EVALUATING THE ACCEPTANCE AND USABILITY OF KISWAHILI LOCALIZED MOBILE PHONE APP IN KENYA: A CASE OF M-PESA APP

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DECLARATION

This project is my original work and has not been submitted for a degree in any other University.

Signed by………………………………….. Date………………………………………….

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This project has been submitted for examination with my approval as University Supervisor.

Signed………………………………………Date…………………………………………….
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Signed………………………………………Date…………………………………………….
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DEDICATION

This research project is dedicated to my mother, Daughter, and my wife whose happiness and encouragement, gave me mental health to undertake and complete this project in the prescribed period.

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I am also grateful for the support, love and encouragement of my family and friends during my course of study.

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TABLE OF CONTENTS

LIST OF FIGURES

TABLE OF ABBREVIATIONS

BBC   British Broadcasting Corporation

LISA   Localization industry Standards Association

SPSS   Statistical Programme for Social Science

ICT   Information and Communication Technology

PIN   Personal Identification number

QWERTY   Quadratic Welding of Etherogeneous Rasterization Trigonometry of Yoda

YU   YU Mobile is a brand name for a mobile cellular network backed by Essar Telecom Group

DEFINATION OF TERMS

Acceptance: Refers to the act of approving or agreeing to something (in this case translation) expressly or by conduct.

Usability: Refers to the extent of a product usage by specified users to achieve particular goals with effectiveness, efficiency and satisfaction.

App: Refers to an abbreviation for the word "application", which is defined as a specialized program software downloaded onto mobile devices

M-Pesa: M-Pesa is a mobile money app and service that is operated by Safaricom Limited Kenya

ABSTRACT

This study aimed at evaluating the acceptance and usability of Kiswahili localized mobile phone app in Kenya: A case of M-Pesa app. The study was carried out in Nairobi County of Kenya.

The study used mixed research design method. Specifically, concurrent mixed method was utilised. This is a research method that involves the separate collection and analysis of qualitative and quantitative data and then integrating them at interpretation stage. Quantitative data was collected using a survey questionnaire. Out of the 30 questionnaires that were to be administered, only 23 responses were received, which were then analyzed by SPSS software version 20. Three In-depth-depth interviews with app translators were conducted using an in-depth interview guide and then thematically analyzed.

The study found out that generally, the level of acceptance and usability of Kiswahili language menu of M-Pesa app was low. This was attributed to lack of awareness about the existence of the Kiswahili language menu on the M-Pesa app, use of hard and unfamiliar terms in the Kiswahili menu, and the negative attitude that the public have towards the Kiswahili language.

In conclusion, the researcher suggests that the Kiswahili menu would be accepted and used if the message is clear, easily understood, uses common or familiar terms, if single terms are consistently translated, and is functionally suitable in the culture of the target text. Consequently, enough awareness should be created to dispel the public negativity towards Kiswahili language.

CHAPTER ONE: INTRODUCTION

1.1.   Background of the Study

In the past couple of years mobile technology has gained popularity and usage globally and particularly in the developing countries (Eulich, 2012). The flourishing of the mobile technology has equally resulted in the gush of messaging services that has not only been used as a conduit for personal communication, but also as a platform for communicating valuable information such as reminders of healthcare, and agricultural reports (MarketsandMarkets, 2013). Mobile money is the latest phenomenon that has been produced by mobile technology. Mobile money services are financial services that are offered on the mobile phone platform (Firpo, 2009). They can take the forms of mobile payments, mobile money transfer, and mobile banking.

In the developing countries, mobile money services have helped to provide money transfer services to millions of individuals who had previously been under-served by banks (Graham, 2010). These services allow them to send money, receive money, and pay bills without exclusively relying on cash. It has been claimed that Kenya is a global leader in mobile money services (Michaels, 2011). The mobile money service platform in Kenya allows its clientele to transfer money, purchase airtime, pay wages and salaries, pay bills, and buy services and goods from both physical merchants and online traders. The mobile operators in Kenya that offer mobile money services are Safaricom Limited, Airtel Networks Limited, Telkom Kenya, and Essar (YU). Nevertheless, this study focused on M-Pesa, which was the leading mobile money app in Kenya.

The word M-Pesa is a combination of M that stands for mobile phone and Pesa, which is a Swahili term for money (Twomey, 2013). M-Pesa is a mobile money app and service that is operated by Safaricom Limited Kenya (Neva, 2012); (Emilylora, 2014). (Safaricom.co.ke, 2014) defines M-Pesa as an innovative platform that was initiated in 2007, and allows Individuals with Safaricom lines to use their handsets to send and receive money, and make payments. Additionally, even though its customers do not earn interests on their balances, M-Pesa allows its customers to build savings in their accounts (Cull, 2010). Safaricom has lately added various value-added services to its M-Pesa services (Kaffenberger, 2014). The aim of these added services is to move its clientele from the basic money transfer services. Key and popular among these offerings is M-Shwari service. This is a loan and savings product that was launched in 2012 by Safaricom (Kaffenberger, 2014). The M-Pesa menu includes services such as sending money, withdrawing cash, buying of airtime, M-Shwari (offers savings and credit services), Lipa na M-Pesa (for paying bills), M-Kesho (enables online banking, credit services, and buying of insurance cover). The menu also has my account (which shows M-Pesa balance, Support services, allows changing of M-Pesa PIN number, Secret word for security purposes, and allowing language change-to either English or Swahili).

Since the initiation of M-Pesa in 2007, it was claimed to have attracted over 19.5 Million customers by the year 2013, accounting to about 83% of the Kenyan adult population (Botsman, 2014). This was attributed to the M-Pesa`s low-cost and secure means of transferring money (Cull, 2010). The other contributing factors to the M-Pesa growth included; high cost of sending money via other means, Safaricom`s dominant market position, effective marketing strategies, and the Central Bank of Kenya`s decision to allow the service run on an experimental basis

without formal authorization (Mardi, 2013). Initially, the service aimed at enabling urban Kenyans to sending money to their friends, relatives and loved ones in the upcountry. Subsequently, as the service opened up its doors to its surging clientele in the villages and enhanced accessibility to its services by certifying many Safaricom agents to transact the transfers for them, the need for localising the M-Pesa register from English to Swahili arose. This is because some of the M-Pesa app users were illiterate and semi- illiterate and thus were more likely to be at home with an app menu that is in Kiswahili language. Nevertheless, a study carried out during the pilot implementation of M-Pesa indicated that majority of its users preferred the English language menu as compared to the Kiswahili language menu (World Bank Grp., 2011). The reason cited was that the Kiswahili language menu contained complex terminologies and thus making it hard to understand and use. From that finding, Safaricom Company, that operated M-Pesa, took the initiative of making the Kiswahili language menu less complex so that it can easily be understood and used. Despite the efforts made by Safaricom in making the Kiswahili language menu of M-Pesa less complex after its pilot implementation in 2006, little had been done to evaluate whether there had been any change of trend in the users` acceptance and usability of the Kiswahili language menu in Kenya.

1.2. Statement of the Problem

The overall problem addressed in this study was that despite the efforts made in localising the M-Pesa service app from English to Kiswahili, little had been done to evaluate the acceptance and usability of the translated Kiswahili M-Pesa language menu in Kenya. During the pilot implementation of M-Pesa (on October 11, 2005 and ended on May), an extensive research conducted on its users depicted that most of them preferred using the English language menu of the app vis-à-vis the Kiswahili menu (World Bank Grp., 2011). Subsequently, following that finding, Safaricom Company (the company that operates M-Pesa) is said to have altered the Kiswahili menu with the aim of making it less complex and hoping that it can in turn attract more acceptability and usability among the users. Many years had gone by, yet little research was there to show whether there had been high acceptability and usability of the Kiswahili M-Pesa language menu. Therefore, this study aimed at finding out the level of acceptability and usability of the Kiswahili M-Pesa language menu vis-à-vis the English language menu in Kenya. Subsequently, the study investigated the public`s awareness, attitude and perception as far as M-Pesa`s Kiswahili menu was concerned. Addressing this matter was to help inform and better future Kiswahili app localization in Kenya.

1.3. Objectives of the Study

1. To assess the public awareness of the existence of the translated Kiswahili M-Pesa language menu;

2. To assess the degree of acceptance of the translated Kiswahili M-Pesa language menu by the public;

3. To assess the public usability of the translated Kiswahili M-Pesa language menu vis-à-vis the English language menu;

4. To find out the public attitude and perception on the translated Kiswahili M-Pesa language menu.

1.4. Hypotheses

1. At least 70% of the Kenyans are aware of the existence of the translated Kiswahili M-Pesa language menu.

2. The degree of public acceptance and usability of the translated Kiswahili M-Pesa language menu in Kenya is lower than 50%.

3. More than 50% of Kenyans have a negative attitude towards the translated Kiswahili M-Pesa language menu

4. More than 50% of Kenyans view the translated Kiswahili M-Pesa language menu as important

1.5. Significance of the Study

This study helps in providing information concerning the acceptance and usability of app localization process as far as Kiswahili language is concerned in Kenya. This is because it gives stakeholders some insights into the most effective language to use in their apps, including the register that is most appropriate for the clients, in English and Kiswahili.

1.6. The Scope and the Limitations of the Study

There were four mobile operators in Kenya that offered mobile money services namely Safaricom Limited, Airtel Networks Kenya, Telkom Kenya, and Essar Yu. However, this study focused on the translated Kiswahili M-Pesa language menu. This is because M-Pesa was the dominant mobile money app used by majority of Kenyans. Despite the existence of other texts used by M-Pesa on other platforms such as brochures and websites, this study focused only on those existing on the handset menus.

1.7. Literature Review

Literature review aimed at examining in detail the available literature and studies that have already been conducted and which are directly related to the topic under study.

1.7.1. Related Studies

Concerted efforts have been made over the years to localise technology-based products into bi-lingual and multilingual languages. Various scholars and researchers have given varied views on the localisation of mobile phone apps. (Pym, 2005) quotes LISA, the localisation industry

Standards Association, Operational from 1990 to 2011 which defines localisation as the process that "involves taking a product and making it linguistically and culturally appropriate to the target locale/country/region and language where it will be used and sold" (pg 17). Subsequently, (Sasikumar & Hegde, 2004) adds that localisation efforts involves linguistic adaptation of all texts used in an app (software). This language localisation as has been referred to by Sasikumar and Hegde, plays an important role in the success of an app (Ankier, 2013). Nevertheless, an observation on the Kiswahili language menu of the M-Pesa depicts that its texts are not fully adapted. The level of its localisation is what (Pym, 2001) refers to as `enabled` localisation. This is where the interfaces of the app remain in the default language-English, as other texts are translated in the local language. Therefore, this study was keen on finding out whether this `enabled` level of localisation influenced user acceptability and hence usability of the Kiswahili translated M-Pesa menu.

(Duan, 2012) argues that in order for top apps to reach their full potential commercially, they should strive to be fully localised just like what has been achieved in Japan and Korea for their iPhone top 20 apps. This is because studies have depicted that localised apps perform better (Kim, 2012) . Accordingly, this study was keen on unraveling why Kenyan Mobile money apps (especially M-Pesa) that is a global leader is yet to attain full Kiswahili language localisation. Especially, now that Kiswahili language is a national and official language in Kenya, and the language that acts as a unifying medium of communication because of its easy comprehension cutting across majority of the Kenyan populace (Wachira, 2006).

According to recent studies, there has been agreement that in order to improve the acceptance, usability and growth of mobile phone user interfaces, there is need for standardizing the mobile phone terms and their translations (Ray, 2012). This is to avoid differences in translations of similar terms of apps of the same purpose and serving the same locale. For instance, in Kenya, the 3 leading mobile money apps are M-Pesa (by Safaricom Limited), Airtel money (by Airtel Networks Kenya) and Orange money (by Telkom Kenya). All of these apps have a localised Kiswahili menu. Sasikumar & Hegde (2004) argue that in cases where different companies are used in translation, there lacks interaction in the cause of their working, and thus being unable to share knowledge on their pitfall, failures, and successes. This may lead to a number of incompatible versions of an app translation (Sasikumar & Hegde, 2004). Also, these different companies apply different philosophies while translating the texts of the apps. According to (Sasikumar & Hegde, 2004), the need for a mutual approach, such as the use of a well-defined area glossary helps eliminate the chances of proceeding translations leading to "unnecessary branching effects." Bearing in mind the existence of users with multiple mobile money registrations, this study was keen on sampling any differences in the Kiswahili translation of similar English terms between M-Pesa and other mobile money apps in Kenya. Moreover, the study sought to find out whether the differences affected acceptance and usability of the Kiswahili language menu. It is claimed that people tend to believe in using technology-based products in their default language-English (Welankar, Joshi, & Kanitkar, 2010). Accordingly, poor translation of a product has been mentioned as one of the key reason for minimal acceptability and usability of a technological product (Welankar et al., 2010). According to Welankar et al., (2010) this is attributed to lack of user understanding of the translated terms. The arguments posited by Welankar et al., (2010) are based on a study carried out on the

acceptance and usability of translated Marathi mobile phone interfaces. Because of the aforementioned arguments, this study sought to evaluate the Kenyan users` attitude and perception of the M-Pesa Kiswahili language menu vis-à-vis the English language menu.

It has been argued that individuals are on edge in using machine related texts, especially those related to financial transactions, in a foreign language (Ronen, 2011). The reason for this is that persons want to be sure of their transactions, and this can only be achieved with the use of their primary language. Consequently, bi-lingual or multilingual translation of mobile money apps, just like with the ATMs, makes them more accessible to users (Ronen, 2011). Today, mobile money app allows users to carry out many financial transactions. The services includes sending money, withdrawing cash, buying of airtime, M-Shwari (offers savings and credit services), Lipa na M-Pesa (for paying bills), M-Kesho (enables online banking, credit services, and buying of insurance cover). Accordingly, going by the argument of (Ronen, 2011) that individuals will prefer carrying out financial transactions in their primary languages, then one is bound to believe that the acceptance and usability of the translated Kiswahili M-Pesa menu will be high. Because Kiswahili language is spoken and understood by both literate and illiterate, and it is the national and official language as per the Kenyan constitution (Thuku, 2010). Nevertheless, is the translated Kiswahili M-Pesa menu accepted and used by Kenyans? If yes, to what extent? If not, why not? These are some of the questions that were to be answered by this study. According to a survey by (Khasawneh, 2014) on the challenges of Arabic user interface, it was found out that for a mobile phone service translation to be accepted and its usability increased, there was need for the translation to be proper and to use common or familiar terms. This finding is based on English-Arabic translation of a mobile phone services. Therefore, this study sought to find out

whether proper Kiswahili translation and use of common terms in the translation was a factor for acceptance and usability of a Kiswahili language menu of M-Pesa in Kenya.

1.8. Theoretical Framework

This study was guided by the Translatorial action theory.

1.8.1 Translatorial action theory

This is one of the functional theories of translation. It is a theory proposed by Justa Holz-Manttari in the year 1984. Much of its concepts are derived from action theory and communication theory (Munday, 2013). In her book "Translatorial Action: Theory and Method," Justa Holz-Manttari describes her Translatorial action theory as follows:"Translatorial action is integrated into a system of others actions and is controlled by factors outside it."(Snell-Hornby, 2006, p. 57). The Translatorial action theory views translation as an action that is "purpose-driven, outcome-oriented human interaction"(Munday, 2013, p. 120). This theory emphasizes that translation is a process of message-transmission or translational action, from a source text (As-Safi, 2011, p. 36). This message-transmission involves intercultural transfer. According to Translatorial action theory, translation is also viewed as a communicative process that involves a series of roles and players (Munday, 2013); (As-Safi, 2011, p. 36). These roles and players include;

- The initiator: this is the individual or the company in need of translation;
- The commissioner: this is the agency or the person that contacts the translator;

- The source text producer: this is the person(s) who is within a company, and is the one responsible with writing or production of the source text. They may not necessarily be involved with the target text production;

- The target text producer: this can be the a translator, translating agency or department;

- The target text user: this is the person that uses the target texts. Examples can include sales representative using company brochure;

- The target text receiver: this is the final receiver of the target text. An example can be that of a mobile phone owner using a translated menu app.

According to the translational theory, each of the aforementioned players each have own specific roles (primary and secondary roles). This theory stresses the need for the produced target text being as functionally communicative as possible to the reader or the final recipient (As-Safi, 2011, p. 36; Munday, 2013, p. 121). The argument here is that the target text`s form and genre have to be guided by what is functionally suitable in the culture of the target text. The translator determines what is functionally suitable. The translator is the expert in translational action and plays a role of ensuring satisfactory intercultural transfer. The theory contends that the needs of the receiver or recipient are the determining factors of the target texts. Munday (2013)) elucidates that as far as terminology is concerned, technical terms in source texts are supposed to be clarified (made simple) for the target text non-technical users. Consequently, Munday (2013) suggests that for the sake of maintaining cohesion for target text readers, single terms should be translated consistently (Munday, 2013, p. 121). Nevertheless, Munday (2013) has criticized the translational action theory for its disregard of the source text, and lack of having guidelines to help solve cultural problems (p.122). Therefore, following the aforementioned Translatorial

action theory arguments, it is lucid that a translation would be accepted and used if the message is clear, easily understood, uses common or familiar terms, if single terms are consistently translated, and is functionally suitable in the culture of the target text.

1.9. Research Methodology

This chapter presents the procedures and methods used to carry out the study. It explains the research design, area of the study, the study population, sample and sampling methods and the methodologies used. The chapter also explains data collection methods and procedures used in analysing and presenting the data.

1.9.1 Study design

Research design is defined by (Orodho, 2003) as the scheme, outline or plan that is used to generate answers to research problem. The best design depends on the research questions and deals with 4 areas; what questions to study, what data are relevant for the questions, what data to collect to answer the questions, and how to analyse the results (Anfara & Mertz, 2006). This study used mixed- research design because it brings together the differing strengths of quantitative and qualitative methods, offsets the weaknesses of each single method, and expands the set of collected data. Mixed-methods research design is the collection and analysis of both quantitative and qualitative data in a single study in which data are collected or analyzed concurrently or sequentially (Creswell & Clark, 2007). The mixed-methods design is better than using a single method because it overcomes the limitations of a single design and has complementary strengths and no overlapping weaknesses (Creswell, 2013)

Mixed research design is categorised into explanatory (where quantitative data is collected first with qualitative data collection following), Exploratory (where qualitative data is collected first with quantitative data collection following) and Concurrent (where quantitative and qualitative data are collected at the same time to provide a more comprehensive and complete set of data). Specifically, this study applied the concurrent mixed design, which involves the simultaneous collection of data, independent analysis of each strand of data and then integrating it at the interpretation stage. This method is intended to attempt confirm, cross-validate, or corroborate findings within a single study (Tashakkori & Creswell, 2007).This study used a survey questionnaire for the collection of quantitative data while it used in-depth interviews for the collection of qualitative data. The results of the two methods were then integrated at the interpretation stage. The idea here was to either note the convergence of the findings as a way of strengthening the knowledge claims of the study or to explain any lack of convergence that may result.

1.9.2   Study area

This study was carried out in Nairobi County.

1.9.3   Target population

The main target population was the population inhabiting Nairobi province, now known as Nairobi County. This population is estimated at 3,138,169 as of the 2009 National Census ("Nairobi (County, Kenya) - population statistics, map and location," 2013). This study employed random sampling, which involves identifying subjects randomly. Random sampling technique offered this study best opportunity to achieve unbiased results. Random sampling

gives all subjects an equal chance of being selected out of the population being researched. In addition, given the financial constraints the study found itself in, random sampling was much faster and less expensive to use. Whereas there is no way to guarantee that the results that come from a sample in a random survey are 100% accurate, they tend to be more accurate than those obtained through other methods. The results from surveying the samples were later used to infer how the population as a whole may have responded and to draw conclusions about the larger group.

1.9.4 Sampling design

A study population can be defined as the entire collection of cases or units about which the researcher wishes to draw conclusions (Kothari, 2004). According to (Williams, 2011), one of the major steps in formulating a research design is to define the population according to the objectives of the study. A sample is a subset of the population that is used to gain information about the entire population. It is a small collection of units, from a much larger collection or population, which is studied to enable the researcher to make more accurate generalizations about the larger group (Mugenda & Mugenda, 2003). Sampling is therefore defined as the process of obtaining information about an entire population by examining only part of it (Kothari, 2004, Mugenda & Mugenda, 2003). It is generally impossible to study every population and hence researchers usually take a sample from the population for their studies (Wimmer & Dominick, 2013).

This study used probability and non-probability sampling methods. In probability sampling, a reasonable number of subjects, objects or cases that represent the target population are selected

(Ivankova, Creswell, & Stick, 2006). In this kind of sampling a researcher can determine the probability that any element or member of the population will be included in the sample (Mugenda & Mugenda 2003). Probability sampling seeks representativeness of the wider population and is mainly used in quantitative research (Cohen, Manion, & Morrison, 2007). Non-probability sampling seeks mainly to represent only a particular group, or a particular named section, of a wider group (Cohen, Manion and Morrison 2007). Non-probability sampling is used when a sampling population cannot be precisely defined, or when a list of the sampling population is unavailable. In non-probability sampling the researcher cannot specify the probability that any element or member of the population will be included in the sample (Mugenda and Mugenda, 2003. Non-probability sampling is used mainly in qualitative data collection while probability sampling is used in quantitative data collection.

First, the study area was purposively selected based on its status as a city county with many of its occupants being mobile users with different backgrounds, gender, age, and levels of education. Probability sampling method (random sampling) was used to select respondents to administer survey questionnaire to while purposive sampling technique was used to select respondents for key informant interviews.

1.9.5 Determining Sample size

Mugenda & Mugenda (2003) suggests several approaches to determining the sample size. They include the use of formulas, census, published tables, and imitation of similar study samples. According to (Kombo & Tromp, 2006), in co-relational and descriptive studies, a researcher can use 30 subjects in each group of the targeted population. Based on time and financial constraints,

this study collected its quantitative data by administering 30 questionnaires to M-Pesa users in Nairobi County.

According to (Bertaux, 1981) as quoted by (Guest, Bunce, & Johnson, 2006), fifteen (15) is the smallest acceptable sample size for the collection of qualitative data via the use of interviews. Bearing in mind the money and time constraints, this study carried out three (3) in-depth interviews of the key informants who were selected through purposive sampling.

1.9.6 Data collection procedures/instruments used

This study used concurrent mixed method design to collect data. This method collects both quantitative and qualitative data concurrently and then integrates them at the interpretation of the overall results. Qualitative data was collected using observation and in-depth interviews while quantitative data was collected using survey questionnaire.

1.9.6.1 Quantitative Data

Quantitative data for this study was collected using survey questionnaire.

1.9.6.1.1 Questionnaire Survey

In a survey, the researcher uses a questionnaire to gather information from the respondents in order to answer the research questions. Questionnaires contain printed lists of questions that are used in finding out the feeling of the people on an issue, product or service. Questionnaires can be interviewer-administered or self-administered). This study used a questionnaire because it is

convenient in collecting information from a large group or number of people within the shortest time possible (Kombo &Tromp, 2006).

In this study, quantitative data was collected through administration of survey questionnaire to the M-Pesa users of Nairobi County. This study used both self and interviewer-administered questionnaire methods. Interviewer- administered questionnaire method helps save on time and covers for the illiterates and other semi-illiterates who may be unable to self-administer the questionnaire. The questionnaire used closed-ended questions (where respondents choose a response from those provided). This is because it is ease to administer and analyze. A pilot test was conducted to test all the survey operations, including the administration of the questionnaire, duration and the data yielded.

1.9.6.2 Qualitative Data

Qualitative data for this study was carried out using in-depth/ key informant interviews

1.9.6.2.1 Key informant interviews/ In-depth interviews

These are interviews that are quite relied on by qualitative researchers (Marshall & Rossman, 1994). These interviews are described as; "a conversation with a purpose" (Kahn & Cannell, 1957: 149). According to (Patton, 2005), the purpose of interviews is to find out what is on someone's mind. People are interviewed to discover things that cannot be directly observed or captured through a questionnaire. It differs from a questionnaire, where the researcher records respondents pre-set questions or the respondent records answers to set questions (Cohen, Manion and Morrison, 2007). Key informant interviews involve verbal administration of the interview

guide to people who have expertise or experience with the topic under study. Key informant interviews provided data to answer the research questions on the acceptance and usability of Kiswahili translated M-Pesa menu. In this study, qualitative data was collected through conducting three interviews with App translators in Kenya.

1.9.7. Research Instruments

This study used two types of research instruments; closed-ended questionnaires and unstructured interview guides. The design of the questionnaires was closed questions (see appendix 1). The questionnaires were first piloted to a few respondents to enable elimination of any question that could not yield useful data. Interview guides were used to collect information from App/software translation key informants. The interview guide was used by the researcher to interview the informants and the responses recorded using digital audio-recorder. The interviews were based on specific research questions and the research framework key concepts (see Appendix 2).

1.9.7.1.   Pilot Testing

A pilot test was conducted with a randomly selected sample of six respondents selected from the area under study. This helped establish the validity and reliability of the questionnaire and interview guide. Changes were then made where necessary on the questionnaires and the interview guide after the pilot testing.

1.9.7.2.　　Validity and Reliability of the Study

Validity of a study is mainly concerned with the measure of how well a test measures what it is supposed to measure (Kombo & Tromp, 2006). In qualitative research, validity can be said to be the proportion to which the data collected is plausible, credible and trustworthy; and thus can be defended when challenged. On the other hand, reliability is concerned with how consistent the results from a test are (Kombo & Tromp, 2006). To enhance the validity and reliability of the study, objectives were clearly defined and operationalised, and the pilot study was carried out to test instruments and get feedback from the respondents on how the testing environment affected their performance. Additionally, research assistants were thoroughly trained on the use of the instruments.

1.9.8.　Data Analysis and Presentation

Data for this study was analyzed and interpreted using the concurrent triangulation method. This method involves collecting and analysing the quantitative and qualitative separately, and then integrating both data at the interpretation stage of the study (Creswell, 2002, 2003). Data analysis, according to Kothari (2004), involves a number of closely related operations, which are performed with the purpose of summarizing the collected data and organizing it in such a manner that it may answer the research questions. The operations include editing, coding, classifying and tabulating. It also entails categorising, ordering, manipulating and summarizing data with the aim of finding answers to the research questions (Marshall & Rossman, 2010).

1.9.8.1.　　Analyzing　Quantitative data

Mugenda and Mugenda (2003) suggest that the first step in quantitative data analysis is by describing or summarizing the data using descriptive statistics. Descriptive statistics are basic

calculations that describe the main characteristics of data. This enables a researcher to meaningfully describe a distribution of scores or measurements using a few indices or statistics. Commonly used descriptive statistics include: frequency or how many times something occurred; percentages and measurements of central tendency. Measurements of central tendency show information such as the mean or average of a group of numbers. Mugenda & Mugenda, (2003) claim "types of statistics or indices used depend on the type of variables in the study and the scale of measurement used (ratio, interval, ordinal and nominal" (pp 118).

Ratio data is continuous, ordered and has standardized differences between values and has a natural zero. For example, weight, age, income. Interval data is continuous and has a logical order; data have standardized differences between values, but no natural zero. For example, Items measured on a Likert scale (e.g. Rank your satisfaction on a scale of 1-5. 1 = Very Dissatisfied   2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, 5 = Very satisfied). Ordinal data have a logical order, but the differences between values are not constant. For example, Military rank (from Private to General). Nominal data – data have no logical data classification. For example, Male or Female. There is no order associated with male or female. Each category is assigned an arbitrary value (male = 0, female = 1).

This study used two levels of measures. That is; nominal level for yes and no questions and interval level for questions with a list of alternative answers. In the organizing or tabulating stage, data was edited, checked for accuracy and coded and transformed into symbols that could be tabulated and counted. The questionnaire survey in the study used closed-ended questions. The data from the questionnaire survey was reduced into percentages. This was done using SPSS software version 20, which helped to produce descriptive statistics and advanced statistics that

shows the nature of the relationship between variables. Data was then summarized and presented using pie and bar charts.

1.9.8.2. Analysing Qualitative data

According to (Merriam, 1998), qualitative analysis, data collection and analysis proceed simultaneously. The steps in qualitative analysis can include: (1) preliminary exploration of the data by reading through the transcripts and writing memos; (2) coding the data by segmenting and labeling the text; (3) using codes to develop themes by aggregating similar codes together; (4) connecting and interrelating themes; and (5) constructing a narrative (Creswell, 2002). Mugenda and Mugenda (2003), also identifies 4 key steps of qualitative data analysis. They include: Data organization, creating of categories, themes and patterns, analysing and interpreting information and writing the report.

The data for this study was first organized into reasonable, meaningful units that were coded with words or very short phrases that signified a category. The categories were Emic categories (information provided by the participants in their own language and organizational units) and Etic categories (the researcher's interpretation of Emic data). The data was then analyzed using a thematic analysis technique whereby data is reviewed to identify themes and patterns that emerge from it and to describe what relationships, if any, exist between them. Themes emerge as words, sentences and concepts that are identified and 'marked-up'. While individual items can appear random and fragmented, as more data is considered depth and richness emerges that illuminates themes. Once a key informant interview had been analyzed, the themes were then separated from the original context and reviewed in light of both the wider research questions and the quantitative data that exist. From here they were merged to

develop over- arching key-thematic lines of enquiry and inform future data collection and, eventually, to identify the key themes to emerge from the research itself.

The study used SPSS Text Editor Software version 20 to generate the codes from the framework themes and concepts. SPSS Text Editor Software is a qualitative data analysis software package designed for handling data that are not easily reduced to numbers. The collected data are typed and transcribed where necessary, and imported into the SPSS Text Editor Software periodically for preliminary analysis, as the data collection process is in progress. This is important because, in qualitative research, data collection and data analysis are simultaneous stages, with new analytic steps informing the process of additional data collection and new data informing the analytic processes (Lyn, 2005); Merriam, 1998).

1.9.9. Ethical Considerations

Ethical considerations represent a moral stance that involves conducting research to achieve not just high professional standards of technical procedures, but also respect and protection for the people actively consenting to be studied (Payne & Payne, 2004). This study adhered to ethical research considerations and professional guidelines. The researcher ensured that relevant research permits were obtained before the commencement of data collection. During data collection, the researcher and his assistants explained the aim and significance of the study to respondents, in order to get their consent. The information collected was treated with confidentiality and was to only be utilised for academic purpose. The survey questionnaire avoided personal questions that could embarrass and/or annoy the respondents. Subsequently, the study adhered to the research ethics policy of The University of Nairobi.

CHAPTER TWO: LOCALISATION, ACCEPTANCE AND USABILITY

2.1. Localisation

Localisation is one of the concepts that has made its way into translation studies over the recent years (Charalampidou, 2006; (Pym, 2011). Localisation is defined as the process of software system adaptation (including websites) to a particular locale, in order to make it present an image of a locally developed system, which aims at that very locale (Sasikumar & Hegde, 2004). The LISA, operational from 1990 to 2011 defines localisation as the process that "involves taking a product and making it linguistically and culturally appropriate to the target locale/country/region and language where it will be used and sold" (Pym, 2005, P. 17). Consequently, locale can be defined as a group of persons with a common language, writing, and other system features that may require a separate version of a product (Charalampidou, 2006). This may be a region/location/ country or area. Several aspects emerge from the localization definition posited by LISA (2003) (as quoted by Pym, 2005).

First, the definition takes cognizance of the fact that one language may not be the only one used in an area/ location/country. For instance, in Kenya, there are 2 official languages (English and Kiswahili), with almost other 42 ethnic languages. Also, Belgium has 3 official languages (German, French and Flemish). On the other hand, one language may be the only recognized and used language in some other countries and regions-for example, the use of Spanish language in Spain. Secondly, the definition recognizes that appropriateness in localisation extends beyond the consideration of language only (Charalampidou, 2006). This is because, despite persons from different regions speaking similar language, they may possess linguistic and non-linguistic differences. For instance, the Kenyan Kiswahili dialect differs from the Kiswahili used in Tanzania, Uganda or Rwanda. Further, cultural symbols such as flags may differ. Furthermore,

for any translation and localisation to be a success, the source material and the target market has to be understood very well, and the language and culture knowledge has to be understood deeply as well. Sasikumar & Hegde, (2004) categorises localisation in mobile phones as display localisation, language localization, cultural localization and device localization. Display localisation refers to the capability of rendering a source text into a target language (local language). Display localization involves building of modules, which are able to display text local in the script rather than the pervasive Roman Script. Subsequently, Language localization involves the adaptation of the user interface to the target language (local language). This encompasses the translation of all the system text to the local language, and then the modification of the software to use it rather than its original language material. Further, cultural localization involves making the software as culturally convenient and acceptable as possible to the target community. The concern of cultural localization is in the use of metaphors, icons, and message conventions that resonate with the locals. Great care should be taken during cultural localization in order to avoid unnecessary confusion. Sasikumar & Hegde (2004) claim that due to lack of a trash can notion in rural areas, its icon could easily be confused for a file folder or mail box. Finally, Device Localization entails the development and usage of input and output devices that are suited to the local cultures and languages. For instance, the use of QWERTY keyboard has been found to be unacceptable for entering alphabet and phonetic rich languages such as those in India (Sasikumar & Hegde, 2004). Therefore, designing keyboard equivalents for entering texts for these kinds of languages have to be put into consideration during the localization of a mobile phone product. Following the localization categorisation by (Sasikumar & Hegde, 2004), this study focused on language localization.

2.2. Localization of Technological Products and Services

2.2.1. Introduction

In the recent past, African economies have been making great strides in technological advancements. In fact, according to (Spoone, 2011), Africa today is keeping up with the global competition in terms of inventions and marketplace for ICT. One of the standout innovations in Africa has been in the area of apps (application software). An app is an abbreviation for the word "application", which is defined as a specialized program software downloaded onto mobile devices (Dictionary.com, 2014; Rouse, 2014). It has been argued that most African apps have been developed to meet the local market needs and situations of the African continent (Spoone, 2011). One of the apps in Africa that has gained world`s attention has been the M-Pesa app. M-Pesa app is claimed to be the most utilised app in the world (Spoone, 2011). M-Pesa being an app that is based on the mobile text messaging application, it is more accessible to many a people (Spoone, 2011). Complimenting this argument is the high growth of mobile penetration in Africa.

Despite the great strides made in Information and Communication Technologies in Africa and other developing countries, its benefits might not be reaching the lower rungs of the society. The reason cited for this, is the inability to use the technologies because of mismatch in language and culture (Kamau, 2007) (Sasikumar & Hegde, 2004). To solve this problem, localization efforts have been cited as one of the ways of alleviating the language and culture mismatches that have been found to be one of the reasons for the technological products and services not achieving their full potential in developing nations.

Kamau (2007) argues that since the spread and the usage of technology is language based, and most African countries acquire these technologies in foreign languages, a large percentage of persons end up not understanding them and thus, may not use them. It is in this regard that there is need for the utilisation and incorporation of African languages in the spread and usage of ICT. Accordingly, this incorporation of African languages in ICT helps remove language barriers for those who cannot understand the foreign language and hence help ensure that the benefits and services of a technology reach the lower rungs of the community. It is against this backdrop that some technological companies operating in Africa have ensured that they localise their products in African local languages. One of the African languages that has greatly benefited has been the Kiswahili language.

2.2.2 Localisation into Kiswahili Language

In a bid to bringing ICT accessibility to East and Central Africa, two re-known computer software developers- Linux and Microsoft started localisation of their software by the use of Kiswahili language (Kamau, 2007). This made Kiswahili the first African language to be utilised in computers. According to (Kamau, 2007), the reasons for this localization was twofold. First, was to help bridge the digital divide gap existing between developed and Africa, and second, was to help these two companies expand their African markets. (Kamau, 2007) enumerates the reasons that made Kiswahili language the most ideal language for the spread and usage of ICT in East and Central Africa. The reasons include:

a) Kiswahili language having carved its niche in higher learning institutions globally. (Kamau, 2007) argues that Kiswahili has been the Lingua Franca for East Africa since the 19th century and that its popularity has tremendously grown beyond its

confirms, to include Europe, USA, Asia and far East countries, where it is also taught in their universities. This makes it the indigenous language that can easily and efficiently be used for localization.

b) It has been claimed that learning Kiswahili language is easy because its phonetic, has less spelling and pronunciation difficulties (Mwaro 2002, Iraki & Maroa, 2008, Katembo (2005) as cited by Kamau, 2007). According to Mwaro (2002), as cited by (Kamau, 2007), Kiswahili has the ability to incorporate and assimilate with words from other languages and thus making it easier to understand and learn by individuals from other language groups in Africa. In fact, Amatubi (2002) posits that most European visitors to Kenya get to learn and understand Kiswahili in their first year of stay, just as it was the case with the colonial rulers and missionaries.

c) Mazrui & Mazrui (1995) argue that Kiswahili is a language, which handles technological terminologies much easier through the method of coinage. Already, some universities and companies have made efforts in development of Kiswahili glossaries for the ICT sector (Ryanga, 2002).

d) Further, Kiswahili language is the only African language that is used by international media houses for broadcasting and publishing (Kamau, 2007). The media houses that utilise Kiswahili language in their broadcasts include British Broadcasting Corporation (BBC) and Radio Japan.

e) Furthermore, (Msanjila 2002) posits that Kiswahili language has an estimated 60 Million speakers in East and Central Africa and some other parts of the Sahara desert. Additionally, according to (Katembo 2005), Kiswahili language has an estimated worldwide user base of 100 Million.

In Kenya, Kiswahili language is "the language of communication almost everywhere between people from different linguistic communities - at home and in public institutions" (Wachira, 2006). Further, Wachira (2006) argues that Kiswahili is a Lingua Franca that is generally spoken, and understood by the majority of Kenyans, irrespective of their regional and educational background. Furthermore, section seven of the Kenyan constitution declares Kiswahili as both a national and official language (Wahome, 2010). Moreover, Kiswahili acts as a unifying medium of communication because of its easy comprehension cutting across majority of the Kenyan populace as has been argued by (Wachira, 2006). Additionally, the constitution of Kenya has made it mandatory for most if not all government documents to be translated to Kiswahili language. Companies have vigorously increased localisation of their products and services from English to Kiswahili to enhance their acceptance and usability among the majority of Kenyans. The enhancement of product acceptance arises from the argument that Kiswahili has gained popularity and acceptance from various groups due to its usage of lexical terms from the local languages (Habwe, 2009).

2.2.3 Acceptance And Usability of the Kiswahili Localisation

Various individuals have defined usability in various terms. Nevertheless, there has been no unanimity on one definition of usability within the community of Human Computer Interaction (Osterbauer, 2000). According to (Preece et al., 1994), usability is defined as "a measure of the ease with which a system can be learned or used, its safety, effectiveness and efficiency, and attitude of its users towards it". Further, (Nielsen & Levy, 1994) defines the usability of a computer system using the following attributes: efficiency, learnability, memorability, errors, and satisfaction. Additionally, ISO 9241-11 describe usability as "the extent to which a product

can be used by specified users to achieve specified goals with effectiveness, efficiency and satisfaction in a specified context of use" (Madan & Dubey, 2012). From the aforementioned definitions, it can be deduced that the concern in the usability of an application is to generally make it acceptable and easy to use (Daniel, Oludele, Baguma, & Weide, 2011). One of the ways of enhancing acceptance and usability of an applications is through localization of an application into the user`s language (Sandrini, 2005). Tractinsky, (2000) argues that information that has been localized into the user`s language is more accessible and easily processed than that in a foreign language.

It is from the aforementioned arguments that localisation of technological products and services into Kiswahili language is seen as a great contribution towards digitizing Africa (Kamau, 2007). According to Kamau (2007), Linux and Microsoft projects that were localised using Kiswahili language proved to be popular with the African audience. For instance, (Kamau, 2007) claims that despite Microsoft Kiswahili Office 2003 only having been launched by December 2005, already 700 downloads were experienced by January of 2006. Despite the progress made in the Kiswahili localizations, several scholars and professionals have pointed at a number of challenges in implementation, acceptance and usability of technological products by the African audiences.

First, research has established that some of the terms used during localization process may be way above the common understanding of the ordinary Kiswahili users (Kamau, 2007; World Bank Grp., 2011). These terms prove to be complex and thus can only be understood and utilised by scholars and linguists. It is no wonder a market research on M-Pesa application in 2008, had indicated that most of its trial users had preferred the English version of the menu because to

them, it was easily understood (World Bank Grp., 2011). This made Safaricom Limited to alter the M-Pesa Kiswahili language menu in order to make it less complicated and thus encourage its acceptance and increase its usability (World Bank Grp., 2011). Complex terminologies are capable of fending off prospective users of an application.

Secondly, it has been argued that the usage of different translations for similar terms by related products during localization tends to cause confusion among the users and thus leading to low acceptance and usability of a technological product (Kamau, 2007) (Sasikumar & Hegde, 2004). An example is of an English term "Airtime" being translated as "Mjazo wa simu" on the M-Pesa platform app and the term being retained as "Airtime" by similar service provider Airtel money app. Thirdly, it has been argued that the usage of mixed language (such as English and Kiswahili) in the localized version of an application tends to reduce its acceptance and usability (Weir & Lepouras, 2001). In these applications, you find that during localization, some texts are maintained in English as others are translated into the local languages (such as Kiswahili). This leads to a peculiar mix of languages in an application meant to be localized, with no specific rationale. Eventually, this inconsistency in language use brings with it the extra burden of comprehension to the user, who may then resort to using the original (English) version of the application (Weir & Lepouras, 2001).

Fourthly, according to (Kamau, 2007), most Kiswahili language speakers do have a negative attitude towards the language and thus tend to prefer the usage of English language, especially on technological and official matters. Research has found this to be quite evident in Kenya and Uganda (Kamau, 2007). In Tanzania, the language is said to be very popular and thus effective in

30

spreading technological advancements in lower rungs of its community. Accordingly, terminology problems have been identified as another challenge to the acceptance and usability of a localized application platform. The argument posited by (Lepouras & Weir, 2001) is that; whenever English language software is translated to a local language, decisions are taken on mapping from English terms to local terms. Inevitably, some measure of arbitrariness is attached to this procedure. In consequence, some aspects of localized software may appear stranger to the local audience than the English (foreign language) original. This explains why many users when faced with a choice between a localized (fully translated) application and an English language original, express a preference for the latter

This study sought to establish whether the aforementioned challenges may be the cause for the low acceptance and usability of the Kiswahili language menu of M-Pesa Application in Kenya. The results were to help form the basis for recommendations of relevant adjustments on the Kiswahili language menu of the M-Pesa Application, in order to improve its usage among the individuals who cannot use the English version.

CHAPTER THREE: DATA ANALYSIS, DISCUSSION AND INTERPRETATION

3.1. Introduction

This chapter presents data analysis, discussion and interpretation. The sample size comprised of Thirty (30) M-Pesa users and three key informants from Nairobi County. Various charts were used in the presentation of data.

3.2. Respondents overview

The researcher intended to administer 30 questionnaires and three key informant interviews. Only 23 responses were received from the 30 questionnaires administered and thus representing a response rate of 77%. Consequently, 3 in-depth interviews were conducted to gather the qualitative data. All the 23 questionnaires were analysed using SPSS version 20. The 3 interviews were recorded and analyzed thematically.

3.3. Demographic information

The respondents were categorised into their physical residential locations, gender, highest educational level, and occupation.

3.3.1. Physical location of the respondents

The total number of the respondents was 23. Of this, 35% were from the city, 52% were from the urban areas, and 13% were from the rural areas (See figure 1). This depicted that the majority of the respondents were from urban area, followed by respondents from city, and then rural areas.
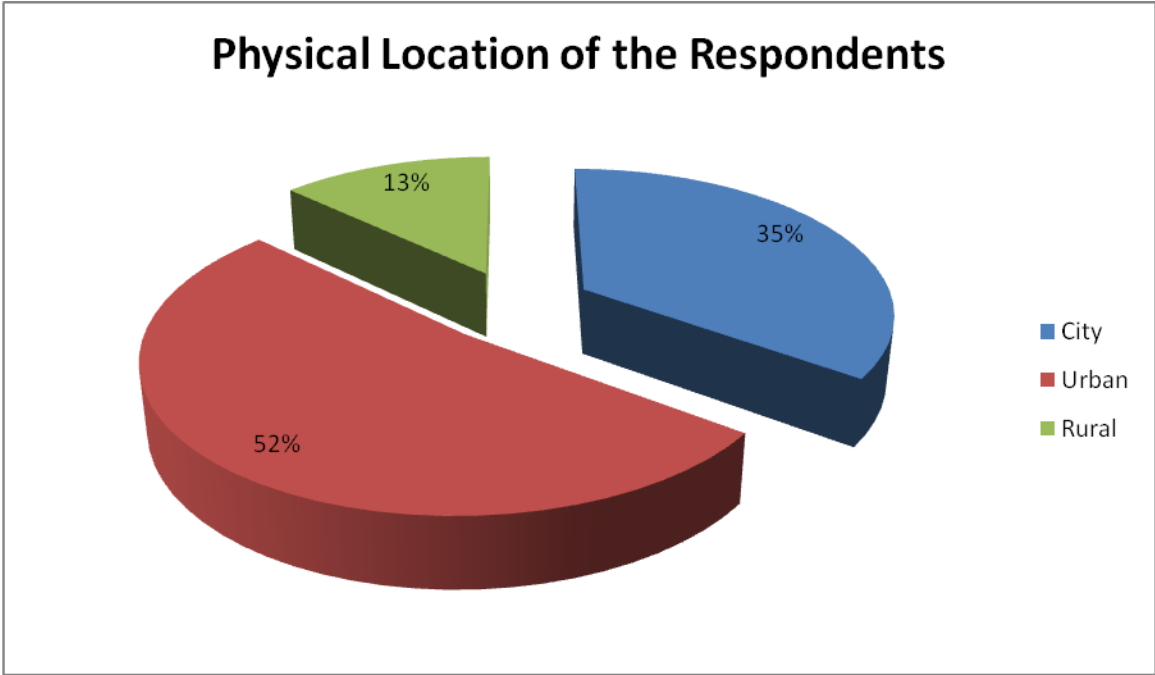
Figure 1: Physical location of the respondents

3.3.2. Educational levels of the respondents across gender

- Figure 2 shows that among the females, 11% of the respondents who were educated up to primary level, another 11% up to secondary level, 22% up to tertiary level, and 56% up to the University level.

- Subsequently, among the males, 7% were educated up to secondary level, 14% up to tertiary and 79% up to university level.
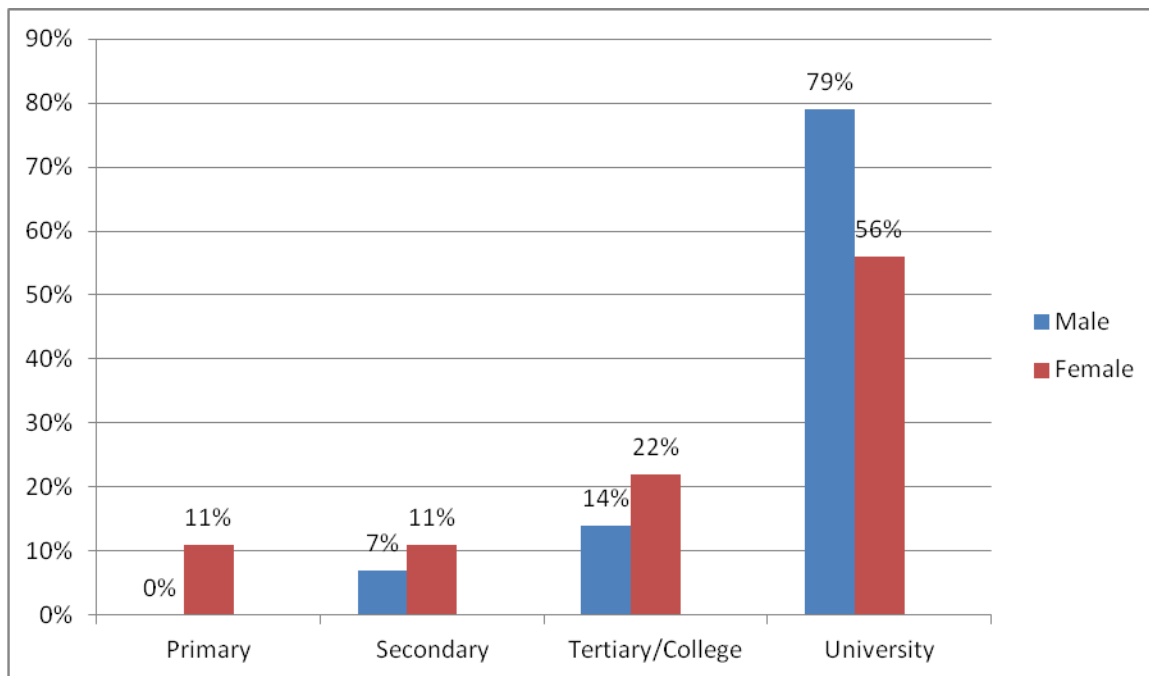
Figure 2: Educational Levels of the respondents across Gender

3.3.3. Occupation of the respondents across gender

- Figure 3 shows that among the Female respondents, 48% of the respondents were in white-collar occupation, 9% in Jua kali occupation, 13% were business persons, and 30 % were students.

- Consequently, among the Male respondents, 43% were in white-collar occupation, 21% were business persons, and 36% were students.

Figure 3: Occupation of the respondents across gender

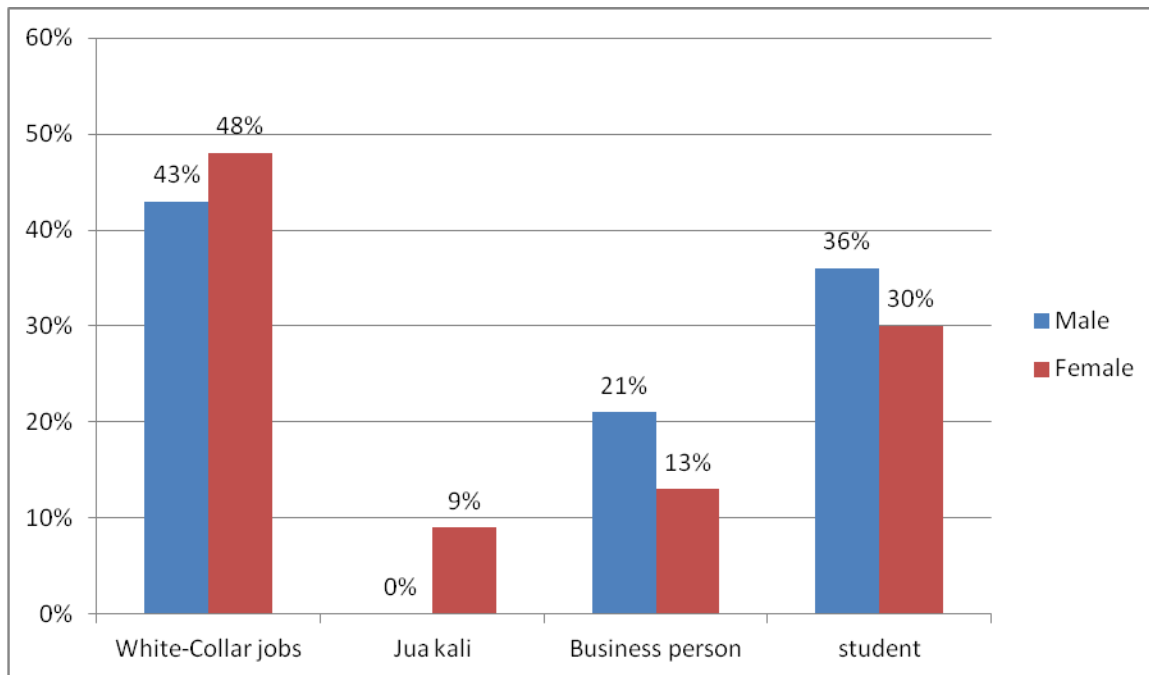**3.4. Public Awareness of the existence of the translated Kiswahili M-Pesa language menu**

- 65% of the respondents indicated that they were aware of the existence of the translated Kiswahili M-Pesa language menu.

- 35% of the respondents indicated that they were unaware of the existence of the translated Kiswahili M-Pesa language menu.

- The 65% of the respondents who indicated that they were aware of the existence of the translated Kiswahili M-Pesa language menu is in contrast with the views of the key informants on the levels of awareness (see 3.8.1). consequently, the 35% of the respondents who indicated that they were unaware of the existence of the translated Kiswahili M-Pesa language menu could have come about from what the key informants argued as the lack of public sensitization about the existence of Kiswahili menu by the M-Pesa service provider (Safaricom) and the hidden nature and long process of accessing the Kiswahili menu (see **3.8.1).**
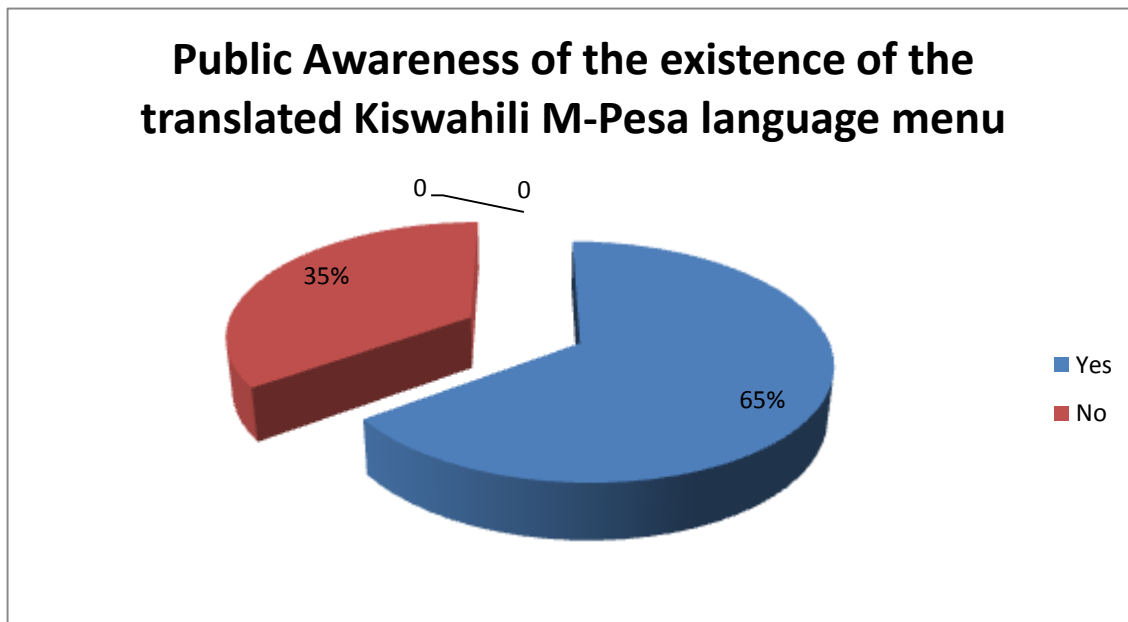

Public Awareness of the existence of the translated Kiswahili M-Pesa language menu

0 —— 0

35%

65%

■ Yes
■ No

Figure 4: Occupation of the respondents across gender

3.4.1. How the respondents became aware of the existence of the translated Kiswahili M-Pesa language menu

- Figure 5 indicates that 13% of the respondents became aware of the existence of the translated Kiswahili M-Pesa language menu through internet, 39% through friends, and another 13% through the social media. This is a further indication that more awareness campaigns need to be carried out through mainstream media and social media to increase the public awareness levels about the existence of the Kiswahili menu.
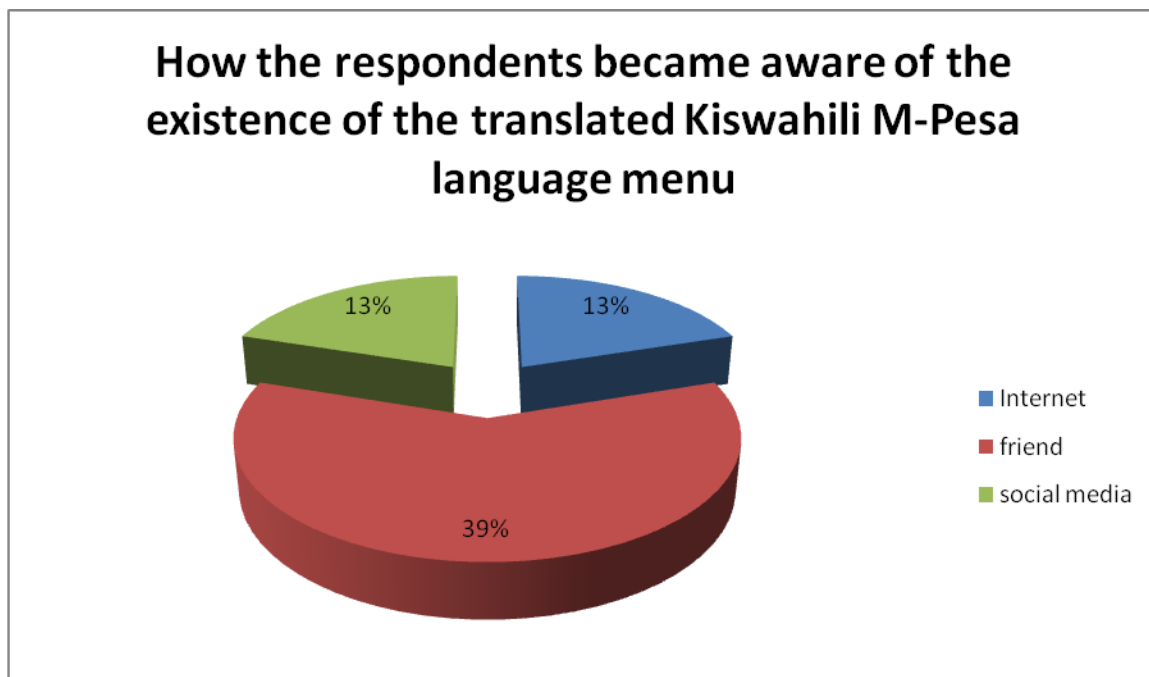

Figure 5: Public Awareness of the existence of the translated Kiswahili M-Pesa language menu

3.4.2. The reason for the lack of awareness about the existence of the translated Kiswahili M-Pesa language

- Figure 6 shows that among the respondents who stated that they were unaware of the existence of the translated Kiswahili M-Pesa language menu, 4% of them indicated that it was due to lack of interest.

- 39% of the respondents indicated that they were unaware of the existence of the translated Kiswahili M-Pesa language menu because they were not informed. This result can be supported by the arguments of the key informants who claim majority of Kenyans are not informed about the existence of the translated Kiswahili, and thus the need for awareness campaigns about the same.
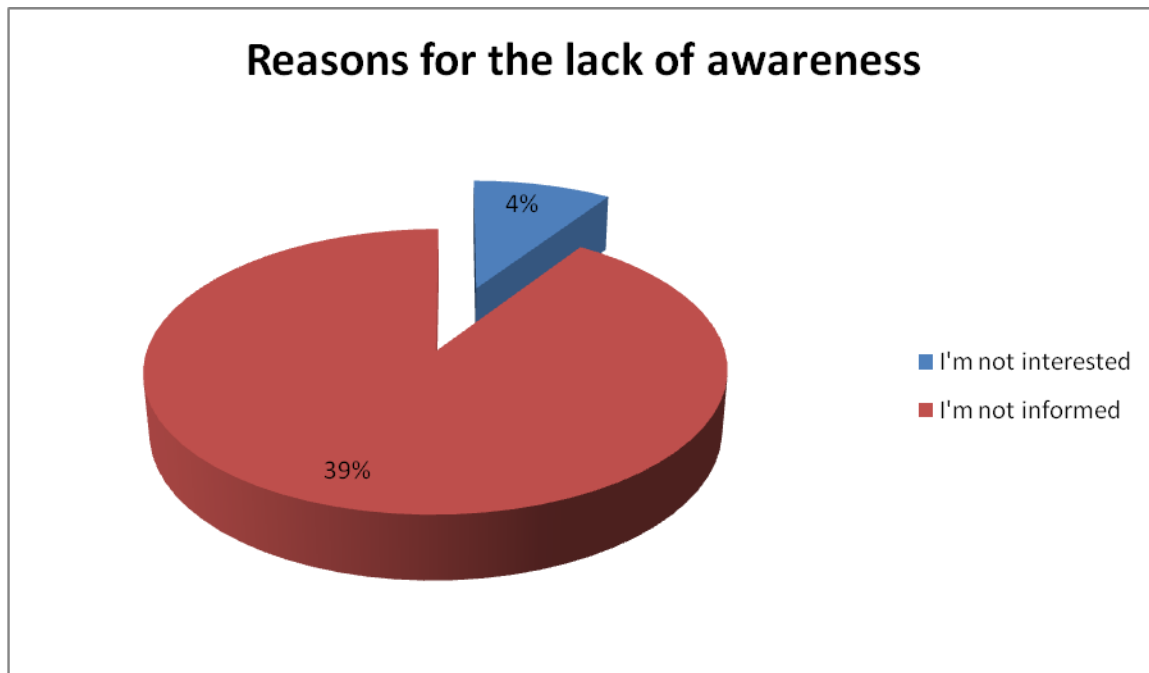

Figure 6: Reasons for lack of awareness

3.5. The Public Acceptance and Usability of the Kiswahili M-Pesa language menu

- Here, the findings on the public`s extent of acceptance and thus usability of Kiswahili M-Pesa language menu is presented.

- As can be seen from figure 7, 35% of the respondents indicated that they have used the translated Kiswahili M-Pesa language menu. Conversely, 65% of the respondents indicated that they have never used the translated Kiswahili M-Pesa language menu.

- From the above findings, it is clear that despite majority of the public (65%) being aware of the existence of Kiswahili M-Pesa menu, still, on a few have accepted and uses it. This argument is further supported by the claims of Key informants who contend that generally, Kiswahili menu in technological applications is not accepted and used in Kenya (see 3.8.2).
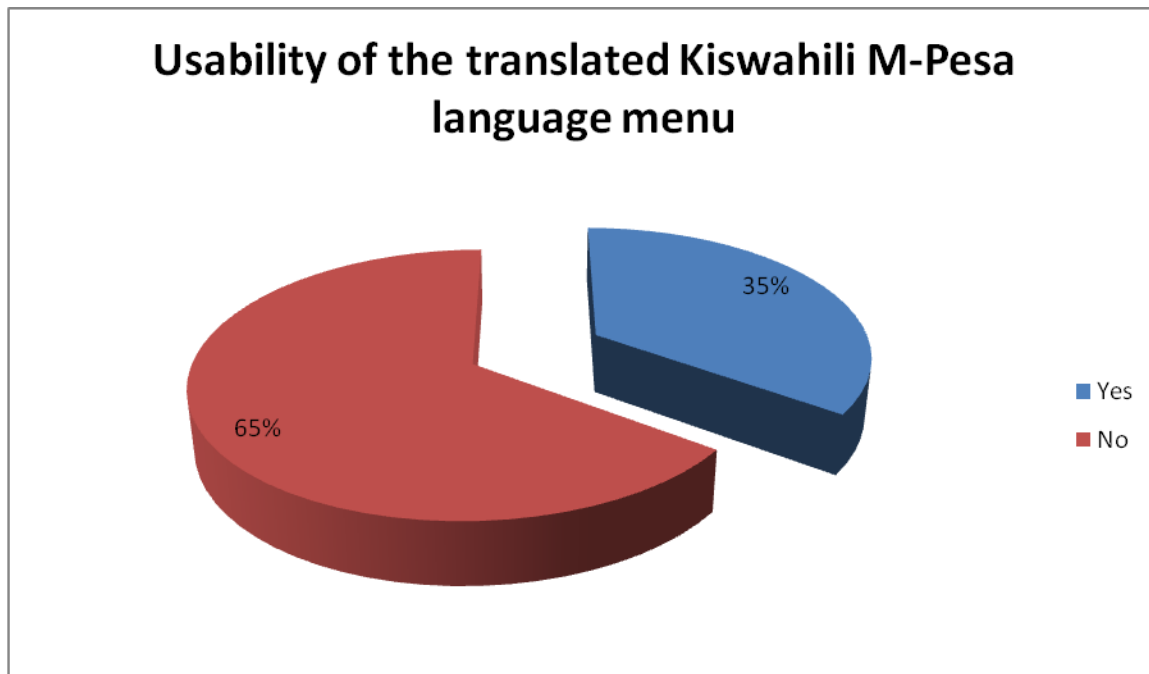
Figure 7: Usability of the translated Kiswahili M-Pesa language menu

3.5.1 How often do you use the translated Kiswahili M-Pesa language menu in your M-Pesa Transactions?

- From the respondents that confirmed to have used the translated Kiswahili M-Pesa language menu, 9% indicated that they use it regularly, 13% occasionally, and 22% rarely (see figure 8).

- These percentages further indicate that even among those individuals who have attempted to use the Kiswahili M-Pesa menu, they rarely use it.
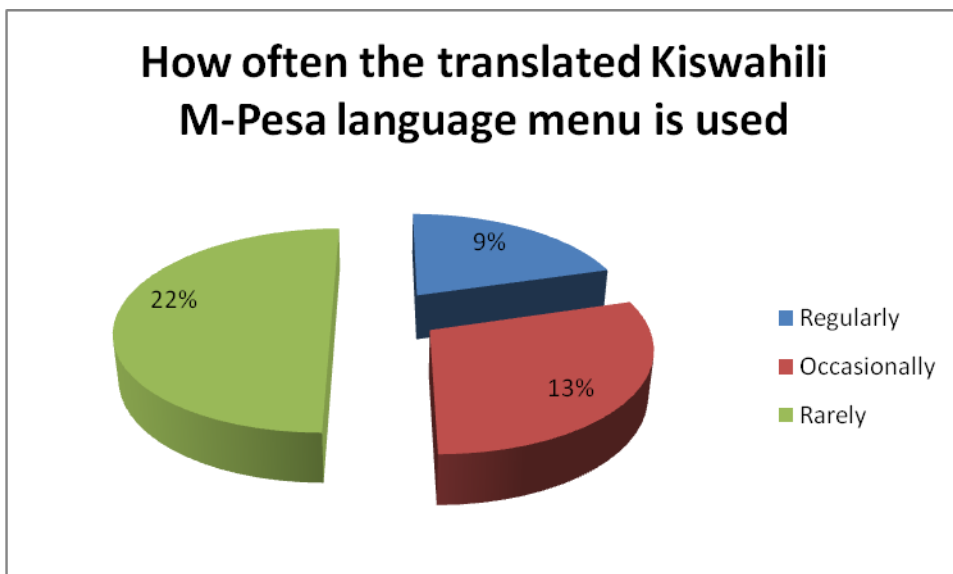

Figure 8: How often the translated Kiswahili M-Pesa language menu is used

3.5.2. Why do you use the translated Kiswahili M-Pesa language menu in your M-Pesa transactions?

- Figure 9 show that 9% of the respondents used the translated Kiswahili M-Pesa language menu because it is easily understood. Subsequently, another 9% of the respondents indicated that they use the translated Kiswahili M-Pesa language menu because they are proficient in Kiswahili. This finding of proficiency is supported with the claims of the key informants about the same (see 3.8.3).

- 13% of the respondents indicated that the reason for their usage of the translated Kiswahili M-Pesa language menu was national pride. Consequently, another 13% of the respondents indicated that they were unsure as to why they used the translated Kiswahili M-Pesa language menu.

- The 13% of the public that indicated not to be sure as why they use the Kiswahili M-Pesa menu can be explained by the argument of the Key informants who claimed that it might be because of wanting to be unique or they are of low education standing (see 3.8.3).
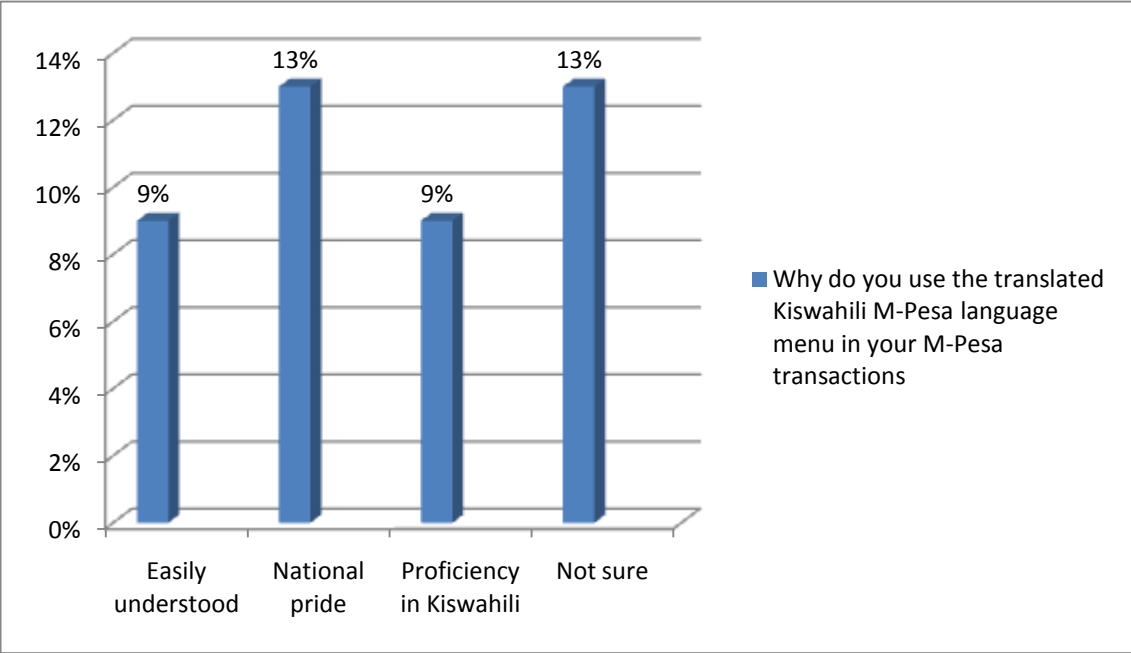
Figure 9: Reasons for using the translated Kiswahili M-Pesa language menu

3.5.3. Reasons for not using the translated Kiswahili M-Pesa language menu

- Figure 10 depicts that 17% of the respondents did not know why they were not using the translated Kiswahili M-Pesa language menu. This can be explained by the argument of key informants that the existence of the English words in the Kiswahili M-Pesa language menu also tends to scare users a bit since; they fear that they may get confused or meet unknown term during their transactions.

- 13% of the respondents indicated that use of unfamiliar terms in the Kiswahili M-Pesa menu was the reason for them not using the Kiswahili language menu.

- Another 13% of the respondents indicated that the Kiswahili M-Pesa menu was hard to understand and thus not using it. This finding seems to relate to the claims by the key informants that the Kiswahili M-Pesa language menu uses some hard terms that may not be easily understood by all. (See 3.8.4).

- 9% and 4% of the respondents indicated being poor in Kiswahili and improper translation respectively as being the reasons for not using the Kiswahili M-Pesa language menu.

- 9% of the respondents pointed at the Kiswahili language lacking clarity and thus their shunning it.
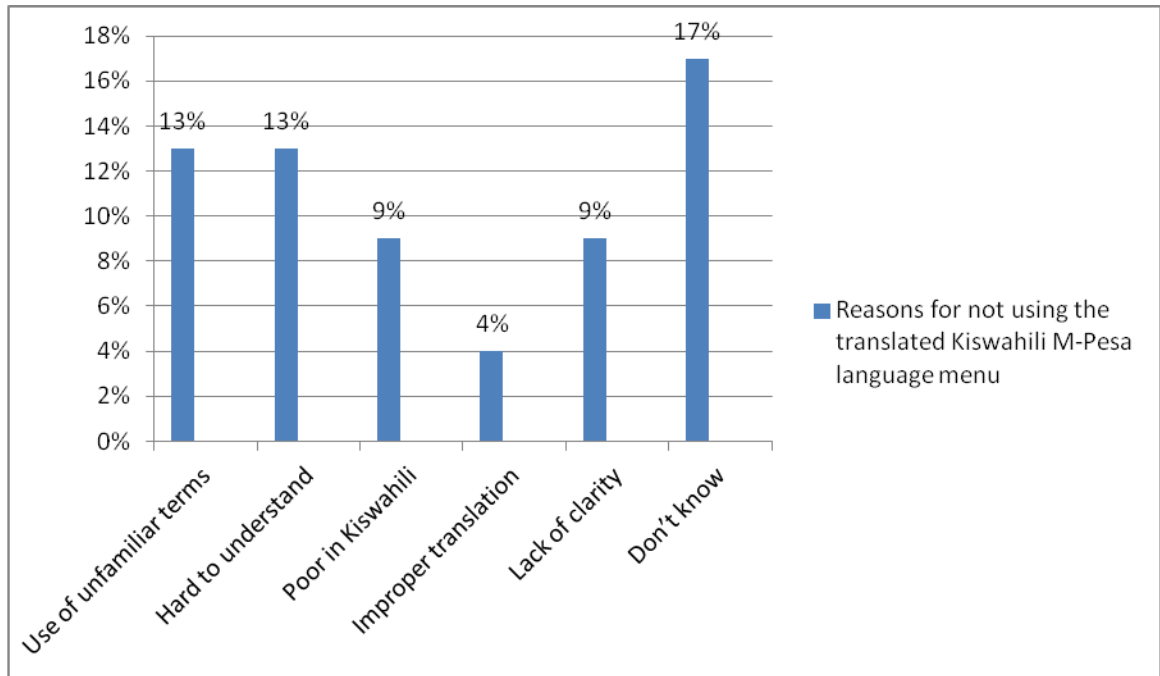
Figure 10: Reasons for not using the translated Kiswahili M-Pesa language menu

3.6. Assessing the public usability of the translated Kiswahili M-Pesa language menu vis-à-vis the English language menu;

- Here, the findings on the level of public usability of the translated Kiswahili M-Pesa language menu vis-à-vis the English language menu are shared.

3.6.1. Public usability of the translated Kiswahili M-Pesa language menu vis-à-vis the English language menu

- Figure 11 shows that 17% of the respondents indicated to using the Kiswahili M-Pesa language menu in their transactions.

- 83% of the responds indicated that they prefer using the English M-Pesa language menu. This preference of English M-Pesa menu can be attributed to the menu having been the original language of the app (M-Pesa) and the lack of public awareness about the existence of Kiswahili menu.

Public usability of the translated Kiswahili M-Pesa language menu vis-à-vis the English language menu

17%

83%

■ Kiswahili M-Pesa language menu

■ English language menu
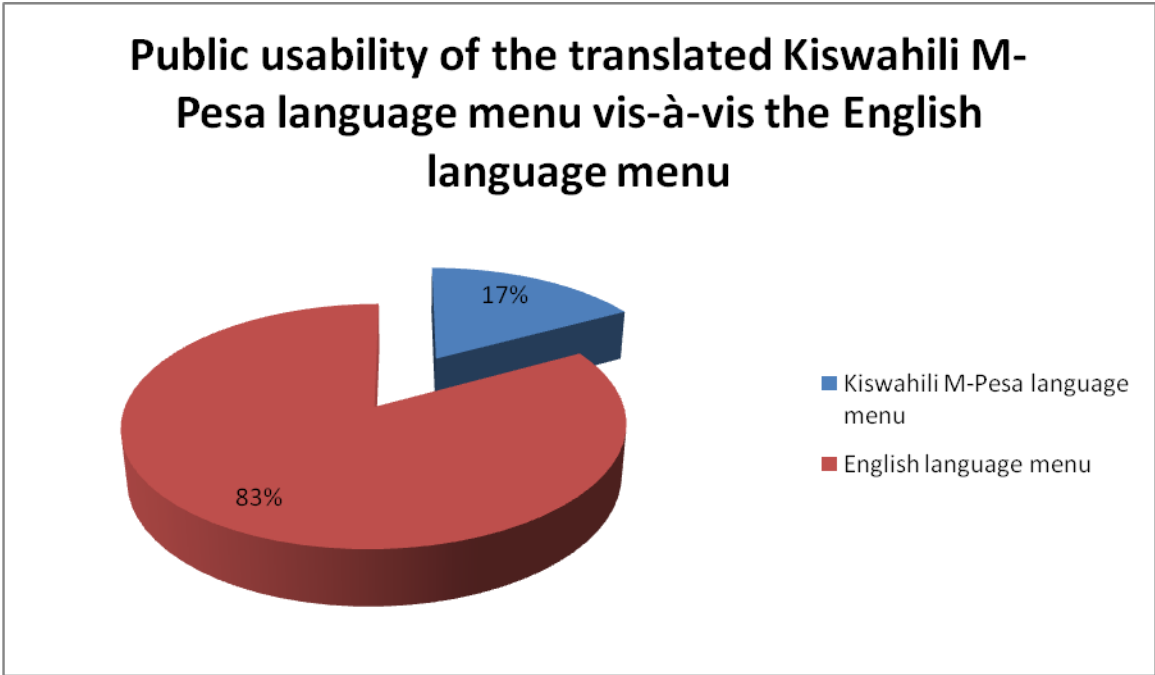
Figure 11: The public usability of the translated Kiswahili M-Pesa language menu vis-à-vis the English language menu

3.6.2. Reasons for the preference of the English language menu vis-à-vis the Kiswahili

language menu:

- Figure 12 shows that 26% of the respondents indicated that they prefer using the English language menu over the Kiswahili language menu because it uses familiar terms.

- 35% of the respondents pointed at ease of understanding as the reason for their preference of the English language menu vis-à-vis the Kiswahili language menu. This concurs with the claims of Key informants that the English language uses familiar terms that are easy to understand by even those with low education standing.

- 17% and 4 % of the respondents pointed at ease of usage and proficiency in English respectively, as the reasons for their preference of the English language menu vis-à-vis the Kiswahili language menu.

- Another 4% of the respondents indicated that their preference of the English language menu vis-à-vis the Kiswahili language menu was because they wanted to be sure with their transactions.

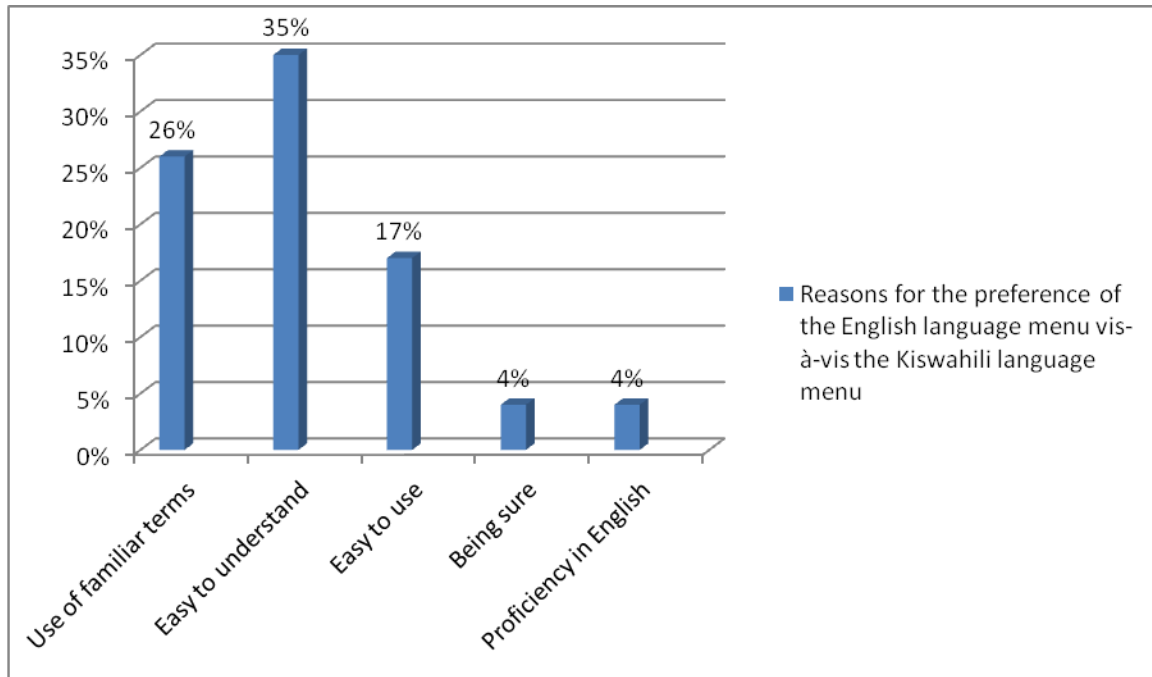**Figure 12: Reasons for the preference of the English language menu vis-à-vis the Kiswahili language menu**

3.7. Assessing the public attitude and perception on the translated Kiswahili M-Pesa language menu.

- Here, the public`s attitude and perception about the translated Kiswahili M-Pesa language menu is sought.

3.7.1. Interest in using the translated Kiswahili M-Pesa language menu

- Figure 13 shows that 39% of the respondents indicated that they were very interested in using the translated Kiswahili M-Pesa language menu. Consequently, 17% of the respondents indicated that they were fairly interested in using the translated Kiswahili M-Pesa language menu.

- 22% of the respondents indicated not to be very interested in using the translated Kiswahili M-Pesa language menu.

- 17% of the respondents indicated not to be at all interested in using the translated Kiswahili M-Pesa language menu.

- 4% of the respondents indicated that they did not know why they were using the translated Kiswahili M-Pesa language menu.

- Since the majority of respondents seem to be interested in using the Kiswahili M-Pesa menu, it is therefore important that concerted efforts are made sensitize people about the Kiswahili menu and its terminologies simplified and uses familiar terms.
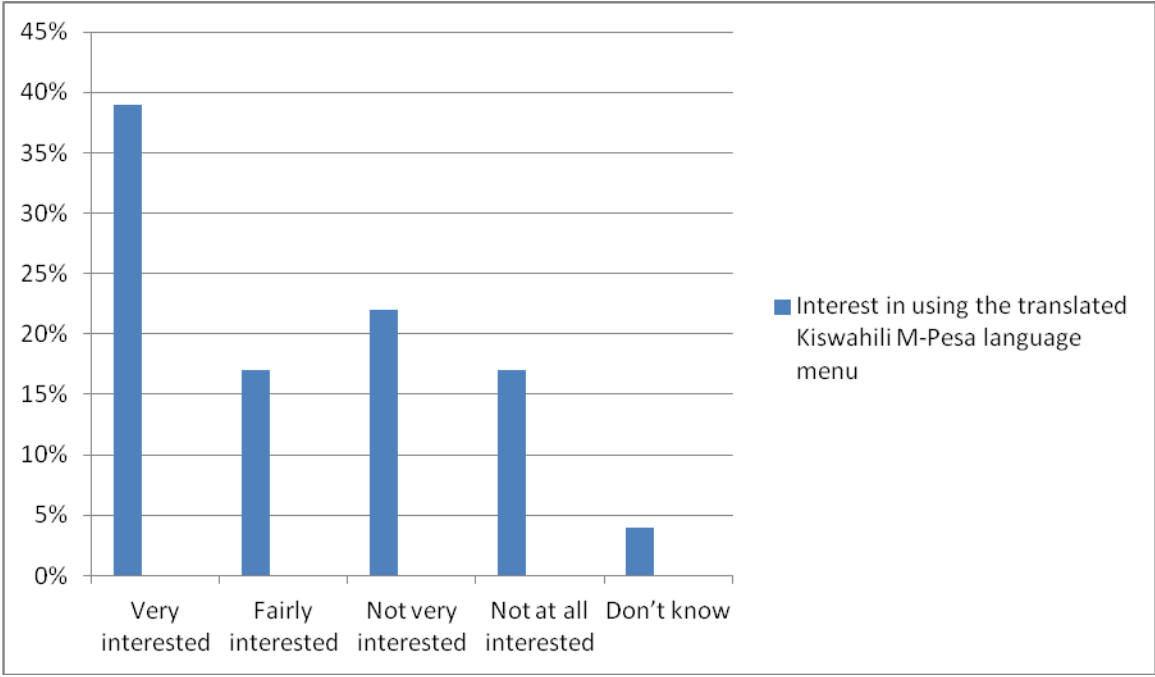
Figure 13: Interest in using the translated Kiswahili M-Pesa language menu

3.7.2. Attitudes towards the translated Kiswahili M-Pesa language menu

- Figure 3.7.2 shows that 22% of the respondents indicated positive attitude towards the translated Kiswahili M-Pesa language menu.

- 17% of the respondents disliked the translated Kiswahili M-Pesa language menu.
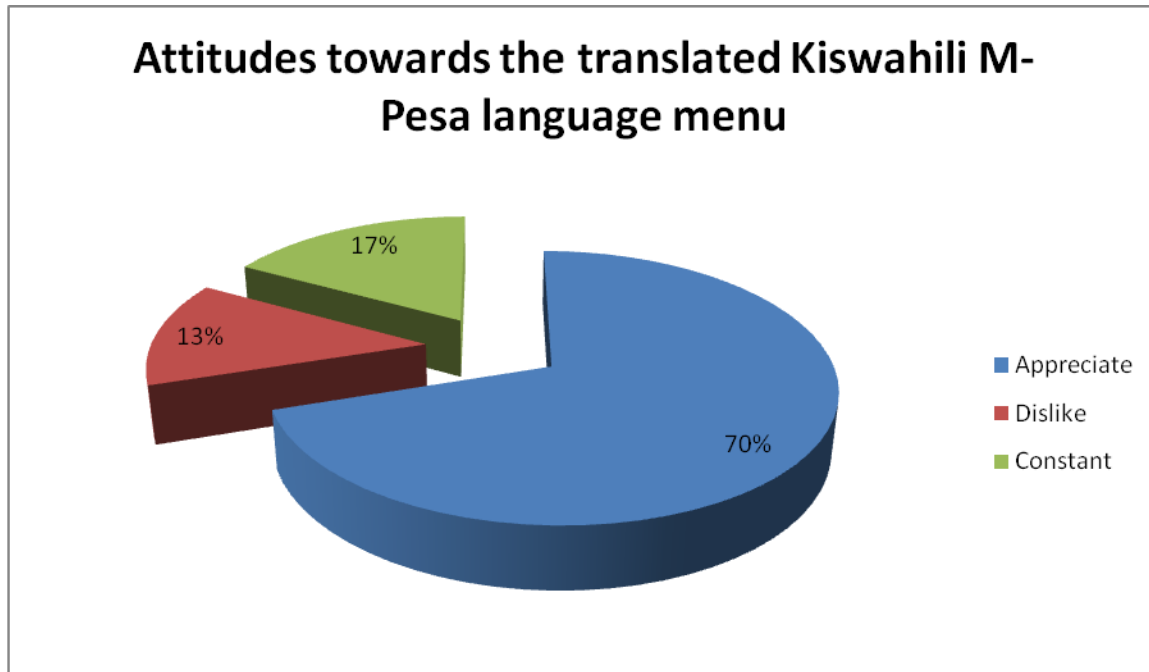
Figure 14: Attitudes towards the translated Kiswahili M-Pesa language menu

3.7.3. Whether the translated Kiswahili M-Pesa language menu is important

- Majority of the respondents (91%) indicated that the translated Kiswahili M-Pesa language menu is important

- None of the respondents felt that the Kiswahili M-Pesa language menu is important

- According to the key informants, even though the users of M-Pesa appreciate and feel that the translated Kiswahili M-Pesa language menu is important, very few individuals do actually use it. This is attributed to the key informants' argument that Kiswahili language is associated with the illiterates, low class individuals. Accordingly, the key informants argue that many users eschew using Kiswahili language menu because they perceive it as being complex.
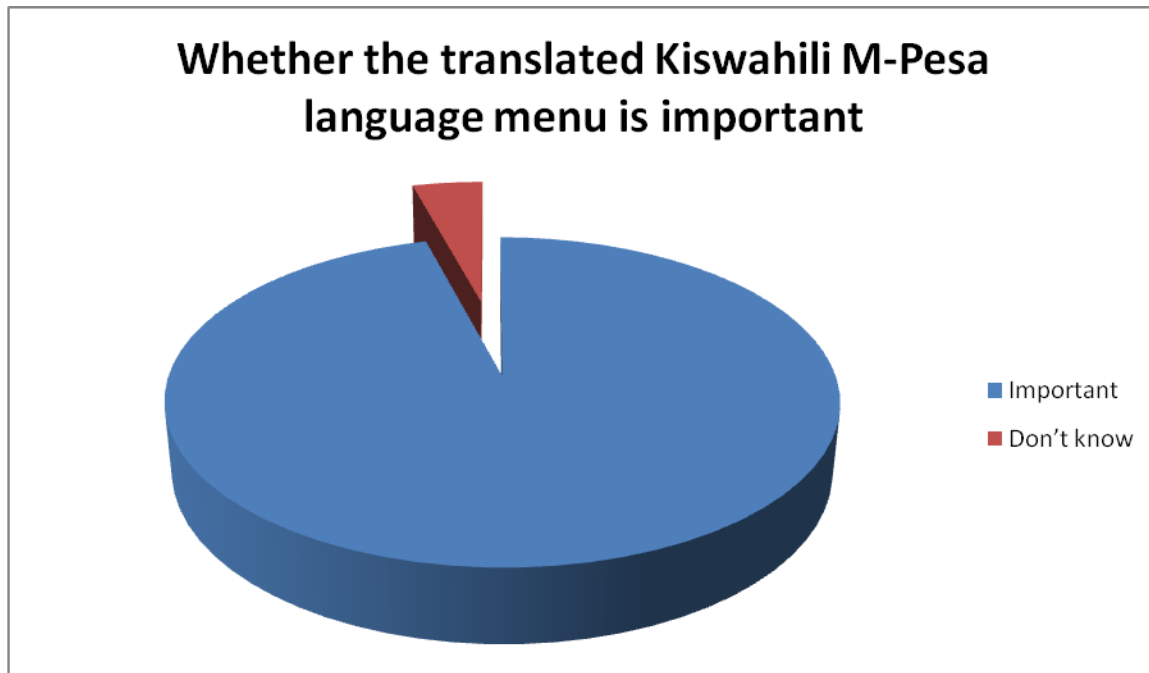
Figure 15: Whether the translated Kiswahili M-Pesa language menu is important

3.7.4. Satisfaction with the translated Kiswahili M-Pesa language menu

- 44% of the respondents indicated that they were satisfied with the translated Kiswahili M-Pesa language menu.

- 17% of the respondents indicated that they were somewhat satisfied with the translated Kiswahili M-Pesa language menu.

- Equally, 35% of the respondents indicated that they were not satisfied with the translated Kiswahili M-Pesa language menu.
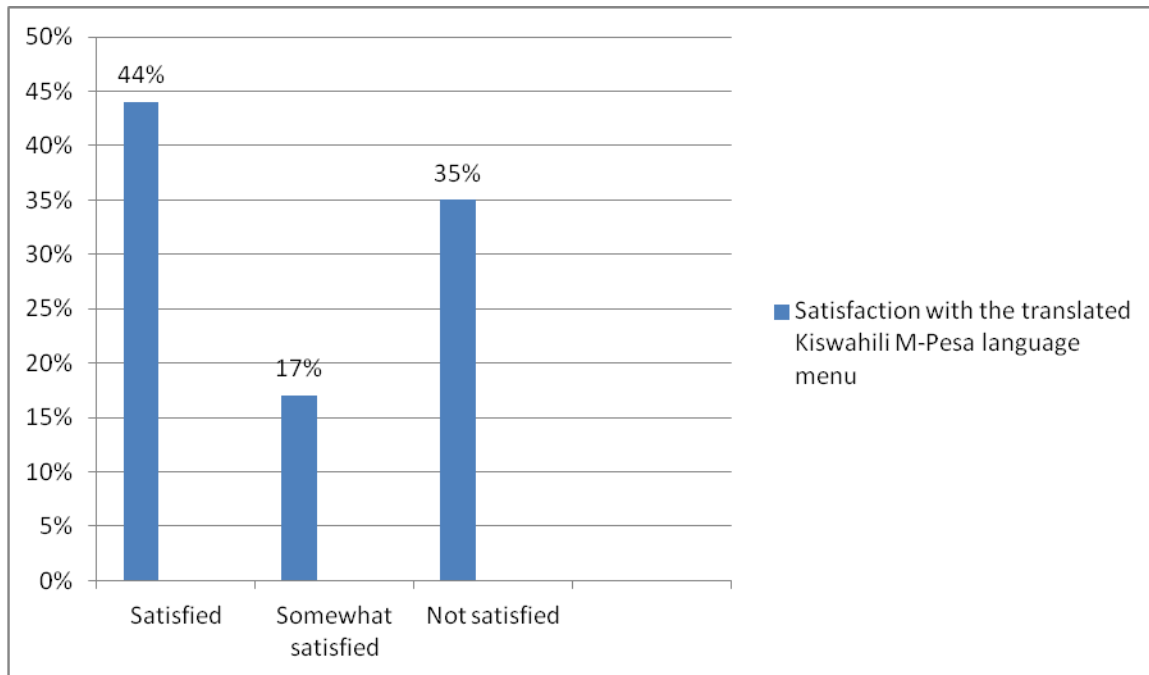
Figure 16: Satisfaction with the translated Kiswahili M-Pesa language menu

3.7.5. Reasons for the satisfaction levels suggested

- 26% and 9% of the respondents indicated that they were satisfied with the translated Kiswahili M-Pesa language menu because it uses familiar terms and has clarity respectively.

- 17% of the respondents indicated that they were somewhat satisfied and not satisfied with the translated Kiswahili M-Pesa language menu because uses unfamiliar terms.

- 9%, 22%, and 10% of the respondents indicated that they were somewhat satisfied and not satisfied with the translated Kiswahili M-Pesa language menu because of the inconsistency in translation, usage of both English and Kiswahili in the Kiswahili menu, and lack of clarity respectively.
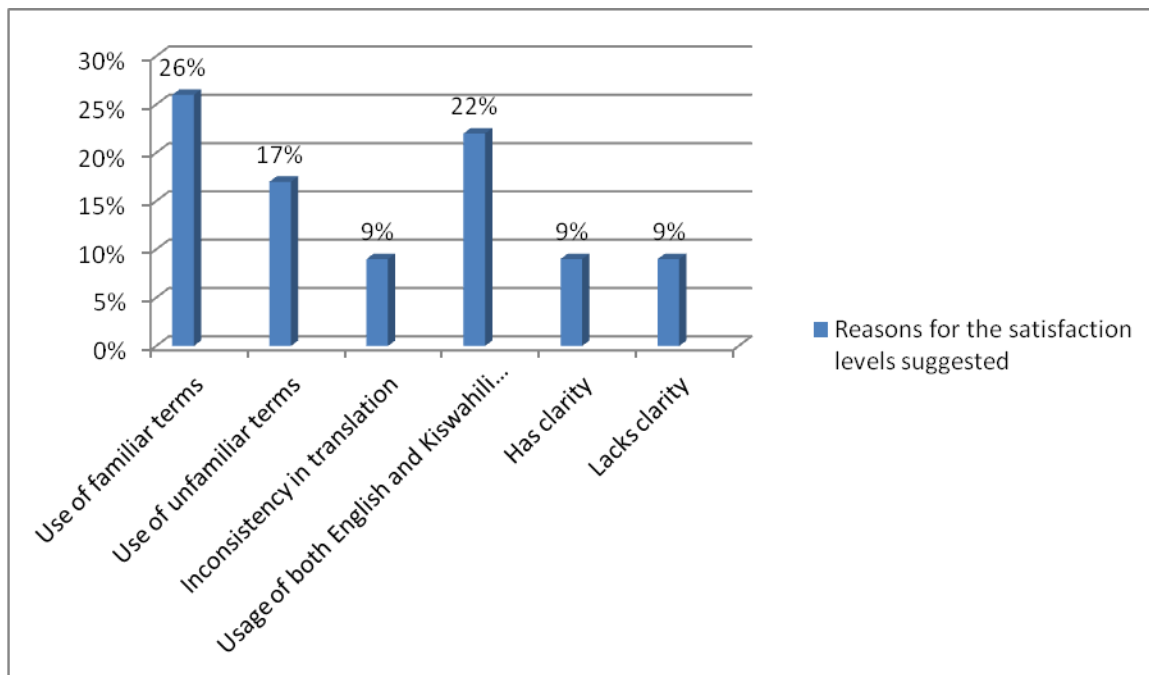
Figure 17: Reasons for the satisfaction levels experienced with the translated Kiswahili M-Pesa language menu

3.8. Key themes from the key informant interviews

The following are the findings of key themes from the Key informant interviews involving verbal administration of the interview guide to people who had expertise or experience with the topic under study. Key informant interviews provided data to answer the research questions on the acceptance and usability of Kiswahili translated M-Pesa menu. The interviews were carried out on three.

3.8.1. The level of public awareness about the existence of a translated Kiswahili M-Pesa language menu

According to the key informants interviewed, the conspicuous key themes on this subject were that:

- The level of public awareness about the existence of the translated Kiswahili M-Pesa language menu was low. This was attributed to the lack of public awareness and sensitization by the service provider (Safaricom) about its existence. Secondly, the low levels of the awareness were attributed to the hidden nature of the menu, plus the long process of applying to use it. To access the Kiswahili menu, a user has to first go to the M-Pesa menu, then scroll down to my account, click on it, and then access the language button to choose the language to use. Furthermore, a user must input his/her M-Pesa PIN in order to change the language menu.

3.8.2 Assessment of the public acceptance level of the translated Kiswahili M-Pesa language menu

- According to the key informants interviewed, the translated Kiswahili M-Pesa language menu was not very much accepted in Kenya. This is because of its low usage, even among the Swahili community and Kiswahili scholars, who should be in the forefront in promoting it. Subsequently, the key informants claim that the Kiswahili M-Pesa language menu uses some hard terms that may not be easily understood by all. Further, it is claimed that the existence of the English words in the Kiswahili M-Pesa language menu also tends to scare users a bit since; they fear that they may get confused or meet unknown term during their transactions.

3.8.3. Assessing the public usability of the translated Kiswahili M-Pesa language menu vis-à-vis the English language menu

- The key informants contend that the English M-Pesa language menu is preferred to the translated Kiswahili M-Pesa language menu. This is because it is the original language of the app (M-Pesa). Consequently, the English language uses familiar terms that are easy to understand by even those with low education standing.

- Nevertheless, the key informants claim that for those users that prefer the Kiswahili M-Pesa language menu, it is because of wanting to be unique, having proficiency in the Kiswahili language, and others being of low education standing. Subsequently, the key informants claim that the number of Kiswahili M-Pesa language menu users can substantially go up, if enough awareness is created among the M-Pesa users.

3.8.4. Evaluating the public attitude and perception on the translated Kiswahili M-Pesa language menu.

- According to the key informants, even though the users of M-Pesa appreciate and feel that the translated Kiswahili M-Pesa language menu is important, very few individuals do actually use it. This is attributed to the key informants' argument that Kiswahili language is associated with the illiterates, low class individuals. Accordingly, the key informants argue that many users eschew using Kiswahili language menu because they perceive it as being complex. Therefore, they recommend that the Kiswahili language menu still needs to be made easier, and familiar terms used.

CHAPTER FOUR: SUMMARY, CONCLUSION AND RECOMMENDATIONS

4.1. Introduction

This chapter gives a summary of the findings, conclusions and recommendations in relation to the objectives of the research.

4.2. Summary

The study aimed at Evaluating the Acceptance and Usability of Kiswahili Localised Mobile Phone App in Kenya: A Case of M-Pesa App. To achieve this, it was guided by the following objectives:

1. To assess the public awareness of the existence of the translated Kiswahili M-Pesa language menu;

2. To assess the public acceptance level of the translated Kiswahili M-Pesa language menu;

3. To assess the public usability of the translated Kiswahili M-Pesa language menu vis-à-vis the English language menu;

4. To find out the public attitude and perception on the translated Kiswahili M-Pesa language menu.

The study utilised a mixed research design. The study targeted to collect quantitative data from 30 M-Pesa users from Nairobi County, of Kenya. The qualitative data was to be collected through in-depth interviews from three key informants. The majority of the respondents were

male at 61%, majority of them were University graduates at 70%, majority were from the white-collar occupation at 48%, and majority of them were from urban areas at 52%.

The responses from the 23 questionnaires were analyzed using Statistical Package for Social Sciences (SPSS) version 20. Consequently the three in-depth interviews conducted, were recorded, and analyzed thematically. Data was presented in graphs, percentages and thematic narratives.

The key findings of the study were:

On the public awareness of the existence of the translated Kiswahili M-Pesa language menu:

- Majority (65%) of the respondents indicated that they were aware of the existence of the translated Kiswahili M-Pesa language menu.

- Majority (39%) of the respondents became aware of the existence of the translated Kiswahili M-Pesa language menu through friends.

- Among the respondents who stated that they were unaware of the existence of the translated Kiswahili M-Pesa language menu, majority (39%) of the respondents indicated that they were unaware of the existence of the translated Kiswahili M-Pesa language menu because they were not informed.

- These findings show that much needs to be done to create awareness about the Kiswahili menu.

On the acceptance and usability of the Kiswahili M-Pesa language menu:

- Majority of the respondents (65%) indicated that they have never used the translated Kiswahili M-Pesa language menu.

- From the respondents that confirmed to have used the translated Kiswahili M-Pesa language menu, majority (22%) rarely use it.

- Majority of the respondents (13%) indicated that the reason for their usage of the translated Kiswahili M-Pesa language menu was because of national pride.

- Majority of the respondents indicated that the use of unfamiliar terms that are not easy to understand in the Kiswahili M-Pesa menu was the reason for them not using the Kiswahili language menu.

On assessing the public usability of the translated Kiswahili M-Pesa language menu vis-à-vis the English language menu:

- 83% of the responds indicated that they prefer using the English M-Pesa language menu.

- Only 17% of the respondents indicated to using the Kiswahili M-Pesa language menu in their transactions.

- 35% of the respondents pointed at ease of understanding as the reason for their preference of the English language menu vis-à-vis the Kiswahili language menu.

On assessing the public attitude and perception on the translated Kiswahili M-Pesa language menu:

- Majority of the respondents (39%) indicated that they were very interested in using the translated Kiswahili M-Pesa language menu.

- Majority (22%) of the respondents indicated positive attitude towards the translated Kiswahili M-Pesa language menu

- Majority of the respondents (91%) indicated that the translated Kiswahili M-Pesa language menu is important

- 44% of the respondents who use the Kiswahili menu indicated that they were satisfied with its translation.

- Equally, 35% of the respondents indicated that they were not satisfied with the translated Kiswahili M-Pesa language menu

- The main reason for the satisfaction from the majority users is that it uses familiar terms at 22%.

4.3.   Remarks on the Hypotheses

The study hypothesized the following:

1. At least 70% of the Kenyans are aware of the existence of the translated Kiswahili M-Pesa language menu.

2. The degree of public acceptance and usability of the translated Kiswahili M-Pesa language menu in Kenya is lower than 50%.

3. More than 50% of Kenyans have a negative attitude towards the translated Kiswahili M-Pesa language menu

4. More than 50% of Kenyans view the translated Kiswahili M-Pesa language menu as important

First, the study found out that 65% of the respondents were aware of the existence of the translated Kiswahili M-Pesa language menu. This was in contradiction with the first hypothesis, which had tentatively stated that at least 70% of the Kenyans are aware of the existence of the translated Kiswahili M-Pesa language menu.

Secondly, the study found out that 35% of the respondents indicated that they have used the translated Kiswahili M-Pesa language menu. Conversely, 65% of the respondents indicated that they have never used the translated Kiswahili M-Pesa language menu. These findings are in agreement with the second hypothesis, which tentatively stated that the degree of public acceptance and usability of the translated Kiswahili M-Pesa language menu in Kenya was lower than 50%. The key informants attributed this to the claim that generally, Kiswahili menu in technological applications is not accepted and used in Kenya.

Thirdly, the study found out that 22% of the respondents indicated positive attitude towards the translated Kiswahili M-Pesa language menu. Consequently, 39% of the respondents indicated that they were very interested in using the translated Kiswahili M-Pesa language menu. These findings are in agreement with the third hypothesis which had stated that more than 50% of Kenyans have a negative attitude towards the translated Kiswahili M-Pesa language menu.

The study found out that majority of the respondents (91%) indicated that the translated Kiswahili M-Pesa language menu is important. This was in agreement with the fourth hypothesis, which stated that than more than 50% of Kenyans view the translated Kiswahili M-Pesa language menu as important.

4.4.   Conclusion

The results of the study show that the level of public awareness about the Kiswahili M-Pesa menu is high. Subsequently, the study findings depict that the extent of public acceptance of the Kiswahili M-Pesa menu is low, which has also resulted in low usability of the same menu. Consequently, majority of M-Pesa users prefer the English menu because of its usage of familiar and understandable terms. Further, in as much as the majority of users appreciate and view Kiswahili menu as being important, this has not translated into increased usage of the Kiswahili menu.

The findings also concur with the arguments of Munday (2013), which suggests that as far as terminology is concerned, technical terms in source texts are supposed to be clarified (made simple) for the target text non-technical users during translation or localisation for that matter. Consequently, just as it has been argued in Translatorial action theory, it is lucid that a translation would be accepted and used if the message is clear, easily understood, uses common or familiar terms, if single terms are consistently translated, and is functionally suitable in the culture of the target text.

4.5. Recommendations

From the foregoing conclusions, the researcher recommends several measures, which if actualized, could enhance public acceptance, usability, attitude and perception about the Kiswahili M-Pesa language menu.

- Awareness campaign should be carried out to sensitize the people about the existence of Kiswahili M-Pesa language menu. This may increase the number of Kiswahili menu users and offer a platform for the illiterates who would otherwise seek help to transact with M-Pesa.

- The Kiswahili translation of the M-Pesa menu should further be simplified. During its simplification, familiar terms should be used, consistency and clarity in translation of terms should also be adhered to, and if possible all terms translated into Kiswahili, instead of having a mixture of both English and Kiswahili in the Kiswahili menu.

- If possible, just like what happens with ATMs, from the onset, the M-Pesa users should be offered an opportunity to choose the language of their choice between English and Kiswahili language menus.

- Since the new constitution has made Kiswahili language both a national and official language of Kenya, policy makers and other stakeholders should do much in encouraging and dispelling the negative perception about Kiswahili language. The acceptance and usage of the Kiswahili language menu of different items will help in the growth of the language.

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APPENDICES

APPENDIX 1: Survey Questionnaire

Study Topic: Evaluating the Acceptance and Usability of Kiswahili Localised Mobile Phone App in Kenya: A Case of M-Pesa App

Contacts:

Sanday Alfred Wandera

P.O.Box 43844-00100

alfredsanday@gmail.com

0723-378489

I,--- , understand that I am being asked to participate in a survey/questionnaire activity that forms part of **Sanday Alfred Wandera** required coursework in The University of Nairobi. It is my understanding that this survey/questionnaire has been designed to gather information about the following subjects:

5. To assess the public awareness of the existence of the translated Kiswahili M-Pesa language menu;

6. To assess the public acceptance level of the translated Kiswahili M-Pesa language menu;

7. To assess the public usability of the translated Kiswahili M-Pesa language menu vis-à-vis the English language menu;

8. To find out the public attitude and perception on the translated Kiswahili M-Pesa language menu.

I have been given some general information about this project and the types of questions I can expect to answer. I understand that the survey/questionnaire will be conducted in person/by phone/by email/on the internet and that it will take approximately **15 minutes** of my time to complete.

I understand that my participation in this project is completely voluntary and that I am free to decline to participate, without consequence, at any time prior to or at any point during the activity. I understand that any information I provide will be kept confidential, used only for the purposes of completing this assignment, and will not be used in any way that can identify me. All survey/questionnaire responses, notes, and records will be kept in a secured environment.

I understand that the results of this activity will be used in the above named student's University of Nairobi course thesis and the results of the study may be published in an academic journal, conference proceedings or book.

I also understand that there are no risks involved in participating in this activity, beyond those risks experienced in everyday life.

I have read the information above. By signing below and returning this form, I am consenting to participate in this survey/questionnaire project as designed by the below named University of Nairobi student.

Signature: _____

Date: _____

Please keep a copy of this consent form for your records. If you have other questions concerning your participation in this project, please contact me at:

Sanday Alfred Wandera, P.O. Box 43844-00100, **alfredsanday@gmail.com**, 0723-378489,

Thank you for agreeing to participate in my project.

SECTION A

PERSONAL INFORMATON

1. Physical location of the respondent (Tick one)

City	
Urban	
Rural	

2. Gender of the respondent (Tick one)

Male	
Female	

3. Highest Education level attained (Tick one)

a) None ☐

b) Primary ☐

c) Secondary ☐

d) Tertiary/College ☐

e) University ☐

4. What is your occupation? (Tick one)

White-collar jobs	
Jua kali	
Business Person	
Others(specify)	

SECTION B: Assessing the public awareness of the existence of the translated Kiswahili M-Pesa language menu

5. Are you aware of the existence of the translated Kiswahili M-Pesa language menu? (Tick one)

Yes	
No	

6. If No to Q5 above, which of these could be the reason for lack of awareness?

I'm not interested	
I'm not informed	
Others(specify)	

7. If yes to Q5, how did you become aware of the existence of the translated Kiswahili M-Pesa language menu? (Tick one)

Internet	
Friend	
Social media	

Section C: Assessing the public acceptance of the translated Kiswahili M-Pesa language menu;

8. Have you ever used the translated Kiswahili M-Pesa language menu in your M-Pesa transactions? (Tick one)

Yes	
No	

9. If Yes to Q9, how often do you use the translated Kiswahili M-Pesa language menu in your M-Pesa transactions? (Tick one)

Regularly	
Occasionally	
Rarely	

10. If Yes to Q9 why do you use the translated Kiswahili M-Pesa language menu in your M-Pesa transactions? (Tick appropriately)

Easily understood	
National pride	
Easy to use	
Poor English	
Proficiency in Kiswahili	
Not sure	

11. If No to Q8, what are your reason(s) for not using the translated Kiswahili M-Pesa language menu in your M-Pesa transactions? (Tick appropriately)

Use of unfamiliar terms	
Hard to understand	
Poor in Kiswahili	
Improper translation	
Lack of clarity	
Don't know	
Low class	

Section D: Assessing the public usability of the translated Kiswahili M-Pesa language menu vis-à-vis the English language menu;

12. Between the Kiswahili M-Pesa language menu and the English language menu, which one do you use? (Tick appropriately)

Kiswahili M-Pesa language menu	
English language menu	

13. If English language menu in Q 13, why do you prefer it to Kiswahili language menu?

Use of familiar terms	
Easy to understand	
Easy to use	
Being sure	
Proficiency in English	
Others (specify)	

Section E: Assessing the public attitude and perception on the translated Kiswahili M-Pesa language menu.

14. How interested would you say you are in using the translated Kiswahili M-Pesa language menu in your M-Pesa transactions? (Tick appropriately)

Very interested	
Fairly interested	
Not very interested	
Not at all interested	
Don't know	

15. What is your view of the translated Kiswahili M-Pesa language menu? (Tick answer)

Appreciate	
Dislike	
Constant	

16. Do you think translated Kiswahili M-Pesa language menu is important? (Tick one)

Important	
Not important	
Don't know	

17. Looking at the translated Kiswahili M-Pesa language menu in your M-Pesa transactions, are you satisfied with its translation? (Tick one)

Satisfied	
Somewhat satisfied	
Not satisfied	

18. What is the reason for your answer to question 17? (Tick appropriately)

Use of familiar terms	
Use of unfamiliar terms	
Consistency in translation	
Inconsistency in translation	
It is accurate	
Lacks accuracy	
Usage of both English and Kiswahili in the Kiswahili menu	
It is natural	
Has clarity	
Lacks clarity	
It is culturally appropriate	
Others (specify)	

APPENDIX 2: Interview Guide

Interview Consent Form

Research Topic:

Evaluating the Acceptance and Usability of Kiswahili Localised Mobile Phone App in Kenya: A Case of M-Pesa App

Contacts:

Sanday Alfred Wandera

P.O.Box 43844-00100

alfredsanday@gmail.com

0723-378489

Study Aims/ Description:

This study aims:

9. To assess the public awareness of the existence of the translated Kiswahili M-Pesa language menu;

10. To assess the public acceptance level of the translated Kiswahili M-Pesa language menu;

11. To assess the public usability of the translated Kiswahili M-Pesa language menu vis-à-vis the English language menu;

12. To find out the public attitude and perception on the translated Kiswahili M-Pesa language menu.

Procedure and Risks:

I would like to record the interview, if you are willing, and use the tapes to write my Master's Thesis. I will record the interview only with your written consent, and will ask that no personal identifiers be used during the interview, to ensure your anonymity. Please feel free to say as much or as little as you want. You can decide not to answer any question, or to stop the interview any time you want. The tapes and transcripts will become the property of project.

If you so choose, the recordings and recording-transcripts (or copy of notes taken) will be kept anonymous, without any reference to your identity, and your identity will be concealed in any reports written from the interviews.

There are no known risks associated with your participation in this study.

Benefits:

It is hoped that the results of this study will add literature and open up further studies into the app localization, especially into Kiswahili language. It will also give stakeholders some insights into the most effective language to use in their apps, including the register that is most appropriate for the clients, in English and Kiswahili.

Cost Compensation:

Participation in this study will involve no costs or payments to you.

Confidentiality:

All information collected during the study period will be kept strictly confidential. No publications or reports from this project will include identifying information on any participant without your signed permission, and after your review of the materials. If you agree to join this study, please sign your name on the following page.

INFORMED CONSENT FOR INTERVIEWS

I, _____, agree to be interviewed for the study entitled: **Evaluating the Acceptance and Usability of Kiswahili Localised Mobile Phone App in Kenya: A Case of M-Pesa App,** which is being researched by **Sanday Alfred Wandera** , a masters student at The **University of Nairobi**.

I certify that I have been told of the confidentiality of information collected for this project and the anonymity of my participation; that I have been given satisfactory answers to my inquiries concerning project procedures and other matters; and that I have been advised that I am free to withdraw my consent and to discontinue participation in the project or activity at any time without prejudice.

I agree to participate in one or more <u>electronically recorded</u> interviews for this project. I understand that such interviews and related materials will be kept completely anonymous, and that the results of this study may be published in an academic journal or book.

I agree that any information obtained from this research may be used in any way thought best for this study.

_____ Date _____

Signature of Interviewee

If you cannot obtain satisfactory answers to your questions or have comments or complaints about your treatment in this study, contact:

Sanday Alfred Wandera, P.O. Box 43844-00100, alfredsanday@gmail.com, 0723-378489,

Interview Questions

1. What is the level of awareness about the existence of a translated Kiswahili M-Pesa language menu?

2. What are the reasons for the awareness level in question 1?

3. To what extent has the translated Kiswahili M-Pesa language menu been accepted in Kenya?

4. What are the reasons for the acceptance level in question 2?

5. Why would the users of M-Pesa prefer the translated Kiswahili language menu to English language menu?

6. Why would the users of the M-Pesa prefer the English language menu to the translated Kiswahili M-Pesa language menu?

7. What is the public`s attitude on the translated Kiswahili M-Pesa language menu in Kenya?

8. What are the reasons for the attitude in question 5?

9. What is the public`s perception on the translated Kiswahili M-Pesa language menu in Kenya?

10. What are the reasons for the perception in question 9?