq	%	Freq	%		
Jumia	49	59.0361	53	40.1515	3	42.8571	105	47.2973
Konga	17	20.4819	47	35.6060	3	42.8571	67	31.0811
Ali-Express	16	19.2771	28	21.2121	1	14.2857	45	20.2703
Amazon	1	1.2048	1	0.7575	0	0	2	0.9009
Jiji	0	0	3	2.2727	0	0	3	1.3514
Grand Total	**83**	**100**	**132**	**100**	**7**	**100**	**222**	**100**

Source: Online survey, June, 2018.

Table 4.9 gives the breakdown of the total number of respondents. 105 Jumia respondents represented 47.2973 % of the population, 67 respondents representing Konga had 31.0811%, 45 respondents representing Ali-Express had 20.3% approximately, 2 respondents only represented Amazon with 0.90% and finally Jiji had 3 respondent which represented 1.35% approximately of the total number of respondents.

Research Question 7: Does the product page include video or more than one high quality photograph of the products?

Proper labels on the product page gives the buyer sure confidence in buying a product. This is because what they see advertised is what they think the product will be like. To gain buyer's trust, high quality picture and video should be embedded in page for each product with appropriate description.

Table 4.10: Does the product page include video or more than one high quality photograph of the product

	Yes		No		Total	Percent (%)
	Freq	%	Freq	%		
Jumia	93	46.0396	12	60	105	47.2973
Konga	63	31.1881	4	20	67	31.0811
Ali-Express	43	21.2871	2	10	45	20.2703
Amazon	1	0.4950	1	5	2	0.9009
Jiji	2	0.9900	1	5	3	1.3514
Grand Total	**202**	**100**	**20**	**100**	**222**	**100**

Source: Online survey, June, 2018.

Table 4.10 has the breakdown of the total number of respondents. 105 Jumia respondents represented 47.2973 % of the population, 67 respondents representing Konga had 31.0811%, 45 respondents representing Ali-Express had 20.3% approximately, 2 respondents only represented Amazon with 0.90% and finally Jiji had 3 respondent which represented 1.35% approximately of the total number of respondents.

Research Question 8: Can you buy a product based on user reviews/rating and opinion?

In the process of looking for item on an E-Commerce platform, reviews and ratings are very important in deciding whether a user can actually buy a product. However, these reviews are based on previous buyers' experience using the already bought product online.

Table 4.11: Can you buy a product based on user reviews/rating and opinion

	Yes		No		Total	Percent (%)
	Freq	%	Freq	%		
Jumia	98	47.1153	7	50	105	47.2973
Konga	65	31.25	2	14.2857	67	31.0811
Ali-Express	40	19.2307	5	35.7142	45	20.2703
Amazon	2	0.9615	0	0	2	0.9009
Jiji	3	1.4423	0	0	3	1.3514
Grand Total	**208**	**100**	**14**	**100**	**222**	**100**

Source: Online survey, June, 2018.

Table 4.11 shows the analysis of the data gotten form the survey. 105 Jumia respondents representing47.2973 % of the population, 67 respondents representing Konga had 31.0811%, 45 respondents representing Ali-Express had 20.3% approximately, 2 respondents only represented Amazon with 0.90% and finally Jiji had 3 respondents which represented 1.35% approximately of the total number of respondents.

Research Question 9: Is the product page flexible enough to support interaction for the buyer to change items like color, size and quantity?

Flexibility ranges from navigation, easy access to information and details regarding to the products to be purchased. When a purchase is to be made, buyers should be given the liberty to shop as if they are in physical shops. This will make them have a taste of the product they want to buy.

Table 4.12: The product page is flexible enough to support interaction for the buy to change items like color, size and quantity

	Yes		No		Total	Percent (%)
	Freq	%	Freq	%		
Jumia	98	47.1153	7	50	105	47.2973
Konga	65	31.25	2	14.2857	67	31.0811
Ali-Express	40	19.2307	5	35.7142	45	20.2703
Amazon	2	0.9615	0	0	2	0.9009
Jiji	3	1.4423	0	0	3	1.3514
Grand Total	**208**	**100**	**14**	**100**	**222**	**100**

Source: Online survey, June, 2018.

Table 4.12 shows the analysis of the data obtained form the survey. 105 Jumia respondents represented 47.2973 % of the population, 67 respondents representing Konga had 31.0811%, 45 respondents representing Ali-Express had 20.3% approximately, 2 respondents only represented Amazon with 0.90% and finally Jiji had 3 respondent which represented 1.35% approximately of the total number of respondents.

Research Question 10: On what scale will you rate the delivery time scale of this E-Commerce platform?

Delivery of purchased items determine the review and rating a buyer will submit to show he / she is satisfied with the service offered.

Table 4.13: What scale will you rate the delivery time scale of this E-Commerce platform?

	Excellent		Good		Fair		Poor		Total	Percent (%)
	Freq	%	Freq	%	Freq	%	Freq	%		
Jumia	25	59.5238	78	47.8527	2	12.5	0	0	105	47.2973
Konga	9	21.4285	54	33.1288	4	25	0	0	67	31.0811
Ali-Express	8	19.0476	29	17.7914	7	43.75	1	1	45	20.2703
Amazon	0	0	1	0.6134	1	6.25	0	0	2	0.9009
Jiji	0	0	1	0.6134	2	12.5	0	0	3	1.3514
Total	**42**	**100**	**163**	**100**	**16**	**100**	**1**	**1**	**222**	**100**

Source: Online survey, June, 2018.

Table 4.13 gives the analysis of the data gotten form the survey. 105 Jumia respondents represented 47.2973 % of the population, 67 respondents representing Konga had 31.0811%, 45 respondents representing Ali-Express had 20.3% approximately, 2 respondents only represented Amazon with 0.90% and finally Jiji had 3 respondent which represented 1.35% approximately of the total number of respondents.

Research Question 11: How would you rate security payment of these platforms?

Generally, security has been a very big threat to E-Shopping, this however has made some potential buyer to be discouraged from using this platform. Buyers should be very comfortable in paying for items purchased from any platform online. The use of One Time Password OTP should be used to guarantee buyers confidence.

Table 4.14: How secured is payment on these platforms?

	Yes		No		Total	Percent (%)
	Freq	%	Freq	%		
Jumia	105	49.0654	0	0	105	47.2973
Konga	67	31.3084	0	0	67	31.0811
Ali-Express	37	17.2897	8	100	45	20.2703
Amazon	2	0.9345	0	0	2	0.9009
Jiji	3	1.4018	0	0	3	1.3514
Grand Total	**214**	**100**	**8**	**100**	**222**	**100**

Source: Online survey, June, 2018.

Table 4.14 displays the analysis of the data obtained form the survey. 105 Jumia respondents represented 47.2973 % of the population, 67 respondents representing Konga had 31.0811%, 45 respondents representing Ali-Express had 20.3% approximately, 2 respondents only represented Amazon with 0.90% and finally Jiji had 3 respondents which represented

1.35% approximately of the total number of respondents.

Research Question 12: How would you rate the refund policy of this platform?

Refund policies should be stated clearly in case there is any reason that will warrant the user to request for refund. However, every E-Shopping site should avoid any scenario that will make the customers to ask for refund. This usually happens when buyers perceive a foul play.

Table 4.15: Refund policy ratings

	Excellent		Good		Fair		Poor		Total	Percent (%)
	Freq	%	Freq	%	Freq	%	Freq	%		
Jumia	45	60.8108	42	36.8421	17	56.6667	1	25	105	47.2973
Konga	14	18.9189	50	43.8596	3	10	0	0	67	31.0811
Ali-Express	14	18.9189	21	18.4210	7	23.3333	3	75	45	20.2703
Amazon	1	1.3513	0	0	1	3.3333	0	0	2	0.9009
Jiji	0	0	1	0.8772	2	6.6667	0	0	3	1.3514
Grand Total	**74**	**100**	**114**	**100**	**30**	**100**	**4**	**100**	**222**	**100**

Source: Online survey, June, 2018.

Table 4.15 shows the analysis of the data gotten form the survey. 105 Jumia respondents represented 47.2973 % of the population, 67 respondents representing Konga had 31.0811%, 45 respondents representing Ali-Express had 20.3% approximately, 2 respondents only represented Amazon with 0.90% and finally Jiji had 3 respondent which represented 1.35% approximately of the total number of respondents. Based on the individual analysis, Jumia had 60.81% excellent ratings with 45 respondents, 42% good ratings, with 42 respondents, 56.67% poor ratings, with 25 respondents. Konga had 18.92% approximately excellent ratings with 14 respondents, 43.86% good ratings with 50 respondents, 10% fair ratings with 3 respondents.

Research Question 13: How would you rate the general services offered by these E- Commerce platforms?

Table 4.16: General rating

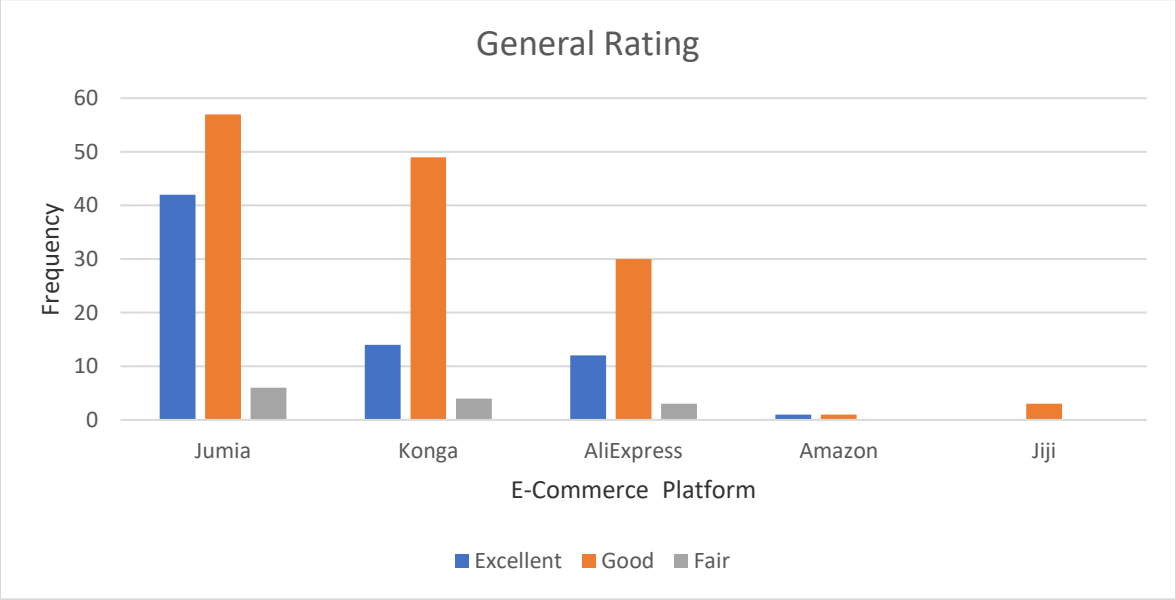
	Excellent		Good		Fair		Total	Percent (%)
	Freq	%	Freq	%	Freq	%		
Jumia	42	60.8995	57	40.7142	6	46.1538	105	47.2973
Konga	14	20.2898	49	35	4	30.7692	67	31.0811
Ali-Express	12	17.3913	30	21.4285	3	23.0769	45	20.2703
Amazon	1	0.0144	1	0.7142	0	0	2	0.9009
Jiji	0	0	3	2.1428	0	0	3	1.3514
Grand Total	**69**	**100**	**140**	**100**	**13**	**100**	**222**	**100**

Source: Online survey, June, 2018.

Table 4.16 shows in details the general over view of users in terms of the general services offered by Jumia, Konga, Ali-Express, Amazon and Jiji.

Jumia recorded 47.29% which shows that buyers were really satisfied with the services provided by the platform. Konga recorded 31.08%, Ali-Express recorded 20.27%, Amazon recorded 0.9009% and Jiji recorded 1.3514% of the total population for the study.

Table 4.17: General rating



Source: Online survey, June, 2018.

Table 4.17 shows in details the general overview of users in terms of the general services offered by Jumia, Konga, Ali-Express, Amazon and Jiji. Jumia recorded 47.29% which shows that buyers were really satisfied with the services provided by the platform. Konga recorded 31.08%, Ali-Express recorded 20.27%, Amazon recorded 0.9009% and Jiji recorded 1.3514% of the total population for the study

RESEARCH HYPOTHESIS:

H_o5: There is no significant difference between the user's experience of the three (3) suggested platforms including the two platforms suggested by the respondents (Jumia, Konga, Ali-Express, Amazon and Jiji)

$H_1$5: There is significant difference between the users' experience of the three (3) suggested platforms including the two platforms suggested by the respondents. (Jumia, Konga, Ali-Express, Amazon and Jiji).

Table 4.18 shows the Chi-square Test on user's experience based on the five (5) platforms used, which are Jumia, Konga, Ali-Express, Amazon and Jiji

Table 4.18: Chi- Square Tests data

	Value	Df	Asymp sig.(2-sided)
Pearson Chi-Square	10.622	8	.224
Likelihood Ratio	9.502	8	.302
Linear-by-Linear Association	1.670	1	.196
N of Valid Cases	**222**		

Source: Generated from SPSS, Version 22

V CONCLUSION

After having an in-depth analysis of the data gotten from the respondents and based on percentage of the general service offered by the various key platforms, Jumia had the highest percentage based on general services ranging from navigation, adequate information about products, delivery time, refund policies and other services which are not mentioned here. The question of the user experience on E-Commerce platform being sufficient can be answered by comparing the results from the results of a large sample of data collected. All the samples were gotten from online questionnaire which is a benchmark data set. Jumia recorded a total number of 105 respondents which accounts for 47.29% of the sample population used, Konga recorded 67 respondents which accounts for 31.08%, Ali-Express recorded 45 respondents had 20.27%, Amazon recorded only 2 respondent which accounts for 0.9% and Jiji recorded 3 respondents which represented 1.35% of the total number of population of respondents.

VI RECOMMENDATION

In order for the end users to have maximum user experience, it is highly recommended that the following be put into consideration by the user experience designers, user interface designers and web developers:

i. Build customer confidence through attractive and easy-to-navigate web store designs. Site security, payment security.

ii. Product details: Online shopping can be a leap of faith, a shopper can't physically pick up and feel merchandise before they buy, like they would in a brick and mortar store. But shoppers still want to familiarize themselves with what you have to offer. According to a Big Commerce study, online shoppers want products to be brought to life with images (78%) and product reviews (69%). Include informative features on product pages such as high-resolution photos, in-depth product descriptions, zoom-in and 360-degree rotation capabilities, view the product in different colors and product videos etc. By providing as much product detail and information as possible, you decrease the chance of returned items and increase the likelihood of satisfied customers.

iii. Videos: A product video is an extremely valuable communication tool that

helps seal the deal. An impact branding and design article states that video helps persuade 73% of people to buy a product or service. Through a video, customers can see exactly how a product looks and how it is being used. Videos can also provide helpful tips, tricks, and give customers an insider view into how best to use the product to their advantage.

iv. Efficient site and payment security.

v. Easy exchange information.

vi. Prompt delivery time.

vii. Inclusion of powerful shopping cart

Customer Reviews: Shoppers want to hear from real people about their product experiences to see if the product fits their desires and expectations. According to Kissmetrics, 55% of shoppers say that online reviews influence their buying decision. Build trust with your shoppers by posting customer product reviews on your site. While positive reviews are helpful, don't be afraid to post negative reviews too, your transparency creates credibility on the honesty of your brand.

We do hope that this finding contributes to the development and improvement of the users experience for E-Commerce platform and also help user experience designers and developer to think of user-oriented designs when building any E-Commerce platforms.

REFERENCES

[1] B. Anders, G. Peter, H. Lene, and S. Jan, "*Proceedings of the SIGCHI Conference on Human Factors in Computing Systems"*.1619-1628, 2009.

[2] N. Bevan, J. Kiriakovsky, and J. Maissel, "What is Usability?" *in Proceedings of the 4th International Conference on HCI*, Stuttgart, 09, 1991.

[3] C. X. N. Cota, A. I. M. Díaz, and M. A. R. Duque, "Evaluation framework for m-learning systems: Current situation and proposal", *in Proceedings of the XV International Conference on Human Computer Interaction (INTERACCION 2014)*. New York, USA: ACM Press. Online. Available: https://dl.acm.org. [Accessed: 01 Sept. 2018].

[4] J. Forlizzi, and K. Battarbee, "Understanding experience in interactive systems", *in Proceedings of the 2004 conference on Designing Interactive Systems (DIS 04): processes, practices, methods, and techniques*. New York: ACM, 261-268. Available: https://dl.acm.org.

[5] L. Hasan, A. Morris, and S. Probets, "A Comparison of Usability Evaluation Methods for Evaluating E-Commerce Websites", *Behaviour & Information Technology Journal*, 31(7), 707–737, 2012.

[6] J. Hartmann, A. De-Angeli, and A. Sutcliffe, A, "Framing the User Experience: Information Biases on Website Quality Judgement", *CHI 2008*, April 5–10, 2008, Florence, Italy.

[7] Hassenzahl, M. & Tractinsky, N. (2006). User experience - a research agenda. *Behaviour and Information Technology*, *25* (2), 91-97.

[8] P. Hekkert, and H. N. J Schifferstein,"Introducing product experience", in H.N.J. Schiffer-stein and P. Hekkert (Eds.), *Product experience* , 1-8. 2008. Amsterdam: Elsevier.

[9] J. Nielsen, *Usability engineering*, Morgan Kaufmann, Elsevier, 1994.

[10] C. Salvador, A. Nakasone, and J. A. Pow-Sang, "A systematic review of usability techniques in agile methodologies", *7th Euro American Conf. on Telematics and Info.* Systems, ACM Press. 2014.

[11] L. H. A. Salazar, T, Lacerda, J. V. Nunes, and C. G. Von Wangenheim, "A systematic literature review on usability heuristics for mobile phones." *International Journal of Mobile Human Computer Interaction (IJMHCI)*, *5*(2), 50-61, 2013.

[12] E. D. Turban, J. King, M. Lee, Warkentin, and M. Chung, "*Electronic commerce; a managerial perspective",* London, UK: Pearson Education, Inc. 2002.

[13] Usability First. Retrieved from http://www.usabilityfirst.com/about-usability/web-application-design/ecommerce-systems/

[14] K. Väänänen-Vainio-Mattila, V. Roto, and M. Hassenzahl, "Now let's do it in practice: user experience evaluation methods in product development" in *CHI '08 extended abstracts on Human factors in computing systems,* 3961-3964, Florence, Italy: ACM. 2008.

[15] P. W. Jordan, *Designing Pleasurable Products*. New York, NY: Taylor & Francis. 2000.