IMPLICATION OF LOGISTICS SERVICE QUALITY ON CUSTOMER SATISFACTION: THE CASE OF JUMIA ONLINE MARKET

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A Thesis Submitted to Addis Ababa University School of Commerce in Partial Fulfillment of the Requirements for the Degree of Masters of Arts in Logistics & Supply Chain Management

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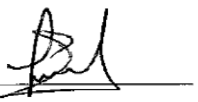
DECLARATION

I, **Hana Alemu**, declare that the study entitled **"Implication of Logistics Service Quality on Customer Satisfaction: The Case of Jumia Online Market"** is the result of my own effort in research undertaking. The study has not been submitted to any Degree or Diploma in any college or university. It is submitted in the partial fulfillment of the requirement of the Masters of Arts in Logistics & Supply Chain Management.



Hana Alemu

STATEMENT OF CERTIFICATE

This is to certify that **Hana Alemu Desalegn** has carried out this research work on the topic entitled, **"Implication of Logistics Service Quality on Customer Satisfaction: The Case of Jumia Online Market"** for the partial fulfillment of Masters of Arts in Logistics & Supply Chain Management at Addis Ababa University-School of Commerce. This study is an original work and not submitted earlier for any degree either at this University or any other University and is suitable for submission of Masters Degree in Logistics & Supply Chain Management.

Advisor: Berhanu Denu (PhD)

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Implication of Logistics Service Quality on Customer Satisfaction: The Case of Jumia Online Market

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LIST OF ABBREVIATIONS AND ACRONYMS

B2C: Business-to-Consumer

C2C: Consumer-to-Consumer

IQ: Information Quality

LSQ: Logistics Service Quality

OA: Order Accuracy

OC: Order Condition

ODH: Order Discrepancy Handling

OP: Order Procedure

PCQ: Personnel Contact Quality

TI: Timeliness

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ABSTRACT

The main purpose of this study is to investigate the implication of logistics service quality dimensions on customer satisfaction. In addition it measures customer satisfaction level and the logistics service quality of Jumia online Market. The seven dimensions of logistics service quality model i.e. information quality, order procedure, timeliness, order condition, order accuracy, order discrepancy handling and personnel contact quality were used to measure the logistics service quality of Jumia online market. In order to answer the raised research questions, both primary and secondary sources of data were used. The primary data was collected through administrating questionnaire. A combination of purposive and convenient sampling technique was used to obtain 96 responses from customers of Jumia online market who had made purchases recently. Correlation analyses were used to investigate the relationship between dependent and independent variables. Regarding the satisfaction level measurement, 52.7% of respondents are satisfied and 28.6% are highly satisfied with the logistics service provided by Jumia online market. The correlation results indicate that there is a positive correlation between the dimensions of logistics service quality and customer satisfaction. The research showed that timeliness and order procedure plays the most important role in customer satisfaction level followed by Order accuracy, Information quality, Order discrepancy handling, Order condition and Personnel contact quality respectively. From the seven logistics service quality dimensions, timeliness is the least scored one on the perception measurement. Jumia online market should give focus to improve logistics service quality items of this specific dimension by enforcing seller to make a commitment on availing the orders as soon as they are placed, to make time gap between order placement and receipt shorter, and continuous follow up of delivery partners is mandatory as it has significant impact on delivering products on the promised date.

Key Words: *Customer Satisfaction, Logistics Service Quality, Online market*

CHAPTER ONE

1. Introduction

1.1 Background of the study

"The market place isn't what it used to be" (Kotler, 2000, pp.14). As Kotler describes, different forces result in market change like, technological advancement, globalization and deregulation and these forces created new behaviors and challenges. Among those behavioral changes, increase in customer expectation for higher quality of service is one of them.

Businesses become more of customer oriented to be able to survive in the market or to have a competitive advantage over others. Customer orientation focuses on retaining market share through high customer satisfaction (Kaur and Sharma, 2009). Measuring customer satisfaction level plays an important role in identifying the customer perception on the product /services offered by a given company and helps to take a corrective action to retain the customer's satisfaction at the highest level.

As competition in the services sector is constantly increasing, the ability of companies to understand their customers and ensuring their customer's satisfaction with the services provided is becoming more and more significant (Kavaliauskienėa, Aranskisa, Litvinenkoa, 2014).

Logistics excellence has become a powerful source of competitive differentiation with divers marketing offerings of world-class firms (Mentzer, Flint, & Hult, 2001).

To maintain a competitive advantage on the online retailing markets involves the integration of the marketing strategy in the Supply Chain Management and the reinforcement of the role played by logistic service quality (LSQ) in the achievement of an efficient customer response. The option for e-commerce involves a logistic system tailored to the customers' requirements, reflecting the flexibility of the ordering system, speed of delivery and customization of products and services provided online (Mărunţelu, 2008).

Though online shopping in Ethiopia is a recently emerging business, many retailers are being engaged in this service and Jumia online Market (the former Kaymu) is one of them.

The widespread use of social media has a positive contribution for creating awareness to the customers about the online shopping options.

Kaymu is an online marketplace founded in 2013, providing localized C2C and B2C products in an emerging economies of Africa, Europe and Asia. The platform lets buyers and sellers meet to make deals on new and used fashion items, mobile phones, jewelry, and home appliances (Wikipedia the free encyclopedia, Kaymu, 2016).

Kaymu initially launched in Nigeria and Pakistan in January 2013 and within 27 months opened operations in 32 other countries. Kaymu copies eBay's model; it does not offer first-party product sales, and it has separate retail websites for each of the countries it operates in (Wikipedia the free encyclopedia, Kaymu, 2016).

As of March, 2016, Kaymu's operations have grown in 35 countries, 17 of which are in Africa, and the rest in Europe and Asia. Kaymu has operations in the following regions & countries;

- Africa- Algeria, Angola, Cameroon, Ethiopia, Gabon, Ghana, Ivory Coast, Kenya, Morocco, Mozambique, Nigeria, Rwanda, Senegal, Tanzania, Tunisia, Uganda & Zambia
- Asia and Middle East- Azerbaijan, Bangladesh, Cambodia, Myanmar, Nepal, Pakistan, Philippines, Saudi Arabia, Sri Lanka & Uzbekistan.
- Europe- Albania, Bosnia Herzegovina, Bulgaria, Belarus, Croatia, Georgia, Slovakia & Slovenia (Wikipedia the free encyclopedia, Kaymu, 2016).

Kaymu is backed by Rocket Internet. Rocket Internet oversees all of its business affairs in Africa through Africa Internet Group which has shared ownership among Rocket Internet, MTN and Millicom. And on 2014, Kaymu had win an Online Retail Award in London (Wikipedia the free encyclopedia, Kaymu, 2016).

Kaymu in Ethiopia starts its operation in 2014 (EthYP, Kaymu Ethiopia, 2015). As Kaymu managing director Tesfa Gebreab replied on his interview with capital newspaper (June 16, 2015), at the beginning of their operation, they had a marketing team that brings buyers, mostly through social media such as Facebook, the sellers' management team that handles orders by calling sellers to make sure they have products in stock, the customer service team who calls to buyers to make sure buyers still want the product and decide a point of

delivery, the logistics team who coordinates with third-party logistics partners to deliver products to buyers and finally, the content team who is responsible for posts in the website.

In the same interview, Tesfa has describe Kaymu as an online mall. It's an online platform that connects buyers and sellers. He also describes the benefit for sellers and buyers as below;

> "For sellers, the value added is that they can grow on the Internet without opening more shops. If you're in Kazanchis, you can target customers in Merkato – all you need is someone connected to the Internet. Meanwhile, buyers get discounted prices because retailers are most likely selling products from their warehouses at below retail prices. You get choices of 3,500 sellers in front of you; you don't have to waste time negotiating prices because you can filter products based on your price range. So it gives you very good prices and convenience, in an era where you have a lot of traffic jams and limited time to shop" (Capital new paper, 2015).

At the last moment of the interview, Tesfa has mention the biggest challenge they are facing, which is addresses. He has also states that this is the problem which is faced all over Africa. He explains that the best way to solve this problem is using existing technologies like mobile, GPS or real-time location for delivery (Capital new paper, 2015).

Having said that about establishment of Kaymu, now it is rebranded as Jumia Market as of June 23, 2016. On the annual press conference of June 23, 2016, Africa Internet Group (AIG) announced that it is consolidating all its companies into the Jumia ecosystem with a new vision of '*Expanding your horizons*" (Innov8tiv, Africa Internet Groups rebrands as Jumia, 2016).

Now the new platform of Jumia in Ethiopia has more additional service than before. Which includes; Jumia market; where you could find the service which were previously delivered by Kaymu, Jumia travel; where it helps you find and book hotel for your travel, Jumia deal; where it allows anyone to sell products they won't use and find a buyer for it, Jumia house; which allows you to buy, sell and rent property online and Jumia Job; where you could find possible job opportunities. Thus, Kaymu has come with the same service, richer experience and new brand called Jumia.

As different literatures indicated, logistics service quality highly contributes to the delivery of efficient online service which fulfills customers' requirements and needs. Thus, this study will focus on gathering empirical evidences to determine the customer satisfaction level of Jumia online Market users with the logistics service quality provided.

1.2 Statement of the problem

In our dynamic world, way of business making process is being changed from time to time and the introduction of new technologies takes the largest contribution for this evolvement. Now, businesses are more of customer oriented and try to fulfill their customer demand before their competitors do, otherwise, they will be out of market as customers have options to get what they want.

Delivering goods to customers is a critical activity in any business (Huang, Kuo and Xu, 2009). And the way of performing this core activity matters for the customer. In now a days, people are seeking for more convenience and comfort in their shopping experience, and market strategies are continuously changing to cop up with this customer needs.

Digital technology has provided a new paradigm to our society and changed our lives interaction with the Internet. Online shopping is much more convenient for shoppers than that of the traditional way, as there is a possibility to order what they need at their office or home. Online shoppers anticipate quicker delivery than offline purchasing, and timely delivery at convenient times (Huang *et al*., 2009).

Several factors contribute to a positive experience on online acquisition from an e-shop: comfort, products' availability and diversity, handling and payment conditions, reimbursement policies in case of non-conformity (Ramanathan, 2010). Effective logistics service is required to meet the customer need and satisfy the customer.

Online shopping in Ethiopia is started in recent years and it is not matured yet as there are bottlenecks like our payment system, our society understanding for online shopping to find potential market and others. Regardless of this, there are some businesses started to participate in this market like, Jumia Market, Sheger, Sheba Shopping, Yeroof and the like. Thus, it is worth studying this new stream of shopping experience in Ethiopia so as to identify logistic service quality contribution to the increase of its customers' satisfaction level.

The study will mainly focus on determining the customer satisfaction level of Jumia Market online shoppers by using standard measurement of logistics service quality and it also identifies the logistics service quality dimensions that affect the customer satisfaction most.

1.3 Research Questions

This paper introduces the preliminary objective of online shopping, which is getting more convenience and comfort which results in high level of customer satisfaction. As the literature suggested, if the overall logistics service quality affects the customer satisfaction, then it is important to prove the claim with empirical evidence.

Three questions will be addressed with this research:

First: What is the level of customer satisfaction with Jumia online Market service?

Second: Is there statistically significant relationship between Jumia online market logistics service quality and its customer satisfaction?

Third: Which logistics service quality dimensions affect customer satisfaction most?

Forth: Is there any relationship among each logistics service quality dimensions?

1.4 Objective of the study

1.4.1 General objective:

The general objective of the study is to assess the satisfaction level of Jumia online Market with its logistics service qualities provided.

1.4.2 Specific objectives:

In addition of attending the general objective, the study has the following specific objectives:

- To assess the significance of overall Jumia online Market logistics service quality on customer satisfaction.
- To determine which logistics service quality dimensions mostly affect the customer satisfaction.
- To identify the relationship among logistics service quality dimensions.

1.5 Operational definition of Terms

Table 1: Operational Definitions

Term	**Definition**
LSQ	LSQ is a logistics service quality model which measures the logistics service quality using the perceptions of the customer.
Information quality	The adequacy and accuracy of the information provided by Jumia Market online shopping.
Ordering procedures	Effectiveness and easiness of ordering procedure in Jumia Market online shopping.
Timeliness	Ability of Jumia Market to deliver orders at the customer location on time as promised.
Order condition	Ability of Jumia Market to deliver orders without any damage.
Order accuracy	Ability of Jumia Market to deliver the correct ordered items without any mistake or substitutions.
Order discrepancy handling	Capability of Jumia Market on handling any discrepancies in orders delivered to the customer.
Personnel contact quality	Customer orientation ability Jumia Market customer service representative to provide prompt service and help customers.

1.6 Significance of the study

The study of customer satisfaction is critical for any organization to provide superior service for their customers, especially for online shopping retailers in Ethiopia who are recently emerging. This study has both practical and theoretical significance. The findings of the will research help Jumia Market to understand its customers' attitude towards the logistics service provided.

The other major significance is the study will contribute its part in the literature of customer satisfaction survey with the logistics service quality of online shopping in Ethiopia that will pave a way for further improvement and in-depth investigation on the impact of logistics service for customer satisfaction.

It is also important for me to conduct the study for fulfilling the requirement of logistics & Supply chain management thesis.

1.7 Delimitation of the Study

The scope of the study will be limited to assessing the customer satisfaction of Jumia online Market with the logistics service they are providing for the customer. The research will not cover other retailers who are engaged in the same business which is also worthy to be assessed since it significantly helps to determine the impact of logistics service quality on customer satisfaction in the emerging business of online shopping in Ethiopia.

1.8 Organization of the study

The introduction part of the study will be discussed in chapter one. Back ground information, problem statement, research questions, objective of the study, operational definitions, significance and delimitation of the study will be discussed in this chapter.

In the next chapter, chapter two, existing literatures related to logistics service quality and customer satisfaction will be assessed. Jumia Market brief background information will be presented and theoretical frame work on the relationship between customer satisfaction and logistics service quality will be developed.

The third chapter will discuss the methodology of the research. The research design and research methods will be explained in this chapter starting from how the data collection instrument is prepared to how the collected data is analyzed.

The following chapter, chapter four, will discuss the empirical findings and analysis of the study with interpretations. And the last chapter, chapter five, will present conclusion based on the analysis result and recommendations provided by the researcher.

CHAPTER TWO

2. Related Literature review

2.1 Theoretical review

2.1.1 Service quality

Different scholars describe service quality in different ways, justifying with different point of views. Wisniewski (2001) stated that service quality is a concept that has aroused considerable interest and debate in the research literature because of the difficulties in both defining it and measuring it with no overall consensus emerging on either.

Ghobadian, Speller and Jones (1994) describes that though there are many definitions of "quality", because quality have different meaning for different people, it is possible to classify the definitions of "quality" into five broad categories. The five generic categories are:

1. *Quality as Transcendent*: - here "quality" is defined as innate excellence, meaning "quality" is the relationship between individual salience and the perceived quality
2. *Quality as Product led*: - here "quality" is defined as the units of goodness packed into a product or service.
3. *Quality as Process or supply led*: - in this approach, "quality" is defined as "conformance to requirements".
4. *Quality as Customer led*: - here the focus is external, "Quality" is defined as "satisfying customer's requirements" or "fitness for purpose"
5. *Quality as Value led*: - here "Quality" is defined either as the "cost to the producer and price to the customer" or as "meeting the customer's requirements in terms of quality, price, and availability.

Most of the service quality definitions fall within the "customer-led" category (Ghobadian *et al*., 1994). And they have defined quality as it is a measure of the extent to which the service delivered meets the customer's expectations.

Parasuraman, Zeithaml and Berry (1985) defined service quality as 'a function of the differences between expectation and performance along the quality dimensions'. And

Cronin and Taylor (1994) viewed service quality as a form of attitude representing a long-run overall evaluation.

Ghobadian *et al*. (1994) have explain that perception of quality is influenced not only by the "service outcome" but also by the "service process". They have presented perceived service quality is the summation of prior customer expectation, actual process quality and actual outcome quality.

2.1.1.1 Service quality models

Measuring service quality is difficult because of the unique characteristics of intangibility, heterogeneity, inseparability and perishability (Buttle, 1996) (Ghobadian *et al*., (1994). Over the years, different service quality determinates and model have been identified and explained, some of them are explained below:

I. Technical and functional quality model

According to Grönroos (1984), Service quality has three components, namely: technical quality; functional quality; and image:

i. The technical quality: - is the actual outcome of the service encounter. It is the quality of what consumer actually receives as a result of his/her interaction with the service firm and is important to him/her and to his/her evaluation of the quality of service. It answers the questions of *what* the customer gets.
ii. The functional quality: - is concerned with the interaction between the provider and recipient of a service and is often perceived in a subjective manner. It answers the question of *how* the customer gets the technical outcome.
iii. The corporate image: - is concerned with consumers' perceptions of the service organization. The image depends on: technical and functional quality; price; external communications; physical location; appearance of the site; and the competence and behavior of service firms' employees

II. GAP model

Service quality is a function of the differences between expectation and performance along the quality dimensions (Parasuraman *et al*. 1985). They mentioned the presence of five gaps that have an influence over the perception of quality:

Gap 1. Consumer expectations vs management perceptions.

Gap 2. Management perceptions vs service quality specifications.

Gap 3. Service quality specifications vs service encounter process.

Gap 4. Service encounter process vs outsider communication.

Gap 5. Expected service vs perceived service

Ghobadian *et al*. (1994) describes this model as a diagnostic tool. They said, if it is used properly, it will enable the management to identify systematically service quality shortfalls since it facilitates the identification of gaps between a numbers of variables affecting the quality of the offering.

III. SERVQUAL Model

SERVQUAL Model was first introduced by Parasuraman *et al*. in 1985. The model has been further developed through a series of publications. This service quality model is founded on the view that the customer's assessment of service quality is paramount. This assessment is conceptualized as a gap between what the customer expects from service providers, and their evaluations of the actual performance the service provider.

Ten components of perceived service quality were identified in the first formulation of SERVQUAL model by Parasuraman *et al.* (1985):

1) Reliability: involves consistency of performance and dependability.
2) Responsiveness: concerns the willingness or readiness of employees to provide service.
3) Competence: means possession of the required skills and knowledge to perform the service.
4) Access: involves approachability and ease of contact.
5) Courtesy: involves politeness, respect, consideration, and friendliness of contact personnel.
6) Communication: means keeping customer informed in language they can understand, and listening to them.
7) Credibility: involves trustworthiness, believability, honesty.
8) Security: is freedom from danger, risk, or doubt.

9) Understanding/Knowing the customer: involves making the effort to understand the customer's needs.
10) Tangibles: includes the physical evidence of the service.

In their 1988 work, they have minimized these components into five dimensions: Tangibility, reliability, responsiveness, assurance, and empathy.

- Tangibility dimension refers to the appearance of physical facilities, equipment, personnel and communication materials
- Reliability dimension refers to the ability to perform the promised service dependably and accurately
- Responsiveness dimension refers to the willingness to help customers and to provide prompt service
- Assurance dimension refers to the knowledge and courtesy of employees and their ability to convey trust and confidence
- Empathy dimension refers to the provision of caring, individualized attention to customers

IV. SERVPERF model

Cronin and Taylor (1992) have developed and tested a performance-based alternative for SERVQUAL measure, called SERVPERF. To investigate and validate their claim, they have gather response on the service quality offered by two firms in four industries (banking, pest control, dry cleaning and fast food). Accordingly, they have found that SERVPERF is a better predictor of perceived service quality than SERVQUAL. Their findings support that performance measurement of service quality is better predictor and therefore, no need to assess the expectation measurements as it was suggested on SERVQUAL model.

Finally, Cronin and Taylor (1992) concluded that performance-based scale developed (SERVPERF) is efficient compared to the SERVQUAL scale; since it reduces the number of items by 50% and the empirical finding also supports the theoretical superiority of the SERVPERF scale.

2.1.2 Logistics service quality

Logistics has traditionally been considered as a necessity for connecting production and consumption (Saura, Frances, Contri, & Blasco, 2008). From this perspective, a company's logistics function was seen only as a generator of costs with no capacity for differentiation (Ballou, 2004; cited in Saura *et al*. (2008)). This began to change in the mid-1990s as logistics research based on marketing principles began to analyze the capacity of logistics to deliver quality and thus generate greater customer satisfaction and loyalty (Mentzer *et al.*, 2001; Mentzer *et al*., 2004).

Logistics service quality has been studied from two different perspectives which is objective quality and subjective quality (Chin *et al*., 2013; Saura *et al*., 2008).

i. ***Objective perspective*** of quality relates quality with adapting the service to service provider defined specifications. This industrial view of service sees quality as an accurate evaluation of all the stages and operations necessary to deliver the service, considering the service as a physical object which can be observed and with attributes that can be evaluated.
ii. ***Subjective perspective*** of quality transfers evaluation of quality to the customer. From this perspective, service quality is "a global judgment or attitude, concerning the superior nature of the service" (Chin *et al*., 2013; Saura *et al*., 2008).

Bienstock, Mentzer and Bird (1997), contributes for the identification of objective variables for the measurement of customers' perceptions in relation to their expectations as the main components of Logistics Service Quality. More recent study of Mentzer *et al*., (2001), contribute to this line by considering logistics service quality as the difference between the expected and the perceived service.

Logistics specific measurement models are being developed on the basis of the above models, which is adapted to the special features/attributes of logistics service (Saura *et al*., 2008). According to Chin *et al*. (2013), these views of logistics service provide the building blocks to create a customer-based foundation for better definitions and measures of LSQ.

Chin *et al*. (2013) and Saura *et al*. (2008), underline two important contributions from Bienstock *et al*. (1997) and Mentzer *et al*. (1999). Bienstock *et al*. (1997) developed a specific model known as physical distribution service quality, based on result, rather than on functional or process dimensions. And Mentzer *et al.* (1999) carried out a study to

confirm the accuracy of the model developed by Bienstock *et al*. (1997) with an integral logistics focus. This revision and validation provided a new multidimensional model which they called Logistics Service Quality that have both aspects of physical distribution and customer elements.

2.1.2.1 Logistics service quality model

Mentzer *et al*. (2001) describes that logistics service quality have two components physical distribution service and marketing customer service. Combining these two components they identified 9 dimensions of logistics service quality: personnel contact quality, order release quantities, information quality, ordering procedure, order accuracy, order condition, order quality, order discrepancy handling, and timeliness. They developed a 25 item instrument to measure customers' perceptions of the nine dimensions of logistics service quality. Two or three numbered items are used to measure each dimension.

Table 2: LSQ Dimensions

Dimensions	**Definition**	**Item in scale**
Personnel contact quality	Refers to the customer orientation of the organization contact people	3
Order release quantities	Measure the product availability	3
Information quality	Refers to customers' perceptions of the information provided by the organization regarding products from which customers may choose	2
Ordering procedures	Refer to the efficiency and effectiveness of the procedures followed by the organization	2
Order accuracy	Refers to how closely shipments match customers' orders upon arrival. This includes having the right items in the order, the correct number of items, and no substitutions items ordered.	3
Order condition	Refers to the lack of damage to orders	3
Order quality	Refers to how good products work. This includes how well they conform to product specifications and customers' needs	3
Order discrepancy handling	Refers to how well the organization addresses any discrepancies in orders arrive.	3
Timeliness	Refers to whether orders arrive at the customer location as promised. More broadly, timeliness also refers to the length of time between order placement and receipt	3

2.1.3 Online logistics service quality

The generalized use of information and communication technologies (ICT) has brought far reaching transformations to different business areas including logistics activities. The use of ICT in logistics has been truly revolutionary, especially in terms of improving LSQ for the customer (Saura *et al*., 2008.)

Internet has not only had an important impact on consumers' ordering processes, making it cheaper and faster and transcending time and geographical constraints, but has also had a significant impact on the business model of physical retail stores. Establishment of the Internet has created enormous potential business opportunities for e-commerce (Chen *et al*., 2014)

With the rapid development of e-commerce, customer demand for diversity and timeliness has also increased, in fact, B2C e-commerce business lead higher requirement for logistics service (Wang, 2015).

When we discuss about logistics service under B2C e-commerce, the concern is no longer only making a movement from the supplier to the buyer, but also pursuit logistics service in a short time, with flexible service, and high value-added services. Therefore, the quality of logistics distribution has become more and more important to the development of B2C electronic commerce (Wang, 2015).

2.1.4 Customer satisfaction

Customer satisfaction has been a subject of great interest for organizations and numbers of researches, because customers are key stakeholders in organizations and their satisfaction is a priority for sustainable growth (Abel, 2013).

Keiningham *et al*. (2006) describes that the ability of the service provider to meet expectations of customers with regards to the different facets of service quality is what ultimately determines the level of customer satisfaction/dissatisfaction. Gro¨nroos (1982) also argue that consumers compare the service they expect with the service they receive to evaluate its quality. When the service delivered does not meet initial expectations, the consumer is dissatisfied, whereas if the service meets or exceeds those expectations, he or she is satisfied.

Lee *et al*. (2011) stated that satisfied customers are a great source to increase profitability. That is because satisfied customers are likely to commit to the service organization and have better social interaction with service providers, while dissatisfied customers complain more and repurchase less. Keiningham *et al*. (2006) have also describe the above concept in different terms but with the similar meaning, satisfaction with a service or service

provider may be a strong incentive for customers to maintain or increase current retention rate, dissatisfaction with a service or service provider may be a strong incentive to exit from the interaction.

Oliver (1997) state that customer satisfaction is the consumer's fulfillment response. It is a judgment that a product or service feature, or the product or service itself, provided (or is providing) a pleasurable level of consumption-related fulfillment, including levels of under- or over fulfillment. On other definition from Oliver (1997) is that customer satisfaction is as an overall emotional response to an entire service experience for a specific service encounter after purchasing consumption.

Saura *et al*. (2008) explains that satisfaction can also be interpreted from the point of view of a specific transaction or from an accumulative view. Most approaches in the literature use the first perspective (Giese and Cote, 2000; cited in Saura *et al*., 2008), although proposals like those by Fornell *et al*. (1996) and Anderson *et al*. (1994) consider satisfaction as a global evaluation based on consumption experience over time or on a set of similar experiences. More recent contributions adopt this last approach in the wide sense supporting the idea of satisfaction as "a global measurement of a set of satisfactions with specific prior experiences" (Yu and Dean, 2001).

Customer satisfaction is considered as a pre requisite for customer retention and loyalty. Delivering quality and achieving satisfaction can be the basis for developing relationship (Saura *et al*., 2008). Jing (2013) stated that satisfied customers are more likely will display loyalty behavior, i.e. repeat purchase and willingness to give positive word of mouth.

2.1.5 Relationship between Logistics Service Quality and Customer satisfaction

Customers are the lifeblood of any business. And "Service quality can win and keep customers" and it can be measured by the extent to which the service provided satisfies the customer's expectations (Ghobadian *et al*., 1994).

Different literature reviewed that service quality impacts customer satisfaction. Keiningham *et al*. (2006) describes that the ultimate determinant of customer satisfaction/dissatisfaction is the ability of service provider to meet the customer expectation with different aspects of service quality. Cronin & Taylor (1992) also found

an empirical support for notion which states “perceived service quality in fact leads to satisfaction”.

Providers look for better ways to understand how customers perceive the quality of service and how the perception of service quality translate into customer satisfaction and customer loyalty (Chin, Soh & Wong, 2013). This is because customer satisfaction is the state of mind that customers have about a company when their expectations are met or exceeded over the lifetime of the product or service. Satisfying customers is the way to hold on our customers and attract the new ones.

Ghobadian *et al*. (1994) states that “Perceived quality” is what the customer’s feel for the “quality” of the service. It determines the extent of the customer’s satisfaction. The three key possible “quality” outcomes are:

1) Satisfactory quality, where customer’s expectations (CE) are exactly met.
2) Ideal quality, where perceived quality is higher than customer’s expectations.
3) Unacceptable quality, where perceived quality is lower than customer’s expectations.

Most research findings indicate that to increase the level of customer satisfaction organizations should provide a high level of service quality as service quality is normally considered an antecedent of customer satisfaction (Saura *et al*., 2008).

The quality of logistics service performance is an important key component that helps Create customer satisfaction. Logistics excellence has been recognized as an area that firms can create competitive advantage because of its visible service impact on customers (Mentzer *et al*., 2001).

There are many definitions and descriptions of how logistics creates customer satisfaction. The most traditional are based on the creation of time and place utility (Perreault and Russ 1974). Mentzer *et al*. (2001) describes the seven Rs which are the attributes of the company's product/service offering that lead to utility creation through logistics service; that is, part of a product’s marketing offering is the company's ability to deliver the right amount of the right product at the right place at the right time in the right condition at the right price with the right information. This conceptualization implies that part of the value of a product is created by logistics service.

The rapid development of e-commerce provides more convenience and comfort for the customer. This rapid growth enhances the customer demand for diversity and timeliness, which in fact led B2C e-commerce business to higher requirement for logistics service (Wang, 2015).

Wang (2015) describe Logistics distribution as a bridge between e-commerce enterprises and consumers, the core competitiveness of e-commerce enterprises is not limited to price competition, the logistics service is becoming more and more important, and the logistics distribution has a great influence on consumer's cognition and trust.

2.1.6 Conceptual framework of the study

In relation to the variables of logistics service quality, the literature reviewed showed that the measurement scale developed by Mentzer *et al*. (2001) has been used repeatedly and is up-to-date. Considering the nature of online shopping, various works regarding this topic used this scale with minor adaptation. Based on earlier research in online logistics, perceived LSQ in online shopping has five dimensions (Huang*, Kuo & Xu, 2009). Those are: information quality, ordering procedures, timeliness, order condition and order discrepancy handling. In addition to the above listed logistics service quality dimensions, two dimensions of logistics service quality namely; personnel contact quality and order accuracy will be included in this research construct.

The measurement model is formulated for the exogenous variable and the endogenous variables as shown in Figure 1, to explain the relationships between satisfaction and logistics service quality;

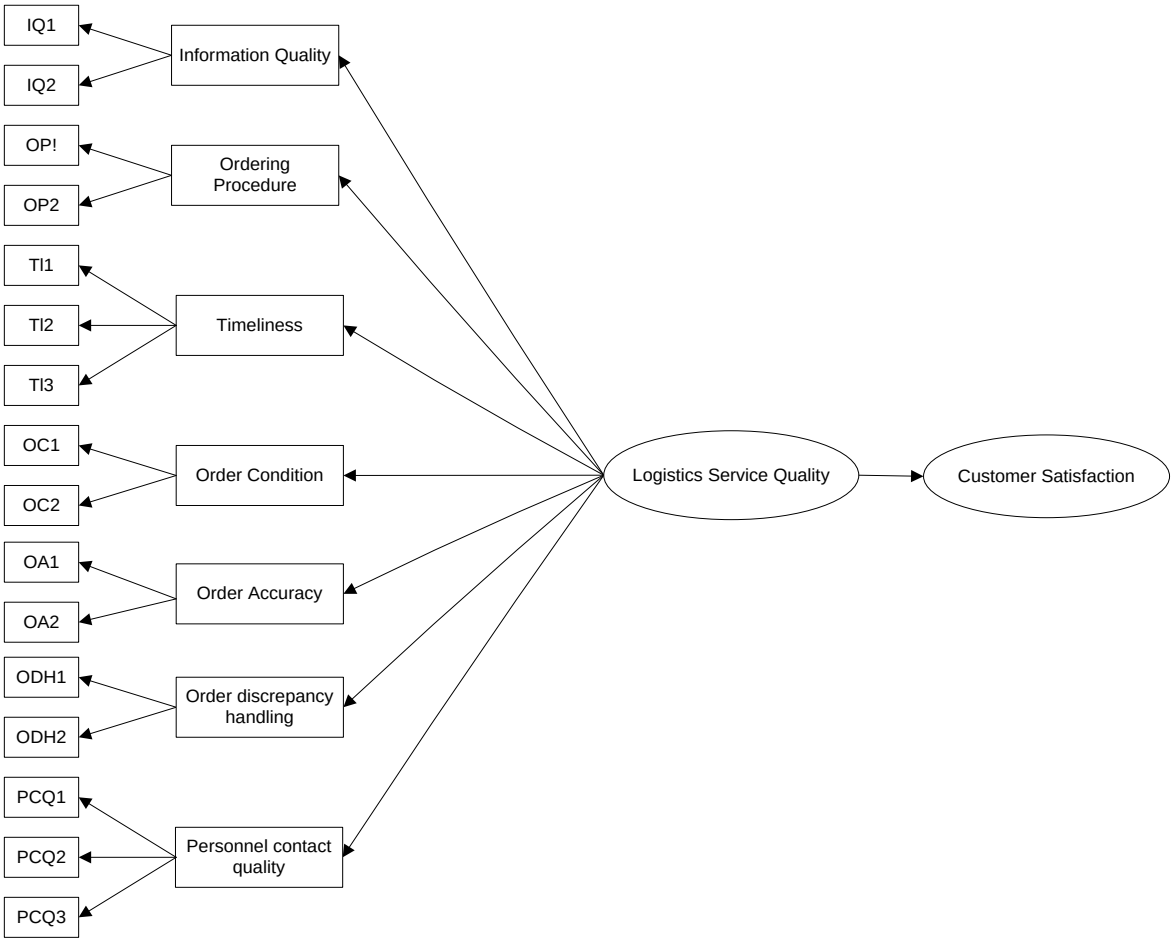


Figure 1: Conceptual framework of the study (Huang*, Kuo & Xu, 2009).

There is insufficient empirical evidences regarding the effect of logistics service quality on customer satisfaction on online market especially, in Ethiopia. Thus this research will bridge the literature gap in this area by providing empirical evidence on implication of logistics service quality dimensions on customer satisfaction level.

CHAPTER THREE

3. Research Design and Methodology

Appropriate research designs and research methodology are selected in a way to address the research question, having the insights from different literatures. This chapter is divided into four sections; Research Design, Sampling and Sampling Techniques, Data Collection and Data Analysis.

3.1. Research design

A combination of descriptive and causal research designs are followed in the study. The study is descriptive in that it seeks to describe in detail the state of customer satisfaction and logistics service quality in Jumia online Market, which gives an in depth understanding of the reality of customer satisfaction with logistics service quality in Jumia online Market. On the other hand, to identify the relationship between logistics service quality dimensions and customer satisfaction in addition to the effect of logistics service quality dimensions on customer satisfaction, causal research design was applied.

To accomplish the study objective and to answer the stated research questions, descriptive and inferential statistics were employed. Descriptive statistics such as frequency, percentage, mean and standard deviation were used to assess service quality and measure customer satisfaction level in Jumia online Market. Inferential statistics such as correlation analysis is also applied to identify the relationship between logistics service quality dimensions and customer satisfaction.

3.2. Sampling and Sampling Techniques

The target population of the study was online shoppers who have visited and ordered products from Jumia Market online shopping website. Out of this sample frame, the sample size was determined using sample size calculator, with confidence level of 95% and confidence interval (margin error) of 10%, which results in 96. Accordingly, 96 respondents are selected and requested to fill the prepared questionnaire (Creative Research Systems, 2012).

Non-probabilistic sampling technique with a combination of purposive and convenient sampling methods is employed to get response from the study participants. First possible

respondents were reached at the convenience of the researcher and collaborators in data collection in different areas. Then possible respondents were asked to answer how long it has been since their last purchase from Jumia Market (the former Kaymu) and respondents who had made a purchase recently, a maximum of six months back, are requested to fill the questionnaire.

3.3. Source and Tools/Instrument of data collection

In order to answer raised research questions, both primary and secondary data sources are used in this study. The primary data collection method is performed using the use of structured questionnaire.

The questionnaire has divided in to three parts. The first part has seven questions and is prepared to gather basic demographic information of respondents, their visit reason and habit to Jumia online Market online.

In the second part respondents were asked to state their level of agreement towards the sixteen statements constructed to show items of logistics service quality dimensions on a five point Likert scale. The 16 items are distributed among the seven dimensions of logistics service quality as follows; two items are put under the information quality dimension, two items are related to ordering procedure dimension, three items correspond to timeliness dimension, two item distributed to order condition dimension, two items are under order accuracy dimension, two items are related to order discrepancy handing dimension, and finally the remaining three items are part of the personnel contact quality dimension.

The third and the final part has one question which requested customers to rate the level of their satisfaction, on a five point Likert scale, during their experience in Jumia online Market.

The questionnaire is self-administered. Self-administered questionnaires are a useful way of collecting data. Sreejesh, Mohapatra and Anusree (2014) describe the advantages of self-administered questionnaires as being less expensive to administer, helps to eliminate the possibility of interviewer bias and derives more honest feedback than methods that involves interview.

In addition to primary data sources, secondary data sources like past studies are collected to obtain some reliable literature and empirical findings that can be applied in order to have a better understanding of customer satisfaction and logistics service quality and its implication on online shopping.

3.4. Procedures of data collection

Before the full scale survey, a sample of 10 respondents were selected and given the prepared questionnaire to fill. The major objective of the pilot taste was to check if it is possible to get the desired result using the prepared questionnaire and to identify and eliminate potential problems associated with question content and wording. Based on feedback received from the test respondents few modifications were made in order to make it more clear and understandable to the full scale survey respondents.

During the full scale survey, the questionnaire is administered to the target population through personal contact by the researchers and collaborators, who helped in data collection. Respondents are kindly requested to fill the questionnaire based on their experience at Jumia online market/former Kaymu/.

Out of the total 96 distributed questionnaires 92 were collected back, this makes the response rate 95.8%. From the collected questionnaires one questionnaire were eliminated because 50% of the questions on the questionnaire were not answered by respondent.

3.5. Data Analysis

The collected survey data is analyzed using statistical package for social sciences (SPSS) version 20 application program. Each research questions are answered accordingly and outputs of the analysis are presented in tables and charts and later their implication is explained.

Simple descriptive statistics like frequencies and percentage are applied to discuss the general demographics and visiting & purchasing habit of respondents from Jumia online market.

The descriptive statistics is also applied to assess logistics service quality in Jumia online market and the level of customer satisfaction with the logistics services provided in Jumia online market. Comparison of Mean scores of each logistics service quality dimension is

conducted to identify the logistics service quality dimension that Jumia market is performing well and bad based on the perception of respondents.

Correlation analysis is performed to discover the relation between each item of the seven logistics service quality dimensions and customer satisfaction, similarly the relation between the overall seven logistics service quality dimensions and customer satisfaction is discovered using correlation analysis.

CHAPTER FOUR

4. Result, Discussion and Interpretation

4.1. Reliability Test

Cronbach's alpha is used in this study to assess the internal consistency of the research instrument, which is developed questionnaire. Cronbach's α (alpha) is a coefficient of reliability used to measure the internal consistency of a test or scale; it resulted as a number between 0 and 1. As the result approaches to 1 the more is the internal consistency of the items, which means all the items measure the same variable.

The result of the coefficient alpha for this study's instrument was found to be 0.944 (table 3), as indication of acceptability of the scale for further analysis since all the seven items of logistics services quality dimensions (Information Quality, Order Procedure, Timeliness, Order Condition, Order Accuracy, Order Discrepancy Handing and Personnel Contact Quality) measure the same variable, which is logistics service quality. Besides the overall reliability test, the items under each of the seven logistics service quality dimensions are also tested to check if they measure the same dimension or not. Most of the dimension consistency test result was acceptable meaning greater than 0.7 except for Information Quality, Order Procedure and Order Condition which was 0.654, 0.58 and 0.569 respectively. The reliability measures of the two dimensions are poor. However, Cronbach (1951) describes that sometimes measurements with low reliability result might still influence the scale measure and the overall reliability tastes results indicate excellent internal consistency. Thus considering the results are acceptable further analysis is conducted (For the full reliability test result see Appendix).

Table 3: Scale Reliability (Cronbach's alphas) – for logistics service quality dimensions

Cronbach's Alpha	No of Items
.944	16

Source: Survey Result (2016)

4.2. Demographic characteristics of respondents

Descriptive statistics (frequency distribution) is used to discuss the general demographic characteristics of respondents. Age, gender and occupation of respondents are discussed in the below table.

Table 4: Demographics of respondents

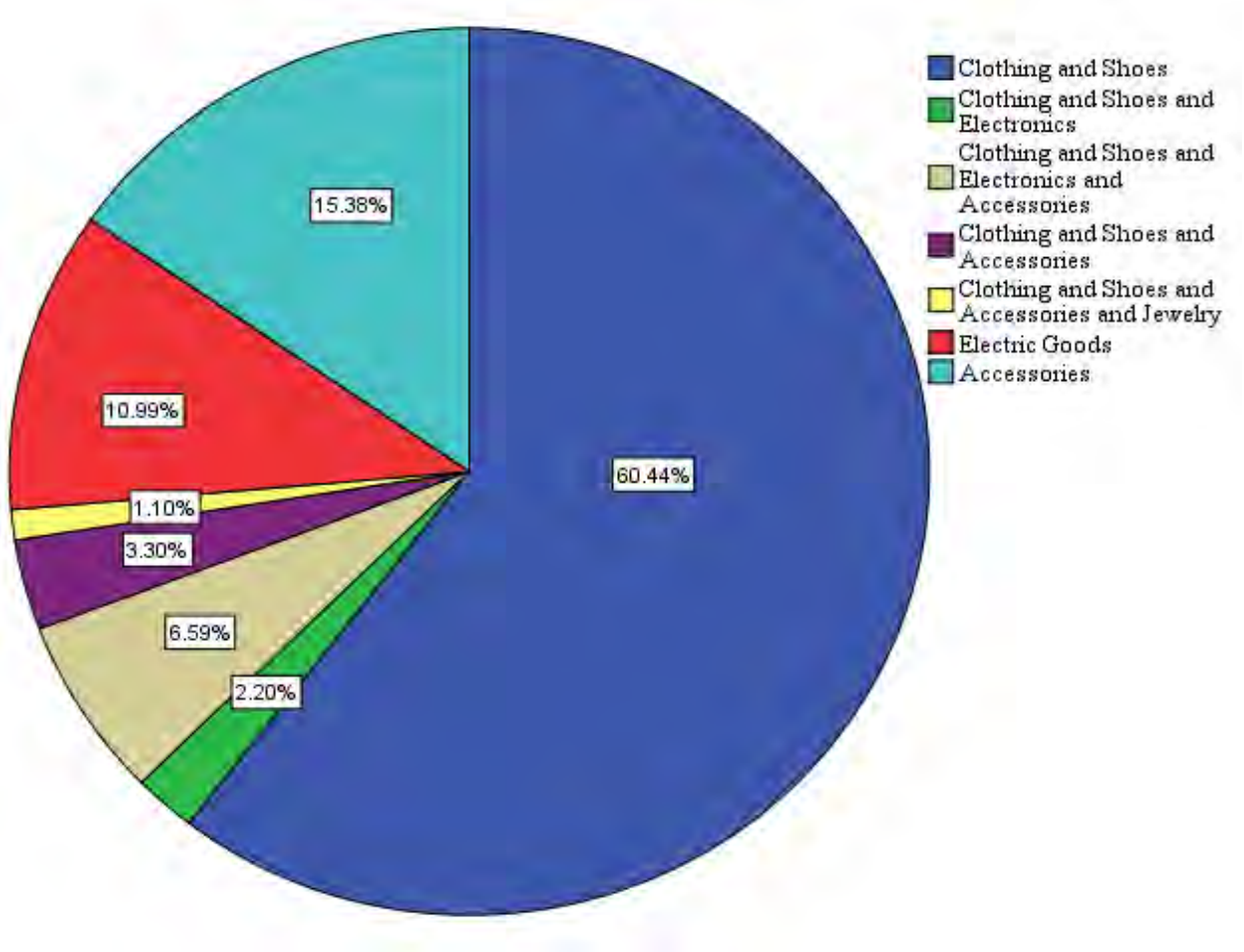
Variables		Frequency	Valid Percent
Age	Below 18	6	6.6
	18 - 30	45	49.5
	31 - 45	40	44.0
Gender	Male	63	69.2
	Female	28	30.8
Occupation	Student	6	6.6
	Self-employed	2	2.2
	Public Employee	70	76.9
	Private Employee	8	8.8
	Unemployed	5	5.5

Source: Survey Result (2016)

As table 4 depicts, from the total respondents, the age group of 18-30 constitutes the highest percentage share (49.5%) followed by the age group 31-45 with 44%. The gender distribution of respondents is dominated by male respondents with 69.2% while the female respondents constitute 30.8% of respondents. Considering the employment status of respondents, the above table shows that from the total number of respondents, 76.9% of respondents are public employees, 8.8% are private employees, 6.6% are students, 5.5% are unemployed and the remaining 2.2% are self-employed.

4.3. Current online shopping's made by respondents

To understand respondents' knowledge of services provided by Jumia online market and to identify their involvement with the services, they were asked to state the type of purchase they have currently made from offers provided by the online shopping.



Source: Survey Result (2016)

Figure 2: Categories shopping made by respondents

As figure 2 presents, 73.6% of respondents had currently made clothing and shoes shopping while 26.4 and 19.8% of respondents purchase Accessories and Electronics goods respectively. Only 1.1% or respondents stated that they have made a Jewelry purchase.

4.4. Visit and purchasing habit of respondents on Jumia online market.

To determine respondents' level of familiarity with Jumia online market and their level of awareness about services provided, they were asked the number, frequency their visit and purchase.

Table 5: Respondents' habit of visit & purchase from Jumia online market

Variable		Frequency	Valid Percent
Frequency of visit to Jumia online market	Once	16	17.6
	Twice	18	19.8
	More than two times	57	62.6
Frequency of purchase made from Jumia online market	Once	33	36.3
	Twice	27	29.7
	More than two times	31	34.1
Duration from last purchase on Jumia online market	< 1 Month	19	20.9
	< 3 Month	30	33.0
	< 6 Month	42	46.2

Source: Survey Result (2016)

As table 5 shows majority of the respondents (62.6%) visited Jumia online market more than two times previously and 19.8% of respondents visited two times. Only 17.6% percent of respondents visited Jumia online market once. This indicates majority of respondents are more familiar to Jumia online market.

The table also shows how respondents frequent purchase from Jumia online market. 36.3% of the respondents have made a purchase from Jumia market once and 34.1% of the respondents have made a purchase more than two times. The remaining 29.7% states that they have made a purchase two times. This implies that majority of the respondents have more purchasing experience from Jumia online market.

46.2% of respondents' states that it has been less than six months since their last purchase from Jumia online market. While 33% and 20.9% of respondents have indicate that it had

been less than three months and one month, since they have made their last purchase respectively. This implies that majority of the respondent have recent experience.

4.5. Analysis of customer satisfaction

To determine the level of satisfaction with the service provided by Jumia online market, respondents were asked to rate their overall level of satisfaction using a 5-point likert scale (1 means highly dissatisfied, 2 means dissatisfied, 3 means neutral, 4 means satisfied and 5 means highly satisfied).

The level of customer satisfaction was analyzed with the descriptive statistics (frequency distribution) and table 6 and Fig 3 presents the result of the analyzed overall customer satisfaction level.

Table 6: Customer Satisfaction level with Jumia online market

	Frequency	**Valid Percent**
Highly Dissatisfied	0	0
Dissatisfied	13	14.3
Neutral	4	4.4
Satisfied	48	52.7
Highly Satisfied	26	28.6

Source: Survey Result (2016)

As table 6 and figure 3 indicates 52.7% of respondents reported that they are satisfied with Jumia online market while 28.6% of respondents found to be highly satisfied with the services provided by Jumia online market. 14.3% of the respondents stated that they are dissatisfied with the service and finally 4.4% of them rated their level of satisfaction as neutral. This findings implies that most of the customer are satisfied with the logistics service provided by Jumia online market.

4.6. Perception of logistics service quality dimensions

Respondents' perception towards Jumia online market logistics service quality is measured using the 16 items divided under the seven logistics service quality dimensions. The analysis result is presented below in two parts. First, customers' perception towards each logistics service quality dimensions using the 16 items is discussed with its implications. Then the overall customers' perception towards the seven logistics service quality dimension is presented.

4.6.1 Perception towards each item of logistics service quality dimensions

Analysis of each of the seven service quality dimension is discussed below. The highest and lowest mean scored will be identified and interpreted with regarding to every item of each logistics service quality dimensions.

I. Perception towards items of Information Quality

The information quality dimension holds two items which indicate the overall information quality of Jumia online market. Customers' perception towards information quality is presented in table 7.

Table 7: Perception towards items of Information Quality

Information Quality	N	Mean	Std. Deviation
Information available on the website of Jumia Online Shopping, about the products' feature, is sufficient.	91	4.02	.745
Jumia Online Shopping provides accurate information for order delivery.	91	4.05	.821

Source: Survey Result (2016)

Analysis of individual logistics service quality items of information quality dimension shows Jumia online market provides accurate information for order delivery with a mean score of 4.05. Also respondents believed that information available on the website of Jumia online shopping is sufficient with a mean score of 4.05.

II. Perception towards items of Order Procedure

Order Procedure dimension explains the efficiency and effectiveness of the procedures followed by Jumia online market.

Table 8: Perception towards items of Order Procedure

Order Procedure	N	Mean	Std. Deviation
Mobile app/website of Jumia Online Market is user friendly to make an order.	91	4.03	.809
The delivery of products bought through Jumia Online market respect the clauses stipulated in the online order.	91	4.03	.836

Source: Survey Result (2016)

As the above table shows, both the items listed under order procedure dimension, shows equal mean score (4.03).

III. Perception towards items of Timeliness

The third logistics service quality dimension, Timeliness, includes three items which indicates on time delivery of orders as promised. Customers' perception towards items of timeliness is presented in table 9.

Table 9: Perception towards items of Timeliness

Timeliness	N	Mean	Std. Deviation
Time between order placement and receipt is short.	91	3.73	.955
Deliveries arrive on the date promised	91	3.78	1.020
The amount of time a requisition is on back order is short.	91	3.56	.833

Source: Survey Result (2016)

From the three items of timeliness dimension, respondents state their agreement that Jumia online market delivers items at the promised date with a mean score of 3.78. However, respondents perceived the amount of time that a requisition is on back order is long (mean = 3.56). The overall result findings of this dimension indicates that the customer have less agree with the quality of Jumia online market on delivering orders on time as promised.

IV. Perception towards items of Order Condition

The Order Condition dimension holds two items which explain lack of damage to orders. Like other dimensions of logistics service quality, this dimension has its own impact and importance for the overall logistics service quality. Since products on transaction involves shipping and movement it might be exposed for damage and customers need to feel safety in their order. Table 10 presents respondents' perception towards the stated points during their purchase with Jumia online shopping.

Table 10: Perception towards items of Order Condition

Order Condition	N	Mean	Std. Deviation
Products received after online orders are undamaged.	91	4.10	1.023
Damage rarely occurs as a result of the transport mode.	91	3.71	.779

Source: Survey Result (2016)

As table 10 indicates, regarding the items of Order Condition although the customers agree that they received undamaged products from online order with a mean score of 4.1, they stated that damages might occur often as a result of transportation mode with a mean score of 3.71.

V. Perception towards items of Order Accuracy

Items constructed under the dimension of Order accuracy are indicators of having the right items in the order and the correct number of items. The below table presents respondents' perception towards items of order accuracy.

Table 11: Perception towards items of Order Accuracy

Order Accuracy	N	Mean	Std. Deviation
The products delivered rarely contains the wrong item	91	4.05	.911
The products delivered rarely contains incorrect quantity, size, etc...	91	4.00	.966

Source: Survey Result (2016)

As presented in table 11, analysis of the order accuracy dimension items shows that customers believed the product delivered after online order contains the correct item with the highest mean score of 4.05. And respondents agree that the products delivered mostly contain the correct quantity, size with mean score of 4.

VI. Perception towards items of Order Discrepancy Handling

The Order Discrepancy Handing dimension holds two items which evaluates how well the company manages discrepancies in orders arrive. Like other dimensions of logistics service quality, this dimension has its own impact and importance for the overall logistics service quality. Since customers requires a well-managed order discrepancy handling mechanism any mismatch. Table 12 presents respondents' perception towards the stated points during their purchase with Jumia online shopping.

Table 12: Perception towards items of Order Discrepancy Handing

Order Discrepancy Handling	N	Mean	Std. Deviation
In case of non-conforming products received, their return is accepted in order to be replaced	91	3.67	.746
Response to quality discrepancy reports is satisfactory.	91	3.65	.848

Source: Survey Result (2016)

As table 12 indicates, regarding the items of order discrepancy handling the respondents agree that return of products is acceptable for non-confirming products with a mean score of 3.67, they have also indicates that Jumia online market response for quality discrepancy report is satisfactory with a mean score of 3.65. This implies that the response given by Jumia online market for order discrepancies are not satisfactory.

VII. Perception towards items of Personnel Contact Quality

The Personnel Contact Quality dimension holds items which explain knowledge, understanding and problem solving abilities of customer's representative of Jumia online market. Table 13 presents respondents perception towards the stated points during their contact with Jumia online market.

Table 13: Perception towards items of Personnel Contact Quality

Personnel Contact Quality	N	Mean	Std. Deviation
The customer service contact person of Jumia Online market makes an effort to understand the customer situation.	91	3.96	.868
Problems are Resolved by the assigned customer service contact person of Jumia Online market.	91	3.82	.811
Know-how and the experience of Jumia customer service representatives are adequate	91	3.84	.764

Source: Survey Result (2016)

As table 13 indicates, regarding the items of personnel contact quality the customers agree that the customer representatives of Jumia online market makes an effort to understand the customer situation with a mean score of 3.96. And they also stated that the problems are resolved by the assigned Jumia customer service representative with lowest mean score (3.82) from the three personnel contact quality items. This indicates that customers are not confident with the problem solving ability of the assigned customer service representatives of Jumia online market.

4.6.2 Perception towards overall logistics service quality dimensions

Customers' perception towards each of the seven logistics service quality dimension items are discussed earlier in this chapter. Now customers' perception towards the seven logistics service quality dimension in general will be discussed. The mean score of each of the 16 items were computed and converted to their respective dimensions.

The following table presents the summarized score of the seven logistics service quality dimension. The mean, standard deviation, and the interpretation of mean scores of customers' perception towards logistics service quality of Jumia online market are presented.

Table 14: Perception towards overall logistics service quality dimensions

Logistics Service Quality Dimension	N	Mean	Std. Deviation
Information Quality	91	4.0385	.67590
Order Procedure	91	4.0330	.69042
Timeliness	91	3.6484	.83498
Order Condition	91	3.9066	.75980
Order Accuracy	91	4.0275	.86076
Order Discrepancy Handing	91	3.6593	.72602
Personnel Contact Quality	91	3.8791	.78649

Source: Survey Result (2016)

As table 14 depicted based on the measurement of customers' perception the information quality dimension of logistics service quality is resulted superior to the other sixth dimensions with a mean score of 4.038. This can be interpreted as, according to respondents of the survey, Jumia online market provides accurate and adequate information on its products features and orders.

As per the rating of respondents the second highly scored logistics service quality dimension is order procedure with a mean score of 4.033. The customers perceived that Jumia online market has efficient and effective order procedure meaning, the customer indicates that the mobile apps/website of Jumia is user friendly and the order delivery process respects the clause stipulated in the online order.

The third highly rated logistics service quality dimension by customers is order accuracy with 4.027 mean score. Followed by order condition, personnel contact quality and order discrepancy handling which is rated as the fourth, fifth and sixth logistics service quality dimension with a mean score of 3.906, 3.879 and 3.659 respectively.

From the seventh logistics services quality dimensions the least performed logistics service quality dimension is Timeliness with a mean score of 3.648. As per the response of the customers Jumia online market are not performing well in delivering products on time as promised and the time between order placement & receipt and time for requisitions being in back order is long.

4.7. Relationship between logistics service quality dimensions and customer satisfaction

I. Correlation analysis

Correlation analysis deal with relationships among variables and helps to gain insight into the direction and strength of relation between the variables. Correlation coefficients take values between -1 and 1 ranging from being negatively correlated (-1) to uncorrelated (0) to positively correlated (+). The sign of the correlation coefficient defines the direction of the relationship. The absolute value indicates the strength of the correlation. Dancey and Reidy (2004) states that a correlation result which is 0 indicates zero correlation, a result between 0.1 and 0.3 indicates a weak correlation among variables, a result which is between 0.4 and 0.6 shows a moderate correlation, a result between 0.7 and 0.9 indicates a strong correlation among variables while a result which is equal to 1 indicates a perfect correlation.

Correlation analysis is conducted to assess the association among:

a. Each item of the seven logistics service quality dimensions and overall customer satisfaction
b. The overall logistics service quality dimensions and overall customer satisfaction.

4.7.1 Correlation analysis between items of logistics service quality dimensions and customer satisfaction

The relation between each items found in the seven logistics service quality dimensions and customer satisfaction is analyzed and presented below.

I. Correlations between items of Information quality and customer satisfaction

The below table presents the nature of relation between customer satisfaction and the two items of Information Quality which deals with the adequacy and accuracy of information provided by Jumia online market.

Table 15: Correlations between items of Information Quality and customer satisfaction

	IQ1: Information available on the website of Jumia Online Shopping, about the products' feature, is sufficient.	IQ2: Jumia Online Shopping provides accurate information for order delivery.	Customer Satisfaction
IQ1: Information available on the website of Jumia Online Shopping, about the products' feature, is sufficient.	1.000		
IQ2: Jumia Online Shopping provides accurate information for order delivery.	.488**	1.000	
Customer Satisfaction	.580**	.727**	1.000

**.Correlation is significant at the 0.01 level (2-tailed).

Source: Survey Result (2016)

As it is depicted in 15 table, there exist a positive and moderate relationship with all information quality items and customer satisfaction which is also highly significant (P=0.000). Providing accurate information for order delivery show better correlation with customer satisfaction form items found within information quality dimension. This means that if Jumia online market keeps its information of order delivery accurately, customer satisfaction will increase significantly.

II. Correlation result between items of Order procedure and customer satisfaction

The analysis result which depicts the nature of relation between items of Order procedure, which deals with efficiency and effectiveness of the procedures followed by Jumia online market, and customer satisfaction, is presented in table 16.

Table 16: Correlations between items of Order Procedure and customer satisfaction

	OP1: Mobile app/website of Jumia Online market is user friendly to make an order.	OP2: The delivery of products bought through Jumia Online market respect the clauses stipulated in the online order.	Customer Satisfaction
OP1: Mobile app/website of Jumia Online market is user friendly to make an order.	1.000		
OP2: The delivery of products bought through Jumia Online market respect the clauses stipulated in the online order.	.409**	1.000	
Customer Satisfaction	.564**	.713**	1.000

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Survey Result (2016)

As presented in the table 16, there exist a positive, moderate and highly significant (0.000) relation among the items of the second logistics service quality dimension, Order procedure, the delivery of products bought through Jumia Online market respect the clauses stipulated in the online order has a better positive relation with customer satisfaction followed by mobile app/website of Jumia Online market user friendliness.

III. Correlation result between items of Timeliness and customer satisfaction

The relation between the ability of Jumia online market to deliver orders to the customer on time as promised with the overall customer satisfaction is presented in the below table.

Table 17: Correlations between items of Timeliness and customer satisfaction

	Tl1: Time between order placement and receipt is short.	Tl2: Deliveries arrive on the date promised	Tl3: The amount of time a requisition is on back order is short.	Customer Satisfaction
Tl1: Time between order placement and receipt is short.	1.000			
Tl2: Deliveries arrive on the date promised	.656**	1.000		
Tl3: The amount of time a requisition is on back order is short.	.629**	.683**	1.000	
Customer Satisfaction	.877**	.630**	.619**	1.000

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Survey Result (2016)

Table 17 indicates that there is a significant positive relationship between all items of timeliness dimension and customer satisfaction. The strongest correlation is obtained on time between order placement & receipt and customer satisfaction (0.877); the lowest correlation is observed on the amount of time that requisition in on back order and customer satisfaction (0.619).

IV. Correlation result between items of Order Condition and customer satisfaction

The analysis result which depicts the nature of relation between items of Order condition, which deals with lack of damage to orders which is delivered by Jumia online market, and customer satisfaction, is presented in table 18.

Table 18: Correlations between items of Order Condition and customer satisfaction

	OC1: Products received after online orders are undamaged.	OC2: Damage rarely occurs as a result of the transport mode.	Customer Satisfaction
OC1: Products received after online orders are undamaged.	1.000		
OC2: Damage rarely occurs as a result of the transport mode.	.413**	1.000	
Customer Satisfaction	.608**	.552**	1.000

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Survey Result (2016)

As it is depicted in 18 table, there exist a positive and moderate relationship with both Order Condition items and customer satisfaction which is also highly significant (P=0.000). Products received after online order is undamaged show better correlation with customer satisfaction form items found within order condition dimension.

V. Correlation result between items of Order Accuracy and customer satisfaction

The analysis result which depicts the nature of relation between items of Order Accuracy, which deals with accurate delivery of orders, and customer satisfaction, is presented in table 19.

Table 19: Correlations between items of Order Accuracy and customer satisfaction

	OA1: The products delivered rarely contains the wrong item	OA1: The products delivered rarely contains incorrect quantity, size, etc...	Customer satisfaction
OA1: The products delivered rarely contains the wrong item	1.000		
OA2: The products delivered rarely contains incorrect quantity, size, etc...	.682**	1.000	
Customer satisfaction	.617**	.748**	1.000

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Survey Result (2016)

As it is depicted in table 19, there exist a positive and moderate relationship with both Order accuracy items and customer satisfaction which is also highly significant (P=0.000). The products delivered rarely contains incorrect quality show better correlation with customer satisfaction form items found within order accuracy dimension.

VI. Correlation result between items of Order Discrepancy Handling and customer satisfaction

The relation between the ability of Jumia online market on handling orders discrepancies with the overall customer satisfaction is presented in the below table.

Table 20: Correlations between items of Order Discrepancy Handling and customer satisfaction

	ODH1: In case of non-conforming products received, their return is accepted in order to be replaced	ODH2: Response to quality discrepancy reports is satisfactory.	Customer Satisfaction
ODH1: In case of non-conforming products received, their return is accepted in order to be replaced	1.000		
ODH2: Response to quality discrepancy reports is satisfactory.	.657**	1.000	
Customer Satisfaction	.495**	.681**	1.000

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Survey Result (2016)

Table 20 indicates that there is a significant positive relationship between all items of order discrepancy handling dimension and customer satisfaction. The moderate correlation is obtained on the satisfactory responses given by the company on quality discrepancies and customer satisfaction (0.681); the weakest correlation is observed on deliveries arrive on the acceptability of returning non confirming products and customer satisfaction (0.495).

VII. Correlation result between items of Personnel Contact Quality and customer satisfaction

The relation between items of personnel contact quality, which deals with knowledge and understanding of Jumia customer service representative and their ability to resolve customer's problem, and overall customer satisfaction, is presented in table 21.

Table 21: Correlations between items of Personnel Contact Quality and customer satisfaction

	PCQ1: Customer service contact person makes an effort to understand the customer situation	PCQ2: Problems are Resolved by the assigned customer service contact person	PCQ3: Know-how and the experience of customer service representatives are adequate	Customer Satisfaction
PCQ1: Customer service contact person makes an effort to understand the customer situation	1.000			
PCQ2: Problems are Resolved by the assigned customer service contact person	.620**	1.000		
PCQ3: Know-how and the experience of customer service representatives are adequate	.642**	.347**	1.000	
Customer Satisfaction	.682**	.622**	.448**	1.000

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Survey Result (2016)

As presented in the table 21, there exist a positive and highly significant relation among the items of the last logistics service quality dimension, Personnel Contact Quality, understanding ability of customer representative to the customers' situation has a better positive relation with customer satisfaction The adequacy of knowledge and experience of Jumia customer representative has the weakest relation with customer satisfaction from all three personnel contact quality items.

4.7.2 Correlation analysis between overall logistics service quality dimensions and customer satisfaction

As discussed above all items of logistics service quality dimensions have a positive and statistically significant relationship with customer satisfaction although the strength of the relationship varies across different items of logistics service quality dimensions. The relationship between each logistics service quality dimensions and customer satisfaction is discussed below.

Table 22: Correlation result of logistics service quality dimensions and customer satisfaction

	IQ	OP	T	OC	OA	ODH	PCQ	Customer Satisfaction
IQ	1.000							
OP	.741**	1.000						
Tl	.635**	.627**	1.000					
OC	.618**	.615**	.648**	1.000				
OA	.710**	.569**	.694**	.785**	1.000			
ODH	.587**	.455**	.662**	.586**	.642**	1.000		
PCQ	.594**	.580**	.696**	.632**	.637**	.696**	1.000	
Customer Satisfaction	.761**	.762**	.804**	.692**	.746**	.652**	.674**	1.000

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Survey Result (2016)

Table 22 indicates that there is a significant positive relationship between all seven dimensions of logistics service quality and customer satisfaction. The strongest correlation is obtained between Timeliness, Order procedure, Information quality, Order Accuracy and customer satisfaction (0.804, 0.762, 0.761 and 0.746 respectively); followed by the moderate correlation between Order condition (0.692), Personnel contact quality (0.674) and Order discrepancy handling (0.652) respectively with customer satisfaction.

Yi-xiong, Bing, and Jian-rong (2007) has proofed the significant correlation between LSQ and customer satisfaction. And according to their findings, timeliness and personnel contact quality have the highest correlation with customer satisfaction.

On this study, from all logistics service quality dimensions, the least scored correlation is between Order discrepancy handling and customer satisfaction (0.652). Because there exists a positive correlation with all logistics service quality dimensions and customer satisfaction, it's possible to say logistics service quality and customer satisfaction is positively related, which in other words mean the better the logistics service quality of Jumia online market, there is the higher is the customer satisfaction.

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CHAPTER FIVE

5. Summery, Conclusion and Recommendation

5.1 Summery

To summarize the findings of the study:

- There exists a high level of internal consistency among the 16 items of logistics service quality constructs. While measured using Cronbach's alpha a 0.944 result was obtained which indicates the existence of high reliability among items of logistics service quality and this implies that a better logistics service quality can be provided by Jumia online market, fulfilling all dimensions concurrently.

- The demographics characteristics of respondents indicates that most of the respondents are within the age group of 18-30, also most of them are male and most the respondents are working in public organizations.

- Visit and purchasing habits of the respondent indicates that most of the respondent are familiar with on Jumia online market and they have recent experience.

- The findings also shows that most of the respondents are satisfied with Jumia online market logistics service quality.

- According to respondents' perception, information quality dimension of logistics service quality is highly scored compared to the other dimensions. Followed by order procedure and order accuracy. The least performed logistics service quality dimension is Timeliness.

- The correlation analysis findings indicates that there is a significant and positive relationship between all the seven dimensions of logistics service quality and customer satisfaction.

5.2 Conclusion

The following conclusion is drawn based the findings of the study, which is obtained while answering research questions:

- The level of customers' satisfaction with the logistics services obtained, from Jumia online market, shows that majority of the respondents are satisfied. 81.3% of respondents expressed that they are satisfied (28.6% highly satisfied and 52.7% satisfied) with their experience of online shopping from Jumia market. Whereas, 14.3% of respondents stated that they are dissatisfied with the logistics service provided by Jumia market. The remaining 4.4% of respondents did not rate their level of satisfaction as satisfied or not satisfied.

- On the measurement of customers' perception towards the logistics service quality dimensions, the information quality dimension is resulted superior to the other sixth dimensions followed by order procedure, order accuracy, order condition, personnel contact quality and order discrepancy handling respectively. Timeliness is the least performed logistics service quality dimension. This indicates although Jumia online market provides accurate and adequate information for products features and order delivery, they are not performing well in delivering products on time as promised and the time between order placement & receipt and time for requisitions being in back order is long.

- There exists a significant positive relationship between all seven dimensions of logistics service quality and customer satisfaction although the degree of relation varies. The highest correlation is obtained between timeliness and customer satisfaction; followed by Order procedure, Information quality, Order accuracy, Order condition and Personnel contact quality respectively, while the weakest correlation is between order discrepancy handling and customer satisfaction.

5.3 Recommendations

As presented in the findings of the study all the seven dimensions of logistics service quality have significant positive relation and impact on customer satisfaction. So working to improve these aspects will contribute to the overall customer satisfaction with Jumia online market. Based on the findings of the study, the following recommendations are provided by the researcher to improve the logistics service quality and customer satisfaction of Jumia online market.

To improve logistics service quality aspects related with Information Quality - although from the seven service quality dimensions' information quality's perception score is superior; there is still a room for improvement.

- From items of information quality, sufficient information availability, on the website of Jumia online market about the products, is the least scored one on the perception measurement. To improve this perception problem, the company should continuously update the website information and more elaborative and explanatory product descriptions has to be included for each product.

- And also the company should continuously update customers about the status of their order.

To improve logistics service quality aspects related with Order procedure, even if the company have also score higher on this logistics service quality dimension; there is still a measure that a company could take for further improvement.

- The company shall give due attention on making the mobile applications and website more user friendly so as to make it easy for anyone to make an order.

To improve logistics service quality aspects related with Order accuracy, Jumia online market should take the following measures.

- From items of Order accuracy, delivery of correct items to the customer is the least scored perception measurement. To improve this perception problem, the company should make sure on capturing the customer order and delivering the right type, size, etc… items. Specially, mismatch in order might disappoint customers if the

product was on sale and the customer do not have a chance to get those advantage because of the company mistake. Thus, the company should always try to deliver the right item of ordered products.

To improve logistics service quality aspects related with Order condition, Jumia online market should emphasize on;

- Alleviating any damage that may occur on the product while delivery. Selecting appropriate transportation mode for different type of product deliveries will help.

To improve logistics service quality aspects related with Personnel contact quality, Jumia online market should take the following measure.

- Providing continues on job and off job training to assigned customer representatives to build their understanding and problem solving skills. This will help to instill confidence to customers on the ability of Jumia customer representatives to handle any of their problems.

To improve logistics service quality aspects related with Order discrepancy handling, Jumia online market should consider on;

- Giving satisfactory response for any order discrepancies that may occur. Stating and notifying customers in advance, about the terms and conditions of order replacement and return for any discrepancies arise, is important.

- Influencing Jumia market sellers to accept order return and replacement for any order discrepancy.

To improve logistics service quality aspects related with Timeliness – from the seven logistics service quality dimensions, timeliness is the least scored one on the perception measurement. Jumia online market should give focus to improve logistics service quality items of this specific dimension. The following points are recommended.

- Enforce seller to make a commitment on availing the orders as soon as order is placed, to make time gap between order placement and receipt shorter.
- Continuous follow up of delivery partners is mandatory as it has significant impact on delivering products on the promised date.

5.4 Limitation and further area of study

From the findings of the study it was confirmed that all the seven logistics service quality dimensions has a relation with customer satisfaction of Jumia online market. However, the study has some limitations, i.e. while determining the sample size, a margin error of 10% is allowed in this study which is lower than the suggested standard and though random sample selection technique is recommend to avoid biasedness, due to information confidentiality of the target population influence the researcher to stick with non-probabilistic sample selection technique. Thus, further studies should be conducted in this area with a wider sample size and scope including other business who have engaged in the online business so as to validate the theoretical claims and conclude on logistics service quality impact on customer satisfaction in online market of Ethiopia.

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(Innov8tiv, Africa Internet Groups rebrands as Jumia, 2016)

(Wikipedia the free encyclopedia, Kaymu, 2016)

Appendix A: Questionnaire

Questionnaire for Logistics Service quality and customer satisfaction survey on Kaymu Jumia online shopping service

First I would like to thank you for your time. My name is Hana Alemu and I am a graduate student at Addis Ababa University School of Commerce. I am conducting this study for the completion of my Masters Degree in Logistics and supply chain management.

The purpose of the study is to measure logistics service quality and the level of customer satisfaction on Kaymu/ Jumia online market/. Your kind cooperation will help me to find reliable data and will be used only for this study. Please try to answer all stated questions and I would like to thank you for your time again.

Please mark your response with "√"

If you have any question, please contact me through myatse@gmail.com

Part one: Demographic information of respondents.

1. Age

   ☐ Below 18 ☐ 18 – 30 ☐ 31 – 45 ☐ Above 45

2. Gender

   ☐ Male ☐ Female

3. Occupation

   ☐ Student ☐ Self-employed ☐ Public - employee

   ☐ Private - employee ☐ Unemployed

4. From shopping categories listed below which kind of shopping do you currently made from Kaymu/Jumia online market/?

   ☐ Clothing and shoes ☐ Electric goods

   ☐ Accessories ☐ Jewelry

   If other please state _____

5. How many times did you visit Kaymu/Jumia online market/?

   ☐ Once ☐ Twice ☐ More than two times

6. How many times have you make a purchase from Kaymu/Jumia online market/?

☐ Once ☐ Twice ☐ More than two times

7. How long it has been since you make the last purchase from Kaymu/Jumia online market/?

☐ < 1 month ☐ < 3 month ☐ < 6 month ☐ Above six month

Part two: Perception towards logistics service quality dimensions.

Please show the extent to which you believe the Kaymu/Jumia online market/ has to the feature described in the statement. (1= Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5= Strongly Agree)

Logistics Service Quality dimensions	**Your level of agreement**				
Information Quality	1	2	3	4	5
Within the website of Kaymu/Jumia online market/, the information about products' features is sufficient.					
Kaymu/Jumia online market/ provides accurate information for your order delivery					
Ordering Procedures	1	2	3	4	5
The mobile app/website of Kaymu/Jumia online market/ is user friendly to make an order					
The delivery of the products bought through Kaymu/Jumia online market/ respect the clauses stipulated in the online order					
Timeliness	1	2	3	4	5
Time between order placement and receipt is short.					
Deliveries arrive on the date promised					
The amount of time a requisition is on back-order is short					
Order Condition	1	2	3	4	5
Products received after online orders are undamaged					
Damage rarely occurs as a result of the transport mode					
Order Accuracy	1	2	3	4	5
The product delivered rarely contains the wrong item					
The product delivered rarely contains incorrect quantity, size, etc					

Order Discrepancy Handling	1	2	3	4	5
In case of non-conforming products received, their return is accepted in order to be replaced					
Response to quality discrepancy reports is satisfactory					
Personnel contact quality	1	2	3	4	5
The customer service contact person of Kaymu/Jumia online market/ makes an effort to understand the customer situation.					
Problems are resolved by the assigned customer service contact person of Kaymu/Jumia online market/.					
Know-how and the experience of Kaymu/Jumia online market/ customer service representatives are adequate					

Part Three: Level of Customer Satisfaction

Please indicate your level of agreement on the below statements. (1= Highly Dissatisfied, 2=Dissatisfied, 3=Neutral, 4=Satisfied, 5= Highly Satisfied)

Statement	1	2	3	4	5
Overall, How satisfied are you with Kaymu/Jumia online market/ service?					

Appendix B: Statistical Output

Reliability Analysis

Reliability Statistics for all 16 items of logistics service quality dimensions

Cronbach's Alpha	N of Items
.944	16

Reliability Statistics – Information Quality Dimension

Cronbach's Alpha	N of Items
.654	2

Reliability Statistics – Order Procedure Dimension

Cronbach's Alpha	N of Items
.580	2

Reliability Statistics – Timeliness Dimension

Cronbach's Alpha	N of Items
.848	3

Reliability Statistics – Order Condition Dimension

Cronbach's Alpha	N of Items
.569	2

Reliability Statistics – Order Accuracy Dimension

Cronbach's Alpha	N of Items
.810	2

Reliability Statistics – Order Discrepancy Handling Dimension

Cronbach's Alpha	N of Items
.789	2

Reliability Statistics – Personnel Contact Quality Dimension

Cronbach's Alpha	N of Items
.779	3

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
IQ1: Website of Jumia Online market, the information about products' feature is sufficient.	57.99	94.767	.550	.502	.943
IQ2: Jumia Online market provides accurate information for order delivery.	57.96	90.198	.796	.763	.938
OP1: The Mobile app/website of Jumia Online market is user friendly to make an order.	57.98	94.288	.532	.540	.943
OP2: The delivery of products bought through Jumia Online market respect the clauses stipulated in the online order.	57.98	91.666	.683	.719	.940
Tl1: Time between order placement and receipt is short.	58.29	88.606	.766	.710	.938
Tl2: Deliveries arrive on the date promised	58.23	87.868	.753	.721	.939
Tl3: The amount of time a requisition is on back order is short.	58.45	90.628	.755	.719	.939
OC1: Products received after online orders are undamaged.	57.91	89.014	.686	.649	.941
OC2: Damage rarely occurs as a result of the transport mode.	58.30	93.255	.628	.568	.941
OA1: The products delivered rarely contains the wrong item	57.96	89.820	.732	.763	.939
OA2: The products delivered rarely contains incorrect quantity, size, etc...	58.01	88.211	.780	.740	.938
ODH1: In case of non-conforming products received, their return is accepted in order to be replaced	58.34	93.872	.614	.618	.942
ODH2: Response to quality discrepancy reports is satisfactory.	58.36	90.967	.718	.745	.940
PCQ1: The customer service contact person of Jumia Online market makes an effort to understand the customer situation.	58.05	89.830	.773	.752	.938
PCQ2: Problems are resolved by the assigned customer service contact person of Jumia Online Shopping.	58.19	92.309	.663	.616	.941
PCQ3: Know-how and the experience of Jumia customer service representatives are adequate	58.18	92.813	.673	.695	.941

Correlation analysis –logistics service quality dimensions and customer satisfaction

Correlations

		IQ	OP	T	OC	OA	ODH	PCQ	Ovsat
IQ	Pearson Correlation	1	.741**	.635**	.618**	.710**	.587**	.594**	.761**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.000
	N	91	91	91	91	91	91	91	91
OP	Pearson Correlation	.741**	1	.627**	.615**	.569**	.455**	.580**	.762**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000	.000
	N	91	91	91	91	91	91	91	91
T	Pearson Correlation	.635**	.627**	1	.648**	.694**	.662**	.696**	.804**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000	.000
	N	91	91	91	91	91	91	91	91
OC	Pearson Correlation	.618**	.615**	.648**	1	.785**	.586**	.632**	.692**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000	.000
	N	91	91	91	91	91	91	91	91
OA	Pearson Correlation	.710**	.569**	.694**	.785**	1	.642**	.637**	.746**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000	.000
	N	91	91	91	91	91	91	91	91
ODH	Pearson Correlation	.587**	.455**	.662**	.586**	.642**	1	.696**	.652**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.000
	N	91	91	91	91	91	91	91	91
PCQ	Pearson Correlation	.594**	.580**	.696**	.632**	.637**	.696**	1	.674**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000		.000
	N	91	91	91	91	91	91	91	91
Ovsat	Pearson Correlation	.761**	.762**	.804**	.692**	.746**	.652**	.674**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	
	N	91	91	91	91	91	91	91	91

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations

		IQ1: Website of Jumia Online market, the information about products' feature is sufficient.	IQ2: Jumia Online market provides accurate information for order delivery.	Overall satisfaction
IQ1: Website of Jumia Online market, the information about products' feature is sufficient.	Pearson Correlation	1	.488**	.580**
	Sig. (2-tailed)		.000	.000
	N	91	91	91
IQ2: Jumia Online market provides accurate information for order delivery.	Pearson Correlation	.488**	1	.727**
	Sig. (2-tailed)	.000		.000
	N	91	91	91
Overall satisfaction	Pearson Correlation	.580**	.727**	1
	Sig. (2-tailed)	.000	.000	
	N	91	91	91

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations

		OP1: The Mobile app/website of Jumia Online market is user friendly to make an order	OP2: The delivery of products bought through Jumia Online market respect the clauses stipulated in the online order.	Overall satisfaction
OP1: The Mobile app/website of Jumia Online market is user friendly to make an order.	Pearson Correlation	1	.409**	.564**
	Sig. (2-tailed)		.000	.000
	N	91	91	91
OP2: The delivery of products bought through Jumia Online market respect the clauses stipulated in the online order.	Pearson Correlation	.409**	1	.713**
	Sig. (2-tailed)	.000		.000
	N	91	91	91
Overall satisfaction	Pearson Correlation	.564**	.713**	1
	Sig. (2-tailed)	.000	.000	
	N	91	91	91

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations

		Tl: Time between order placement and receipt is short	T2: Deliveries arrive on the date promised	T3: The amount of time a requisition is on back order is short	Overall satisfaction
Tl: Time between order placement and receipt is short.	Pearson Correlation	1	.656**	.629**	.877**
	Sig. (2-tailed)		.000	.000	.000
	N	91	91	91	91
T2: Deliveries arrive on the date promised	Pearson Correlation	.656**	1	.683**	.630**
	Sig. (2-tailed)	.000		.000	.000
	N	91	91	91	91
T3: The amount of time a requisition is on back order is short.	Pearson Correlation	.629**	.683**	1	.619**
	Sig. (2-tailed)	.000	.000		.000
	N	91	91	91	91
Overall satisfaction	Pearson Correlation	.877**	.630**	.619**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	91	91	91	91

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations

		OC1: Products received after online orders are undamaged	OC2: Damage rarely occurs as a result of the transport mode	Overall satisfaction
OC1: Products received after online orders are undamaged.	Pearson Correlation	1	.413**	.608**
	Sig. (2-tailed)		.000	.000
	N	91	91	91
OC2: Damage rarely occurs as a result of the transport mode.	Pearson Correlation	.413**	1	.552**
	Sig. (2-tailed)	.000		.000
	N	91	91	91
Overall satisfaction	Pearson Correlation	.608**	.552**	1
	Sig. (2-tailed)	.000	.000	
	N	91	91	91

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations

		OA1: The products delivered rarely contains the wrong item	OA2: The products delivered rarely contains incorrect quantity, size, etc...	Overall satisfaction
OA1: The products delivered rarely contains the wrong item	Pearson Correlation	1	.682**	.617**
	Sig. (2-tailed)		.000	.000
	N	91	91	91
OA2: The products delivered rarely contains incorrect quantity, size, etc...	Pearson Correlation	.682**	1	.748**
	Sig. (2-tailed)	.000		.000
	N	91	91	91
Overall satisfaction	Pearson Correlation	.617**	.748**	1
	Sig. (2-tailed)	.000	.000	
	N	91	91	91

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations

		ODH1: In case of non-conforming products received, their return is accepted in order to be replaced	ODH2: Response to quality discrepancy reports is satisfactory.	Overall satisfaction
ODH1: In case of non-conforming products received, their return is accepted in order to be replaced	Pearson Correlation	1	.657**	.495**
	Sig. (2-tailed)		.000	.000
	N	91	91	91
ODH2: Response to quality discrepancy reports is satisfactory.	Pearson Correlation	.657**	1	.681**
	Sig. (2-tailed)	.000		.000
	N	91	91	91
Overall satisfaction	Pearson Correlation	.495**	.681**	1
	Sig. (2-tailed)	.000	.000	
	N	91	91	91

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations

		PCQ1: The customer service contact person of Jumia Online market makes an effort to understand the customer situation	PCQ2: Problems are Resolved by the assigned customer service contact person.	PCQ3: Know-how and the experience of Jumia customer service representatives are adequate	Overall satisfaction
PCQ1: The customer service contact person of Jumia Online market makes an effort to understand the customer situation.	Pearson Correlation	1	.620**	.642**	.682**
	Sig. (2-tailed)		.000	.000	.000
	N	91	91	91	91
PCQ2: Problems are Resolved by the assigned customer service contact person	Pearson Correlation	.620**	1	.347**	.622**
	Sig. (2-tailed)	.000		.001	.000
	N	91	91	91	91
PCQ3: Know-how and the experience of Jumia customer service representatives are adequate	Pearson Correlation	.642**	.347**	1	.448**
	Sig. (2-tailed)	.000	.001		.000
	N	91	91	91	91
Overall satisfaction	Pearson Correlation	.682**	.622**	.448**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	91	91	91	91

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations

		IQ	OP	Tl	OC	OA	ODH	PCQ	Ovsat
IQ	Pearson Correlation	1	.741**	.635**	.618**	.710**	.587**	.594**	.761**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.000
	N	91	91	91	91	91	91	91	91
OP	Pearson Correlation	.741**	1	.627**	.615**	.569**	.455**	.580**	.762**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000	.000
	N	91	91	91	91	91	91	91	91
Tl	Pearson Correlation	.635**	.627**	1	.648**	.694**	.662**	.696**	.804**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000	.000
	N	91	91	91	91	91	91	91	91
OC	Pearson Correlation	.618**	.615**	.648**	1	.785**	.586**	.632**	.692**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000	.000
	N	91	91	91	91	91	91	91	91
OA	Pearson Correlation	.710**	.569**	.694**	.785**	1	.642**	.637**	.746**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000	.000
	N	91	91	91	91	91	91	91	91
ODH	Pearson Correlation	.587**	.455**	.662**	.586**	.642**	1	.696**	.652**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.000
	N	91	91	91	91	91	91	91	91
PCQ	Pearson Correlation	.594**	.580**	.696**	.632**	.637**	.696**	1	.674**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000		.000
	N	91	91	91	91	91	91	91	91
Ovsat	Pearson Correlation	.761**	.762**	.804**	.692**	.746**	.652**	.674**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	
	N	91	91	91	91	91	91	91	91

**. Correlation is significant at the 0.01 level (2-tailed).