



**THE IMPACT OF SERVICE DELIVERY ENVIRONMENT ON
CUSTOMER SATISFACTION:**

The case of Ethio Telecom Enterprise Service centers

**A Thesis submitted to Addis Ababa University School of Commerce in
Partial fulfillment of the requirements for the Degree of Master of Art
in Marketing Management**

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Graduate Studies
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*“ The impact of service delivery environment on customer satisfaction:
The case of Ethio telecom Addis Ababa Enterprise Service center.”*

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Letter of Certification

This is to certify that Desta Mekango has carried out his project on the topic entitled “*The impact of service delivery environment on customer satisfaction in the case of ethio telecom enterprise service center*”. This work is original in nature and is suitable for submission for the award for Master of Marketing Management.

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Declaration

I, the undersigned, declare that this thesis entitled "*The impact of Service Delivery environment on Customer satisfaction: in the case of Ethio telecom enterprise service center*" is the outcome of my own effort and all sources of materials used for the study have been duly acknowledged. I have produced it independently except for the guidance and suggestion of the Research Advisor. This study has not been submitted for any degree in this University or any other University or institution. It is offered for the partial fulfillment of the degree of Master of Art in Marketing Management

By: Desta Mekango (GSE/0364/07)

Signature.....

Date.....

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By:Desta Mekango (GSE/0364/07)

Signature.....

Date.....

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Abstract

This study presents the analysis of service delivery environment dimensions on customer satisfaction in ethio telecom Addis Ababa enterprise service centers. The main objective of the study was examining the impact service delivery environment dimensions on customer satisfaction. The research used quantitative approach and also descriptive and survey design were used. The variable used in this research were ambient condition, design factors, employee displayed emotions and customer density (independent variables) and customer satisfaction (dependent variable). The sampling technique used was convenient sampling. Self-administered close ended five point likert scale questionnaire was used to collect data from enterprise customers. Statistical package for social science (SPSS) version 20 was used for the data analysis. Cronbach alpha coefficient($\alpha=0.927$) was calculated to check the reliability and validity of the questionnaire. The correlation coefficient analysis indicated a positive relationship between service delivery environment dimensions (employee displayed emotions, design factors and ambient condition) and customer satisfaction. And also the analysis indicated there is negative relationship between customer climate and customer satisfaction. Regarding regression analysis, multiple linear regression analysis revealed a statistical significance between service delivery environment dimensions and customer satisfaction. The conducted study showed that service delivery environment dimensions such as ambient conditions, design factors , employee displayed emotions and customer climate are the dimensions that create pleasant environment in ethio telecom enterprise service centers. This implied that service delivery environment dimentionns highly influenced customers' satisfaction in ethio telecom enterprise service centers. Therefore, the study suggested that ethio telecom managers should devise ways to improve employee displayed emotions, design factors and ambient conditions; and should work to decrease the customer density in ethio telecom service centers to increase customer satisfaction.

Key words: Ambient condition, customer climate, customer satisfaction, design factors, employee displayed emotion, service delivery environment.

Chapter One

Introduction

1.1. Background of the study

Researchers have tried to define service and to explain what service constitutes. There are many definitions regarding the concepts of service. Services are deeds, processes, and performances (Parasuraman, A, Valarie, A, Zeithaml, A, Leonard, L., & Berry, L 1985). Gronroos (2000, p.46) defined service as: "An activity or series of activities of more or less intangibles nature that normally, but not necessarily, take place in interactions between the customer and service employees and/or physical resources or goods and I or systems of service provider, which are provided as solutions to customer problems". Whereas Kotler P, Armstrong G, Saunders J, Wong V (1999) defined service as any activity or benefit that one party offers to another which is essentially intangible and does not result in the ownership of anything, and it may or may not be tied to a physical product.

Service delivery environment plays an important role service delivery because it can promote a positive emotional reaction, strengthens customer perception and customer satisfaction (Lin and Liang, 2011). In 1992, Bitner introduced the concept "service delivery environment" to represent physical dimension (ambient and design elements) used by service organizations to perform and deliver their services to customers. However, many service organizations realize they cannot just rely on the physical setting because factors like service employees and customers also play an important role in services delivery (Tombs and McColl- Kennedy, 2003). For example, even though the physical environment is excellent, if the employees fail to greet and treat customers in a proper manner, it will create a negative influence on customer satisfaction towards the service organization.

Based on the idea of Bitner, Rosenbaum and Massiah (2011) suggested new service delivery environment framework which has four dimensions such as physical dimension, social

dimension, socially symbolic dimension and natural dimension. For this study, the framework proposed by Rosenbaum et.al (2011) completes Bitner's assumptions regarding service delivery environment. However, to further understand the framework, only the first two (physical dimension and social dimension) will be further explored in this study.

According to Rosenbaum et.al (2011), the two physical dimension elements are ambient condition and design elements (spatial/functionality and symbol/signage). a) Ambient condition: refers to background characteristics of the service environment such as temperature, lighting, noise, music ,color and so on that affect five senses of the actors/customers of the service delivery environment. All these factors affect how people feel, think and respond to the service establishment. b) Design elements i) spatial layout and functionality, because service environments generally exist to fulfill specific purposes or needs of the customers. Spatial layout refers to the ways in which machinery, equipment furnishings are arranged; the size and shape of those items and spatial relationship among them. Functionality refers to the ability of the same items to facilitate the accomplishment of customers and employee goals. ii) Signs and symbols- many items in the service delivery environment serve as explicit and implicit signals that communicate about the place to its users. Signs displayed the exterior and interior of the structure are examples of explicit communications. They can be used as labels (name of the company, name of the department and so on), for directional purposes (entrances, exits) and to communicate rules of behavior (such as no smoking signs...). Symbols and artifacts may communicate less directly than signs, giving implicit cues to users about meaning of the place and norms and expected behavior in the place. Symbols and artifacts can communicate symbolic meaning and create overall aesthetic impressions. Signs, symbols and artifacts are particularly important in forming first impressions and for communicating service concept.

The other dimension proposed by Rosenbaum et.al (2011) that can affect customer satisfaction is social dimension which includes employee displayed emotions and customer climate. Employee displayed emotions are emotions to act in a specific company way towards customers. Emotions of employees in the work place play significant role in how an entire organization communicate within itself and outside the organization. Condition at work have real emotional

impact on customers. Positive emotions in the work place help employees to satisfy customers and negative emotions dissatisfy customers. Customer climate can be defined as a customer's perception of the environment which can be shared with other customers who receive the same services (Brocato & Kleiser, 2005).

Service delivery environment plays vital role in customer satisfaction and affects financial performance in service industries (Margaret, 2016). Several studies done by scholars and researchers stated that Service delivery environment plays an irreplaceable role in attracting, satisfying and retaining customers for the long- term relationship. The quality of service delivery environment plays vital role in attracting prospect customers who have no prior experience with the company. This suggests that service delivery environment can positively or negatively influence customers' mood (Margaret, 2016) which affects customer expectation of the quality and formation of impression regarding specific consumption experience. Some new customers are not reluctant to visit the service company if they are not comfortable with the exterior appearance of the company and on the other hand there are also customers who eager to visit the service firm if they feel comfortable with the outside view of the company. In fact, such condition is not workable in Ethio telecom case because Ethio telecom is the solely provider of telecom services in Ethiopia and there is not alternative for customers to choose. But, since its vision is to become world class telecom services provider as stated by the official website of the company, customers expect world class service delivery environment to get world class telecom services from the company.

The importance of creating an appealing and attractive service delivery environment has gained growing attention among researchers and service firm managing people especially in developed countries nowadays. They have taken it as a key factor for attracting, satisfying and retaining customers in service based industries (Han and Ryu, 2009). According to (Margaret, 2016), physical environment can have a significant impact on perception of the overall quality of the service encounter which in turn affects customer satisfaction in service industry. On the other hand, Social environment which comprised both employees and customers also influence the customer satisfaction (Grandey and Brauberger, 2002).

Based on the research idea of Grandey and Bamberger(2002) , Rosenbaum and Massiah(2011) proposed four dimensions for the service delivery environment namely physical dimension, social dimension ,socially symbolic dimension and natural dimension. Rosenbaum et.al (2011), proposed service environment framework which comprised physical dimensions and social dimensions. So, this study will use the framework suggested by Rosenbaum et.al (2011), which completes assumption suggested by Bitner regarding service environment. So, the physical dimension comprises ambient condition, and design elements (spatial layout – functionality factors and sign and symbol elements) whereas social dimension includes employee displayed emotions and customer climate.

Customer satisfaction is very important concept in service marketing which is obtained by meeting customer needs and wants. Companies deliver a products and services to customers; they also deliver satisfaction and obtain profit in return. Customer satisfaction could be defined as an overall assessment of the performance of different attributes and factors which are forming a product or service. According to (Bartikowski and Llosa, 2004) customer satisfaction is a part of business philosophy which creates the value for customers and responsible to satisfy the customers’ needs. As a matter of fact, quality of service and customer satisfaction are critical factors for the success of any business.(Groonos,1990). Many researches done in service marketing focus on identifying factors that could lead to customer satisfaction. Varki and Colgate(2005) and Ryu (2005) has found that the firm’s service delivery environment strongly influenced by customer satisfaction.

Studying the service delivery environment’s impact on the customers satisfaction is an important issue in the modern world where customers expectation is high and demand is increasing continually. The topic has being studied widely in developed world but it is difficult to get research done in developing countries. The researcher couldn’t find any research done on service delivery environment impact on customer satisfaction in Ethio telecom as well as in our country as a whole. So, studying the influence of service delivery environment may help Ethio telecom and other service firms to focus on creating appealing and attractive service delivery

environment in order to minimize the dissatisfaction of its customers and maximize customer satisfaction.

1.2 Statement of the problem

Many researchers have emphasized that Customer satisfaction is a critical factor for the success of any company especially for service businesses nowadays. Undoubtedly, customer satisfaction is closely related with service quality. Service quality is influenced by Service delivery environment. Researches done by Bitner (1992) showed that physical environment influences customer satisfaction. According to Chang (2000) customers used service delivery environment indication in evaluating their satisfaction. Elements of design and ambient conditions also influence the satisfaction of customers. Similarly, ambient condition influence customer satisfaction, Norafifa (2014). Ekaterina Jysma(2012) explained physical environment of the service business can positively and negatively affect customer satisfaction in service industry. Wilson(2008) explained that in today's competitive environment excellent customer service becoming core of competitive advantage in service industries and peoples who are delivering the service such as front employees and those who supporting them from behind the scene are critical to the success of any business organization. Besides employees emotion, according to (Wu, 2008), the existence of other customer in the service delivery environment influence customer satisfaction. Thus, customers support each other by providing cues for the service assessment because they feel that they are part of the service.

The impact of Service delivery environment on customer satisfaction is widely researched topics in service marketing especially in developed countries. However, the researcher could not find researches done on the impact of service delivery environment on customer satisfaction in Ethiopian telecom sector as well as overall service industry in our country whether service delivery environment impact on customer satisfaction or not. As quoted by above paragraphs, besides products and services quality, other factors such as Service delivery environment where the business deliver its service may affect its customers satisfaction. Even though, Ethio telecom is sole provider of telecom services and have no direct competitor in Ethiopia, because of

globalization effect, the company can be affected by abroad telecom operators. I.e. many potential customers living in Addis Ababa have experience of other abroad telecom operators service delivery environment actually or virtually and they expect the same level of standard from Ethio telecom who is visionalizing to provide world class telecom services for its customers. It is obvious that, to provide world class service, the service quality as well as service delivery environment should be in a world class standard. I.e. it is difficult to provide world class standardized service in a poor Service delivery environment. According the frameworks proposed by Bitner (1992) and Rosenbaum et.al (2011) and the researches done in developed countries, as quoted by previous paragraphs, indicated that Service delivery environment has significant impact on customer satisfaction. In our country case, the impact of service delivery environment (physical environment and social environment dimensions) is not studied and its impact on customer satisfaction is not known. Therefore, the researcher is interested to study whether service delivery environment has impact on customer satisfaction or not in Ethio telecom enterprise customers.

1.3. Research questions

1. To What extent ambient conditions on customer satisfaction in Ethio telecom service centers?
2. What is the impact of design factors such as layout, equipment's, furnishings, symbols and signage in service delivery environment on customer satisfaction of Ethio telecom customers?
3. To what extent employees displayed emotions in Service delivery environment on customer satisfaction in Ethio telecom service centers?
4. What is the impact customer climate on customer satisfaction in service delivery environment in Ethio telecom?

1.4. Objective of the study

1.4.1. General Objective

- The main objective of the study is to examine the impact of service delivery environment dimensions on satisfaction of Ethio telecom customers.

1.4.2 Specific Objectives

The specific objectives of the study are:

1. To examine the influence of ambient conditions on customer satisfaction in Ethio telecom Addis Ababa enterprise customers.
2. To explore the influence of design factors such as layout, equipment's, furnishings, symbols and signage's on customer satisfaction in Ethio telecom Addis Ababa enterprise customers.
3. To examine the influence of employee displayed emotions on customer satisfaction in Ethio telecom enterprise customers.
4. To explore the impact of customer climate on customer satisfaction in Ethio telecom Addis Ababa Enterprise customers.

1.5. Significance of the study

There are different researches done by many researchers concerning the impact of service delivery environment on customer satisfaction in developed world. But it is not easy to find such kind of research work in developing countries. In case of Ethiopia, the researcher couldn't find any research stating the service delivery environment's role on customer satisfaction in service sector especially in telecom sector. I hope this study is significant to advance knowledge of service delivery environments role in service sector in our country as it is probably the first of its kind in Telecom sector in Ethiopia. Since Telecom is in dynamic environment, customers expectation is very high and demand is continuously changing. Even though, Ethio telecom is the

sole provider of telecom services in Ethiopia, its customers may have exposure of different abroad Telecom operators actually/ virtually and they expect the similar level of service and their behavior is changing towards getting something special. So, this study serves as a turning point and pave ways to further studies on overall service delivery environment factors that affect customer satisfaction.

The findings and results of the study will be given to Ethio telecom management to use as an input to improve the customer satisfaction regarding service delivery environment. According to African Bussiness.com report on <http://www.africanbusiness.com>(2015), the last two years the service sector in Ethiopia has taken the leading position over other sectors by contributing to GDP and Employment and expected to cover above 40% of GDP over the next five years. This report indicates the focus should be given to the service sector which is expected to have lion share on GDP of the country in the coming years.

So, the findings of the study also will provide an insight to the policy makers of service industry which has significant impact on country's GDP and Job creation. So, It can be concluded that the study can benefit Ethio telecom's management , employees, customers, stakeholders and the country's service sectors because the condition of the service delivery environment of the service positively or negatively affect all parties directly or indirectly. So, It is difficult to ensure service improvement by the country without giving considerable attention to service delivery environment.

1.6. Scope of the Study

The research project is confined to Ethio telecom Enterprise customers of Addis Ababa. Ethio telecom has six zone/ branch office in Addis Ababa and every zone has its own enterprise customers service center. There are nine Enterprise shops that are providing telecom services for organization/company based customers in Addis Ababa zones but the study have considered only five enterprise shops as a sample which are found in Addis Ababa. The zonal enterprise service centers which are found out of Addis Ababa and all Regional enterprise service centers havn't taken in to consideration in the study. Furthermore, this study havn't incorporated

customers who get service through telephone and online. The study is not interested in the consequences of customer satisfaction rather it mainly focus on the service delivery environmental dimensions the cause satisfaction or dissatisfaction.

According to Rosenbaum and Massiah (2011), service delivery environment comprises physical dimension, social dimensions, socially symbolic dimension and natural dimension. But this study have focused on physical and social dimensions of service delivery environment that includes ambient conditions, design factors (layout/functionality and signs/symbols) and social dimensions such as the role of employees and customers climate but the role of socially symbolic dimensions and natural dimensions on customer satisfaction is not considered in the study.

1.7 Limitations of the study

The possible limitation of the study was inability to incorporate all Ethio telecom customers throughout the country. So, it is difficult to generalize the findings and results to all enterprise customers throughout the country. Another limitation can be lack of prior research in Ethio telecom as well as service sector in Ethiopia on the impact of service delivery environment towards customer satisfaction may challenge me in conducting the research. To overcome such limitation, I have read and analyzed the research done on the similar issue developed countries. Other possible limitation can be the lack of experience in thesis writing skills. Such inexperience problem have overcome by reviewing articles and papers written by professional researchers.

1.8. Operational meaning of terms

Ambient Conditions- Background characteristics of the service delivery environment such as temperature, lighting, noise, music, color and so on that affect five senses of the actors of the service environment

Customer satisfaction- Feeling or comfort of customers by Ethio telecom's service delivery environment conditions.

Employee displayed emotions- emotions of service providing employees such as facial expressions, body gestures, voice tones and languages in ethio telecom service centers

Enterprise service centers(shops): are service centers of Ethio telecom which provide service to organization/company based customers such as financial institutions, government offices, non-government organizations, service organizations, manufacturing organizations, international organizations , embacies and so on.

Ethio telecom- Government owned sole provider of telecom services in Ethiopia. Ethio telecom sells its products and services in its Residential and Enterprise point of sales through out the contry.

Physical environment-all physical factors surrounding service environment of Ethio telecom point of sales

Point of sales- Services center of Ethio telecom that provide service to both Enterprise and Residential customers

Service delivery environment - used to describe both physical and social environments in which Ethio telecom provides its telecom services to its customers.

Social environment- refers service providing employees and customer Climate in ethio telecom service delivery environment.

1.9 Organization of the study

This thesis paper is categorized in to five chapters. Chapter one included background of the study, statement of the problem, research questions, research objecives, significance of the study, scope of the study and limitation of the study. Chapter two comprised review of related literature. Chapter three included Research methodology which consists of research approach, research design, sources of data collection, sample size and sampling procedures, method of data collection and data analysis. Chapter four incorporated data presentation, alalysis and interpretation. The last chapter of the study, chapter five, included summary, conclusion, recommendations and suggesions for further study.

Chapter two

Review of Related Literature

2.1 Service Delivery Environment

Many studies have been conducted especially in developed world to examine the performances of services in service industry. The main focus was on physical dimension of service delivery environment and little attention was given to social dimension of service delivery environment. Rosenbaum (2011), Rosenbaum proposed detailed framework on service delivery environment that consists of both physical and social dimensions This study will focus on the role of both physical and social dimension on customer satisfaction in Ethio telecom

2.1.1 Physical Environment

As explained by Bitner (1992), service environment of the firm is the physical setting in which a market place exchange is performed, delivered and consumed with in a service organization. Further Bitner explained, physical environments are all of the objective physical factors that can be controlled by the firm to enhance (or constrain) employee and customer actions. According to Zeithaml and Bitner (1996), physical evidence or environment is the environment in which the services are delivered to the customers and where the firm and the customer intermingle and any tangible commodities that facilitate performance or communicate the service. Physical surroundings help to shape appropriate feelings and reactions in customers and employees and also physical environments often designed to facilitate service encounters and to increase productivity. The effects of physical surroundings on service quality have been studied also by Wall and Berry (2007). They stated that service delivery environment could have essential influence on customers' expectations of service quality because customers need tangible clue to create a picture, in order to estimate the quality. The judgment of the most likely can be influenced by the physical dimensions(Jang and Namkung, 2009). Bitner (1992) finding shows that physical environment also influences customer satisfaction. And also, Bitner(1992) and Chang(2000) used physical environment indication in evaluating their satisfaction.

Physical environments are complex and have many elements. The main dimensions of physical environment in service delivery environment are the ambient conditions and design elements such as spatial/ functionality and signs /symbols.

2.1.1.1 Ambient conditions

Researchers have identified ambient conditions as a factor that affect perception of and human responses to the environment(Baker 1987; Baker, berry and parasuraman 1988). Ambient conditions include background characteristics of the environment such as temperature, lighting, noise, music, scent and color. Ambient conditions refers to those characteristics of the service environment that pertains to five sense organs. Even when they not noted consciously, they may still affect customers emotional well-being, perceptions and even attitudes and behaviors. As general rule, ambient conditions affect the five senses Christopher (2010). The customer satisfaction towards service firms can be influence through the ambience and atmosphere where the service takes place (Barger & Grandey, 2006). Customers most likely set up the expectation on the ambience and atmosphere. When the expectation is met, it definitely effects their expectation towards service organization (Bitner,1992).

Studies in service industry confirm that ambient factors may affect customer perception. Zeithaml et al. (2009) , Eventhough many empirical studies supported positive impact of ambience on customer satisfaction, some past researches did not agree with my findings. For example, the research conducted by Andaleeb and Conway (2006) showed that physical environmental factors not having a significant relationship with customer satisfaction. However , most secondary research supported the idea that ambient condition influence customer satisfaction . For example, a research conducted by Soriano (2002) in Spain stated that attributes ambient were significant ($p < 0.05$) to customer satisfaction. and Bartlett and Han (2007) in China repeated the result of Soriano about the relation of ambient condition and customer satisfaction. In an another study, lighting, temperature, noise, music and color all influence employee performance, Job satisfaction and customer satisfaction (sundstrom,1986). They mentioned in their research that odor, space, lighting,noise and atmosphere are critical dimensions for many people. This implies that in order for customers to be satisfied, these dimensions have to be well managed and gain

a positive perception from customers..Therefore, that service center attractiveness can affect pace of shopping, length of stay and amount of money spent. In an another study, lighting, temperature, noise, music and color all influence employee performance, Job satisfaction and customer satisfaction (sundstrom,1986).

H1: Ambient condition is positively related to the customer satisfaction.

2.2.1.2 Design factors

Design elements comprises spatial layout, functionality, symbols and signages of the service organization (Norafifa et.al, 2014). Customers are more satisfied with the service organization with aesthetic design(Lin, 2011). According to the study made by Zijlstra and Mobach(2011), design and layout should be focused on maximizing the positive and meaningful impact for the customer in service environment. Newman(2007), effective and helpful signsge added to a good spatial organization induces a good customer s' behavior and a positive image of the service.

2.2.1.2.1 Spatial layout and functionality

Service delivery environment is purposeful environments that exists to fulfill specific needs of customers through the successful completion of employee actions. Spatial layout and functionality of service delivery environment are very important in service industry. Spatial layout refers the ways in which machinery, equipment and furnishings are arranged , the size and shape of those items, the spatial relationship among them. Or Spatial layout refers to the floor plan, size and shape of furnishings, counters and potential machinery and equipment and the ways in which they are arranged (Christopher, 2011). Functionality refers to the ability of the same items to facilitate performance and accomplishment of the goal. Spatial layout and functionality create the visual and functional servicescape for delivery and consumption to take place. Both dimensions determine user friendliness and the facilities ability to service customers well; and they not only affect the efficiency of service operation, they also shape the consumer experience. The way the space is used is called spatial layout (eg. Waiting area) as well as furniture arrangement in the room. The shape and size of the equipment and furniture and in which they are located is also a vital point. Spatial layout could create a needed balance between operational

requirements and customer expectations. Functionality of the surrounding is of a great importance in achieving customer satisfaction. As matter of fact, a very little attention is paid to the role of spatial layout for customer satisfaction and loyalty (Bitner 1992 as quoted by Ekaterina Jysma, 2012).

2.2.1.2.2 Signs and Symbols

Many items in the service delivery environment serves as explicit and implicit signals that communicate about the place to users. It can be also said, Signals and symbols are things in service delivery environment act as an explicit or implicit signals to communicate the firms image, help customers find their way, and to convey the service script. In particular, first time customers will automatically try to draw meaning from the environment to guide them through the service process(Christopher, 2011). Explicit signals include signs that can be used as a) labels (to include the name of the department or counter). B) for giving directions (to service counters, entrant , exit, the way to elevators and toilets); c) for communicating the service scripts d) behavioral rules(switch off or turn your mobile devices to silent mode during the performance or smoking / no smoking areas. Signs frequently are used to teach and reinforce behavioral rules in service setting.

The challenge of service delivery environment designs uses signs and symbols to guide customers clearly through the process of service delivery and to teach the service script in as intuitive a manner as possible. This task assumes particular importance in situation in which there is a high proportion of new or infrequent customers and/or a high degree of self-service with no only few services employees available to guide customers through the process. Customers become disoriented when they cannot drive clear signals from the service delivery environment, leading to anxiety and uncertainty about how to proceed and how to obtain the desired service. Customers can easily feel lost in a confusing environment and experience anger and frustration as a result. To sum up, Countryman and Jang (2006) indicated that design factors positively influence the customer satisfaction

H2: Design factors are positively related to customer satisfactio

2.1.2 Social Environment

According to Rosenbaum and messiah (2011),customer and employee elements can be conceptualized as a social environmental dimentions. Service encounter satisfaction can be resulted from the individual transaction (Bitner,1992). For the successfulness of service interaction, emotional content and spatial proximity of service provider and the customer (Bitner, 1992). Bitner explains that the physical environment affects the nature of social interaction .According to her, every social interaction is part of service delivery environment because it suggests social rules, principles and expectation about people behavior. The appearance and behavior of both service personnel and customers can reinforce or detract from the impression created by a service delivery environment, Social environment comprised two dimensions such as employee displayed emotions and customer climate.

Bitner (1992) argues that the physical dimension of service delivery environment is linked to the quality of the relationship between customers and employees where it occurs. She explained that the physical service delivery environment affects the nature of social interactions. According to her, every social interaction is part of the physical environment because it suggests social rules, principles, and expectations about people behaviour, and it helps to define the nature of social interactions. According to Rosenbaum's and Massiah's perspective, the social dimension is the link between employees and customers. Relationship is an important part of social dimension in most service delivery environments.. In fact, more than giving a response to their utilitarian needs during service performance, customers are also aiming at fulfilling their social and psychological needs.

2.1.2.1 Employee displayed emotion

According to Grandey and Brauberger (2002) , employee displayed feelings has a strong impact on the quality of service interactions. During the service encounter, people tend to judge people who display positive emotion as a likeable and chivalrous. The content of displaying emotions is manifested in facial expressions, bodily gestures, tone of voice and language. Customers build up

the expectation on the employees emotion and the expectation influenced the customer satisfaction. Past studies showed that the employees minor effort like smile resulted in the customer satisfaction(Barger and Grandey, 2006).

H3: Employee displayed emotions positively related to customer satisfaction

2.1.2.2. Customer climate

Customer climate can be defined as a customer's perception of the environment which can be shared with other customers who receive the same services (Brocato&Kleiser,2005). It is the density customers in the service environment. Studies have shown that crowd has a significant impact on the other customers'experience (Pons et al., 2006, DeWitt and Russell-Bennett, 2012). For example, (Zijlstra and Mobach,2011), in their research confirmed that crowd has a negative impact on consumer's mood. Customers support each other by providing cues for the service assessment because they feel that they are the part of service (Huang, 2008). Usually, it is very difficult for the service organization to take control over the customers' behavior assessment because they feel that they are part of the service. For that reason, the existence of the other customers with the service environment influences the satisfaction (Wu,2008). Therefore, positive customer-to customer experience within the service environment increases satisfaction.

H4: customer climate negatively related to customer satisfaction.

2.1. Customer Satisfaction

Customer satisfaction has been one of the most researched topic in Service marketing. Kotler and Keller(2009) define satisfaction as “ a person's feeling of pleasure or disappointment resulting from comparing a products or services perceived performance in relation to his or her expectations. Customer satisfaction could be defined as an overall assessment of the performance of different attributes or factors which are forming a product or service (Bartiwoski and Llosa, 2004). Hansemark and Albinson (2004) also define Customer satisfaction as the feeling

or attitudes of customers towards a product or service performance by comparing its perceived performance with their expectations. When perceived performance matches or exceeds expectations, the customer becomes satisfied. Conversely, when perceived performance is below expectations, the customer becomes dissatisfied. (Banker, Potter and Spinivanson, 2000), satisfied customers will repeatedly experience the company products or services and can convey positive word of mouth advertising and all these efforts result in boosting the sales of the company. Conversely, dissatisfied customers may stop buying the company's products/services and can spread unfavorable word of mouth advertising and finally affect the company's performance negatively. As a matter of fact, quality of service and customer satisfaction are the critical factors for the success of business firms (Gronoos, 1990).

2.3. Roles of Service delivery environment.

The service delivery environment in which customer experience is created is considered as a key variable influencing customer perceptions, and one of the strongest drivers of service value (Walter, Edvardson and Ostrom, 2010).

The service delivery environment can play many strategic roles. An examination of the variety of roles and how they interact makes clear how significantly important it is to provide appropriate physical evidence of the service. There are four roles of service delivery environment such as package role, facilitator role, socializer role and differentiator role.

2.3.1. Package role

Service delivery environment and other elements of physical evidence essentially "wrap" the service and convey to customers an external image of what is inside the firm. Product/service packages are designed to portray a particular image as well as to evoke a particular sensory or emotional reaction. The setting of the service does the same thing through the interaction of the many complex stimuli. The service delivery environment is an outward appearance of the organization and thus can be critical in forming initial impressions or setting up customer

expectations-it is visual metaphor for the intangible service. This packaging role is particularly important in creating expectations for new customers and for newly established service organizations trying to build a particular image. The physical surroundings offer an organization the opportunity to convey an image in a way not unlike the way an individual chooses to “dress for success”. The packaging role extends to the appearance of contact personnel through their uniforms or dress and other elements of their outward appearance.

2.3.2. facilitator role

The service delivery environment can serve as a facilitator in the performance of persons in the environment. How the setting is designed can enhance or exhibit the efficient flow of activities in the service setting, it easier or harder for customers and employees to accomplish their goals. A well designed functional facility can make the service a pleasure to experience from the customer point of view and a pleasure to perform from the employees. So, the design of service delivery environment can satisfy/ dissatisfy customers and employees.

2.3.3. Socializer role

The design of service delivery environment aids in socialization of both employees and customers in the sense that it helps to convey expected roles, behaviours and relationships. The design of facility can also suggest to customers what their role is relative to employees, what parts of the service delivery environment they are welcome in and which are for employees only, how should they behave while in the environment, what type of interactions are encouraged.

2.3.4. Differentiator role

The design of physical facility can differentiate a firm from its competitors and signal the market segment that the service is intended for. Given its power a differentiator, changes in the physical environment can be used to reposition a firm and/or to attract new market segments .signages, decors and so on used to differentiate one firm from the other.

2.4. Physical environment and Customer satisfaction

Customers respond to the three elements of the physical surroundings cognitively, emotionally and physiologically. According to Kiran (2012), physical surroundings can influence how customer believe the products or services they will receive inside the building. They can also influence the level of pleasure and they can have tangible impact upon customers physical comfort and discomfort. (Bitner,1992), the view of physical evidence the environment in which the services are delivered to the customers and where the firm and the customer intermingle and any tangible commodities that facilitate performance and communicate the service.

The judgment of the customer most likely can be influenced by the physical dimensions. The previous research findings shows that physical environment also influences customer satisfaction(Bitner,1992). According to Bitner (1992) and chang(2000) customer used physical environment indication in evaluating their satisfaction. Elements of design also positively influence the customer satisfaction (Vilanai-yavetz and Rafaeli, 2006). Customer satisfaction towards service firms also can be influenced through the ambience and atmosphere where the service takes place(Baker,2002). Customer most likely set up the expectation on the ambience and atmosphere. When expectation is met, it definitely affects expectation towards service organization. Based on the study conducted by Bitner(1992) , Both ambient, layout & functionality and symbols & signage elements influence the customer satisfaction. Countryman and Jang (2006) indicated that ambient, spatial-functionality and signs and symbol factors positively influence the customer satisfaction.

2.5. Social environment and Customer satisfaction

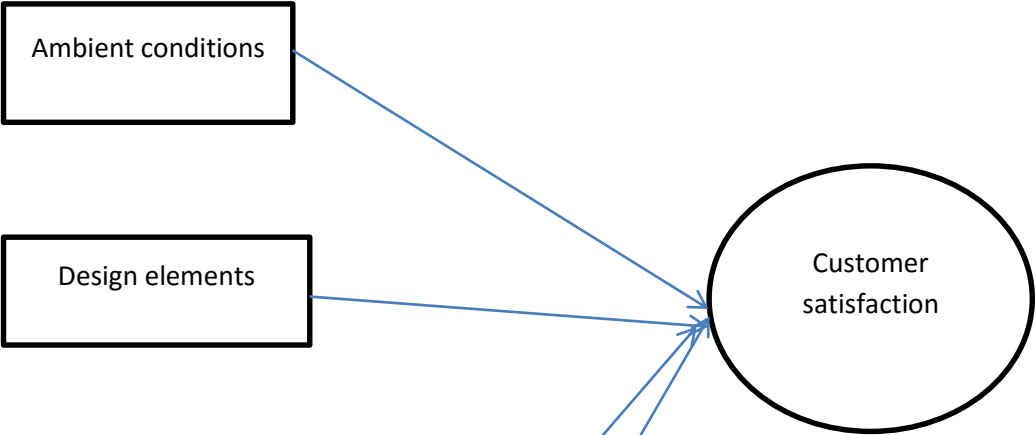
Service encounter satisfaction can be resulted from the individual transaction. Many researches support the notion that the manner in which an individual displays feelings has a strong impact on the quality of service transactions (Grandey and Brauburger,2002). During service context and business relationship, people tend to judge people who display positive emotion as a likable and chivalrous (Harker and keltener ,2001). The content of displaying emotions is manifested in facial expressions, bodily gestures, tone of voice, and language. Customers build up the expectations on the employees emotions(Tsai, 2002) and the expectation influenced the customer satisfaction(Lin,2011). Many past studies showed that employees minor effort such as smile resulted in the customer satisfaction (Barger and Grandey, 2006).

2.6. Conceptual framework of the study

The conceptual framework on service delivery environment model has been proposed first by Bitner (1992) , and then modified by Rosenbaum (2011) and Zeithaml, Bitner,and. Gramler (2013). The researcher will take the physical dimensions and social dimensions from the service delivery environment model that is proposed by the scholars. The main purpose of this study is to examine the influence of service delivery environment on customer satisfaction in ethio telecom Addis Ababa service centers. Using the service delivery environment model, the physical environment dimensions such as ambient conditions, layout/functionality and signs/symbols; and social environmental dimensions such as employees displayed emotion and customer climate. It is important to mention that the this framework does not encompass all the service delivery environment elements that have been suggested by Rosenbaum et.al., (2011) ,but only focusing on the physical dimension and social dimension as these two dimensions mainly constitute the services setting (Zeithaml et.al,2009). The proposed framework is shown below

Service delivery environment framework

Physical dimensions



Social dimensions

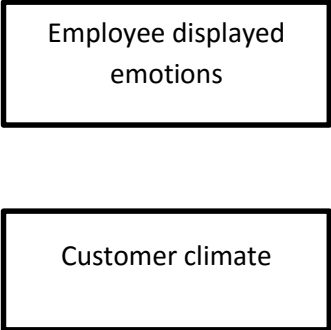


Figure 2.1 Proposed service delivery environment model, Rosenbaum and Massiah(2011)

Chapter three

Research Methodology

3.1 Description of the study area

This study is conducted in Addis Ababa. Addis Ababa is selected for the study because it is the capital and the largest city in the country where many potential customers are living with compared other cities of the country. Addis Ababa is also the residence of international, governmental, non-governmental organizations, Embassies and so on. And also, because of Headquarter African Union and African Economic Commission, the city considered as a capital of whole Africa. Besides potential citizens of the country, many diplomatic communities who have other abroad telecom operators exposure are living in the city. Besides customers' need, the company working to achieve its vision, mission and core values.

3.2 Research approach.

Quantitative research approach used for this study. This approach is chosen because it involves collecting and converting data in to numerical form so that statistical calculations can be made and conclusions drawn. To test the hypothesis and investigate the research objective and research question, both survey and descriptive research design will be employed. Descriptive research design was adopted because the researcher's wants to identify and obtain information on the characteristics of a particular issue, thus measure the conditions and relationships that exist (Jackson 2009). It is used to address/ answer the research question of "what" type. It is used to describe dependent and independent variable. It is also used to describe characteristics of a population or phenomenon being studied. Causal research design is to be used to investigate the cause and effect relationship between service delivery environment and customer satisfaction in Ethio Telecom enterprise customers in Addis Ababa service centers.

3.3.Target Population and sampling

The target population of the study is Ethio telecom Addis Ababa Enterprise customers who came to service centers in Addis Ababa to get different services. Enterprise customers comprises key account customers and SME(small and medium enterprises) customers. According to Marketing research and intelligence department six month report of year 2016, the customer base of Enterprise customers in Addis Ababa is 103,332 from which 1,804 are Key account customers and 101,528 are Small and medium enterprise customers.

Since the number of enterprise customers of Ethio telecom in Addis Ababa is more than one hundred thousand, the researcher selected 384 respondents based on the sample size table advised by professionals website <http://www.research-advisor.com>(2006). According to this known website, 384 sample size sufficiently representing Addis Ababa Ethio telecom Enterprise customers for the study. There are nine enterprise shops in Addis Ababa city. Out of nine shops, five were chosen as a sample. The shops are Central Addis Ababa shop (Stadium Shop) , North Addis Ababa zone (Arat kilo shop), West Addis Ababa zone (Mesalemia shop), East Addis Ababa zone (Bole shop) and South Addis Ababa zone (Saris shop). Selection of respondents based on convenience sampling and judgemental sampling (non-probability sampling).

Required Sample Size[†]

Population Size	Confidence = 95%				Confidence = 99%			
	Margin of Error				Margin of Error			
	5.0%	3.5%	2.5%	1.0%	5.0%	3.5%	2.5%	1.0%
10	10	10	10	10	10	10	10	10
20	19	20	20	20	19	20	20	20
30	28	29	29	30	29	29	30	30
50	44	47	48	50	47	48	49	50
75	63	69	72	74	67	71	73	75
100	80	89	94	99	87	93	96	99
150	108	126	137	148	122	135	142	149
200	132	160	177	196	154	174	186	198
250	152	190	215	244	182	211	229	246
300	169	217	251	291	207	246	270	295
400	196	265	318	384	250	309	348	391
500	217	306	377	475	285	365	421	485
600	234	340	432	565	315	416	490	579
700	248	370	481	653	341	462	554	672
800	260	396	526	739	363	503	615	763
1,000	278	440	606	906	399	575	727	943
1,200	291	474	674	1067	427	636	827	1119
1,500	306	515	759	1297	460	712	959	1376
2,000	322	563	869	1655	498	808	1141	1785
2,500	333	597	952	1984	524	879	1288	2173
3,500	346	641	1068	2565	558	977	1510	2890
5,000	357	678	1176	3288	586	1066	1734	3842
7,500	365	710	1275	4211	610	1147	1960	5165
10,000	370	727	1332	4899	622	1193	2098	6239
25,000	378	760	1448	6939	646	1285	2399	9972
50,000	381	772	1491	8056	655	1318	2520	12455
75,000	382	776	1506	8514	658	1330	2563	13583
100,000	383	778	1513	8762	659	1336	2585	14227
250,000	384	782	1527	9248	662	1347	2626	15555
500,000	384	783	1532	9423	663	1350	2640	16055
1,000,000	384	783	1534	9512	663	1352	2647	16317
2,500,000	384	784	1536	9567	663	1353	2651	16478
10,000,000	384	784	1536	9594	663	1354	2653	16560
100,000,000	384	784	1537	9603	663	1354	2654	16584
300,000,000	384	784	1537	9603	663	1354	2654	16586

† Copyright, The Research Advisors (2006). All rights reserved.

Sample size table

3.4 Data Sources

The study used both primary and secondary source. Primary data was gathered from questionnaire which was prepared for the Enterprise customers of Ethio telecom Addis Ababa service centers and data from different service marketing books to be used as primary source. The secondary data was collected from journal, articles, Addis Ababa university dissertation sources, Ethio telecom published and unpublished sources and so on.

3.5 Data collection procedure

Self-administered close ended five point likert scale questionnaire was employed in the study. Likert scale questionnaire is a widely used rating scale which requires the respondents to indicate a degree of agreement or disagreement with each of a series of statements or questions. It is less expensive, easy to construct and administer for the researcher and to understand how to use the scale by respondents. Almost all questions are close-ended because all possible answers were given to respondents, but one open ended question was provided to the respondents to obtain important information which was not addressed by the questionnaire. The questionnaire had two sections. The first section is about customers demographic information which described the demographics of respondents and the second part was the questionnaires about service delivery environment of the Enterprise service centers that helps to evaluate customer satisfaction. The researcher provided questionnaires to volunteered ethio telecom enterprise shop employees in order to distribute to the volunteered customers who came to the service center. Besides ethio employees, the researcher distributed the questionnaire to customers of the five zone by going to their service environment Customers who visited Ethio telecom Addis Ababa Enterprise service centers during the survey six months period were included in the study. The questionnaire provided to every interested customers in ethio telecom sample shops. And also the researcher has gone to the customers office, shop, and their working to distribute the questionnaire. Those who were not busy returned the questionnaire immediately and those who were busy, returned other time. So, all selected enterprise customers who are volunteered to fill questionnaire are welcomed by ethio telecom volunteered employees to distribute the

questionnaire and the researcher. The questionnaires were prepared both in Amharic and English language. The scale ranged from:

Scale	Rating
Very Dissatisfied/strongly disagree	1
Dissatisfied/disagree	2
Neutral	3
Satisfied/agree	4
Very satisfied/Strongly agree	5

3.6.Method of Data analysis

The study aims to investigate the relationship between service delivery environment and customer satisfaction. The collected data coded in statistical package for social science (SPSS) version 20 for analysis. Descriptive statistics instruments such as frequency table, graph, mean and standard deviation were applied to assess the level of customer satisfaction. Correlation analysis has been used to assess the relationship between service delivery environment dimensions (independent variable) and satisfaction of customers (dependent variable). Multiple linear regression analysis has been used to test the proposed hypothesis to study the relationship between the service delivery environment dimensions and customer satisfaction. It has been used to predict the satisfaction of customers in relation to service delivery environment dimensions.

3.7 Ethical considerations

The researcher believes and considers ethics to the respondents to enhance their confidence and participation in the study. Respondents of the questionnaire are not required to write their names and any other related confidential information. In any way, the respondents data kept secretly. The purpose the research was disclosed at the introductory section of the questionnaire. In addition, the researcher avoided misleading or deceptive statements in the questionnaire. Lastly, only volunteered customers filled the questionnaires

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTREPRETATION

4.1 Introduction

The research design and methodology used to collect and analyze data in order to answer the research questions have been discussed in chapter three. The purpose of this chapter is to analyze the data collected from the 366 respondents and present the analysis results accordingly.

The purpose of this study was to identify service delivery environment dimensions that could affect customer satisfaction in ethio telecom Addis Ababa enterprise shops(service centers). The service delivery environment is the function of physical and social service delivery environment dimensions. Physical service delivery environment consists of Ambient condition(background characteristics of the shop environment such as temperature, lighting, noise, scent and color) and design factors (spatial layout, functionality, symbols and signages of the etho telecom shops). Social service delivery environment consists of two dimensions such as employee displayed emotions and customer climate. Self-adminstered close ended five point likert scale questionnaire was employed to collect data from ethio telecom Addis ababa enterprise customers from five shops. The questionnaires were assigned the following codes(1= strongly agreed/satisfied, 2= agreed/satisfied, 3= neural 4= disagreed/dissatisfied 5= strongly disagreed/dissatisfied.). A sample of 384 was used , out of which 18 were lost or nor returned or not properly filled, so such questionnaires were not made part of the research and 366 questionnaires returned from respondents. The response rate was 95.3% in which many researchers consider a response rate of 70% and above is adequate for generalization to the population studied, though this may vary according to the purpose and nature of the study.

The data collected was coded, edited and analyzed using a software program called statistical package for social sciences version twenty(SPSS-V20) ((Manning & Munro, 2007). The research focused on identifying service delivery environmental dimensions that mainly affect customer

satisfaction in ethio telecom shops. The study employed both descriptive and inferential data analysis tools. Under descriptive statistical analysis frequency distribution, percentage, graph , mean and standard deviations were used to describe and analyze the data. Reliability test, correlation and regression analysis were also employed in this research to see the relationship with the variables so as to infer to the population. Different interpretation were made for different statistical analysis output and discussions and recommendation were done and areas needed further research was indicated.

4.2. Demographic information

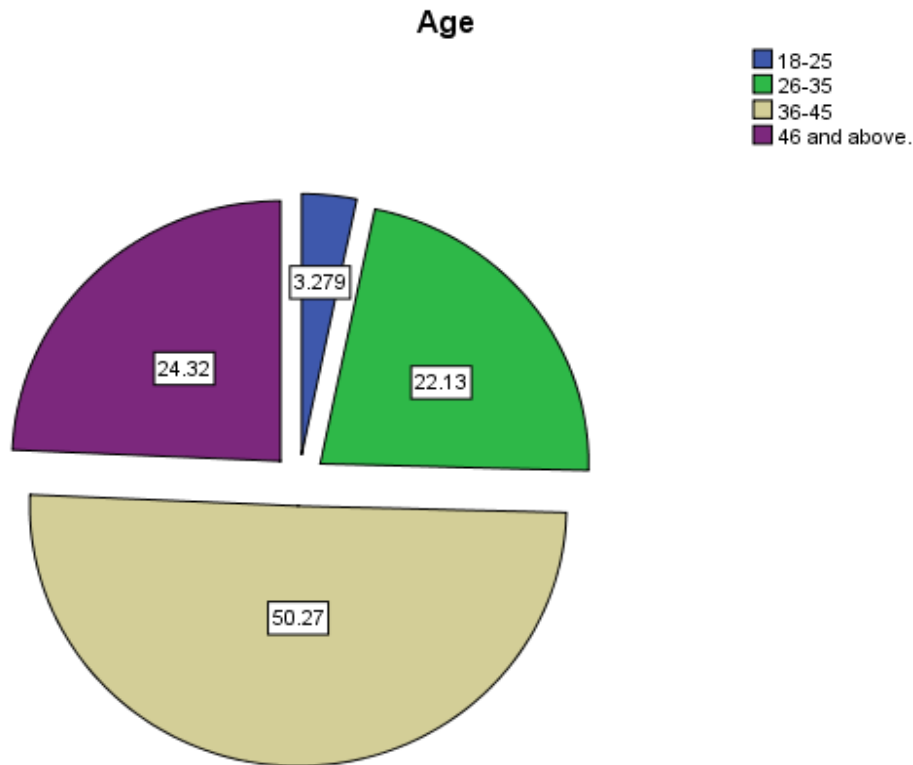
Table 4.1: Demographic Information

Demographic Information	Values	Frequency	Percentage
Gender	Male	248	67.8
	Female	118	32.2
Level of education	Diploma and below	34	9.3
	First degree	222	60.7
	Second degree and above	110	30.1
Nationality	Ethiopian	336	91.8
	Non-ethiopians	30	8.2

Source: Survey data(2017)

The total number of respondents who were participated (returned) this research were 366. From the total respondents, 248(67.8%) were male and the remaining 118(32.2%) were female. Regarding level of education, more than half of the respondents had first degree which was 222(60.7), 110(30.1%) of the respondents from second degree and above category and the rest 34(9.3%) from diploma and below category. Regarding the nationality of respondent, Ethiopian respondents accounted 336 (91.8%) and non-Ethiopian nationals scored the remaining 30(8.2%). Table 4.2 presents the detailed demographic information of the respondents

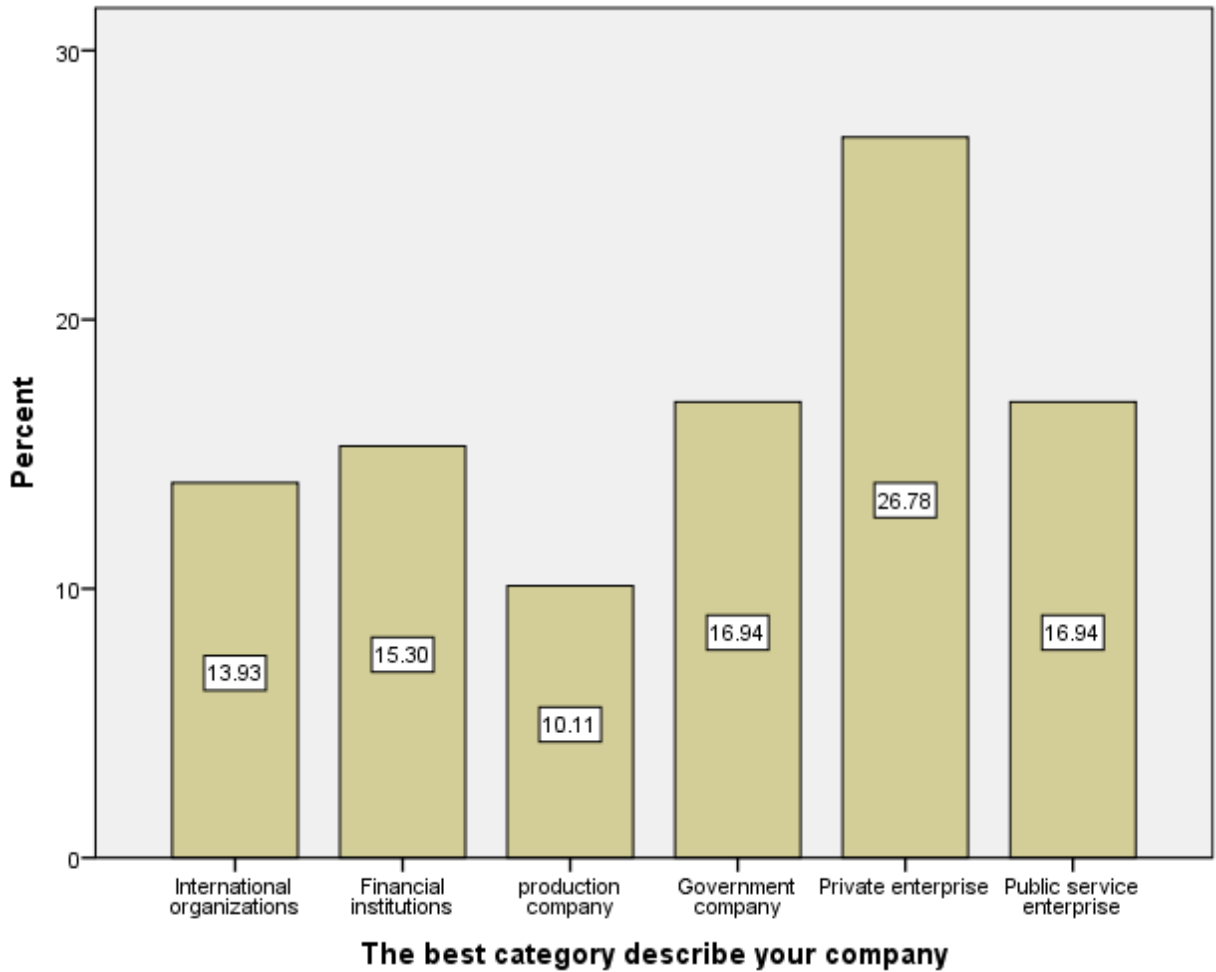
Graph 4.1: Age of the respondent



Source: Survey data (2017)

From all respondents, almost more than half of them(50.27) were found at the age of 36-45, followed by age group 46 and above which constituted 24.32%. The age group of respondents from 26-35 comprised 22.13% and the least age group in the sample of respondents is from 18-25 which is 3.3%.. The age analysis showe that almost half of company owner or managers were found I 36-45 age category followed by 46 and above age category. The least age category was of 18-25, this showed that the number of the number of youth managers or owners is small relative other age category of the respondents.

Graph 4.2 . Company category of respondents



Source: Survey data (2017)

The graph showed that almost 27% of the researchers questionnaire were responded by private enterprises customers. The government based company and public service enterprises customers accounted equal number of respondents, which is 16.94 % for each. The questionnaires responded by financial institution constituted 15.30% and followed by international organizations 13.93%. The least respondents of the researchers questionnaires were production company customers which is 10.11%. This graph showed the private companies the highest respondents and the production companies the least respondent for the researcher

questionnaire. The tabulation presentation of company category frequency shown in Appendix table 4.

4.3 Reliability test

Reliability is the degree to which the measure of a construct is consistent and dependable (Bhattachere (2012)). It tells about stability of the results i.e how accurately the study or the measurement has been carried out. Reliability refers to whether a measurement instrument is able to yield consistent results each time it is applied. It is the property of measurement device that causes it yield similar outcomes for similar inputs.

Reliability test was conducted in ambient conditions, design factors, employee displayed emotions, customer climate and overall customer satisfaction in order to prove their reliability for further analysis. The test score showed that the Cronbach alpha of ambient conditions, design factors, employee displayed emotions, customer climate was 0.832 , 0.838, 0.844 and 0.908 respectively which showed highly reliable result. Since, the questionnaire prepared to know the opinion of enterprise customers on customer satisfaction is only one so no need to calculate its reliability. In general, Cronbach's alpha coefficient for the scale that measures all of dependent variable (customer satisfaction) and independent variables (service delivery environment dimensions) was $\alpha = 0.927$, which can be treated as "excellent", according to the commonly accepted rule for describing the internal consistency (Mallery, 1999), where $\alpha \geq 0.9$ is excellent, $0.7 \leq \alpha < 0.9$ is good, $0.6 \leq \alpha < 0.7$ is acceptable, $0.5 \leq \alpha < 0.6$ is poor and finally, $\alpha < 0.5$ is treated as unacceptable. . For this study the alpha coefficient for the overall scale is calculated as a reliability indicator of 0.927. As described by Andy (2006) the values of Cronbach's alpha more than 0.7 is good. The alpha values in this study are greater than 0.7 and which is considered an "excellent" reliability for the researcher questionnaires.

The reliability test was executed by Cronbach's alpha coefficient and items which scored acceptable value were retained. In this research, all dependent and independent variables scored acceptable level of alpha coefficient, Therefore, all variables were retained for the study. The

table below shows the value of alpha for all variables as a whole. The overall detailed value for alpha for each variable is presented in Appendixes table 7, 9 & 11.

Table 4.2: Reliability test

Service delivery environment dimensions	Number of items	Cronbach's Alpha
Ambient condition	7	0.832
Design factors	6	0.838
Employee displayed emotions	8	0.844
Customer climate	5	0.908
Overall test result of both dependent and independent variables(total items)	27	0.927

Source: Survey data (2017)

4.4 Overall description of service delivery environment

Table 4.3: Overall mean and standard deviation of service delivery environment dimensions

Service delivery environment	Mean	Std. Deviation
Ambient conditions	3.748087	0.693795717
Design factors	3.850472	0.534760784
Employee displayed emotions	3.70765	0.720720953
Customer Climate	4.303279	0.689125047
Customer Satisfactions	3.754098	0.810663271

Source: Survey data (2017)

The mean is one of the most commonly used measure to examine the central tendency of the responses. In this case, customer climate has the largest mean score of 4.30. It indicates that the respondents were agreed and had a positive opinion towards questionnaire related to customer climate. In addition to customer climate dimension, other service delivery environment dimensions such as designs factors, ambient conditions and employee displayed emotions scored mean of 3.85, 3.75 and 3.71 respectively. The mean score of all three service delivery environment dimensions indicated that the respondents agreed on the questionnaires asked and had positive/uniform opinion towards the questionnaires. The mean score of customer satisfaction which 3.75 indicated that the respondents were agreed with ethio telecom service delivery environment and they had positive opinion towards the questionnaire related to customer satisfaction.

Standard deviation measures the spread of a set of observations. The larger the standard deviation implies the more spread of the observations. A low score of standard deviation means that the responses were concentrated, hence, the respondents had the same opinion about a statement and scored almost similar. For instance, the statements related to design factors has the standard deviation of 0.53. On the other hand, the higher standard deviation means that the respondents had different opinion towards the same statement. For example, the statements related customer satisfaction score the highest standard deviation of 0.81 which indicates the respondents had different opinion towards the same statement.

4.5 Correlation analysis

Correlations are perhaps the most basic and most useful measure of association between two or more variables. According to Mareczyk, Dematteo and Festinger(2005), the generally accepted guidelines for correlation or association between variables as follows: Correlations from 0.1 to 0.3 considered as small association, correlations of 0.3 to 0.7 considered as moderate associations, correlations from 0.7 to 0.9 considered as large (strong) associations and correlations from 0.9 to 1.00 taken as very large(strong) associations. The Correlation coefficient

has been computed to identify the significance of existing relationship between dependent variable (customer satisfaction) and independent variables(service delivery environment dimentions.)

Table 4.4: correlation analysis service delivery environment with customer satisfactions

		Ambient condition	Design	Employee displayed emotions	Customer Condition
Customer Satisfactions	Pearson Correlation	.482**	.605**	.747**	.163**
	Sig. (2-tailed)	.000	.000	.000	.002
	N	366	366	366	366
**. Correlation is significant at the 0.01 level (2-tailed).					

Source: Survey data (2017)

The correlation analysis table above showed that there were highly significantly strong positive correlation between employee displayed emotions and customer satisfaction.($r=0.747$ & $p=.000$) with relative to othe independent variables.This indicates that the improvement of employee displayed emotions in ethio telecom enterprise shops can significantly increase customer satisfaction. And also there were significantly moderate association between design factors and customer satisfaction in ethio telecom shops($r=0.605$ & $P=.000$). The correlation between Ambient condition and customer satisfaction($r=.482$ & $p=.000$) is moderate but the correlation is highly significant. Regarding, the correlation between customer climate and customer satisfaction($r=0.163$ & $p=.002$) is small but still the correlation is significant. According to the above table, there is significantly positive correlation between service delivery environment dimensions such as employee displayed emotions, design factors, ambient conditions and customer climate ($r = 0.747, 0.605, 0.482$ & 0.163 respectively , $P \leq 0.01$) with customer satisfaction. A p value $P \leq 0.01$ is a clear indication that there is a statistical significance between

service delivery environment dimensions and customer satisfaction at 0.01 confidence level. The results suggested that higher level of service delivery environment quality were associated with higher level of customer satisfaction. Therefore, reject all null hypotheses and do not reject all alternative hypotheses. In other words, we can say that sample data supports our alternative hypothesis and relationship between variables in the sample holds for the population as well. It means that we can generalize the sample results for entire population.

4.5 Regression analysis

The final data analysis for the current research is the multiple linear regression analysis, which is one of the most common statistical methods used for studying the influence of one or more independent variables on the dependent variable (Mallery, 1999). While some statisticians may said that the regression analysis do not perfectly fits the Likert scales, it can still be useful for checking the extent of influence of one or several items on another item - which is crucial for my study.

According to the context of the research, the regression analysis was performed primarily in order to check the degree of impact of service delivery environment dimensions (such as ambient condition, design factors , employee displayed emotions and customer climate) on customer satisfaction(dependent variable) of ethio telecom Addis Ababa enterprise service centers..

4.5.1 Multiple linear regression model assumptions

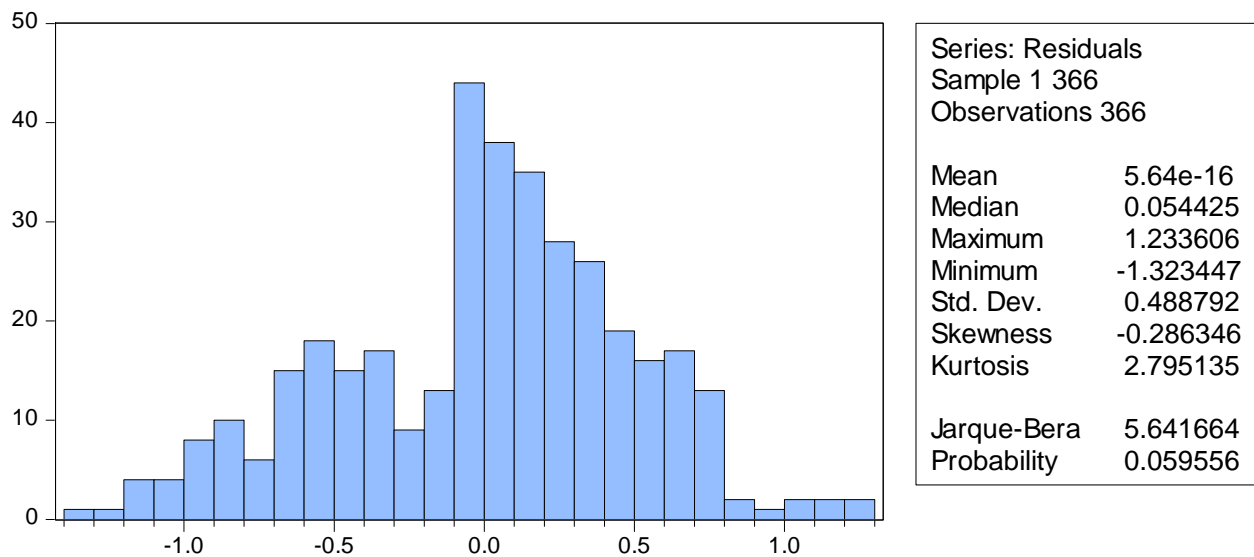
4.5.1 Normality test

Many statistical data analysis methods requires that the dependent variable is approximately normally distributed for each category of the independent variable. A normally distributed data assumed that the data are from one or more normally distributed populations(Field, 2005 as quoted by Yonas, 2013). The rationale behind the hypothesis testing relies on having normally distributed populations and so if this assumption is not met, then the logic hypothesis testing is

flawed. A normal distribution is said to be not skewed, its coefficient of kurtosis is defined to have 3. Jarque-Bera formalizes this by testing the residuals for normality and testing whether the coefficient of skewness and kurtosis are zero and three respectively. Normality assumption of the regression model can be tested with the Jarque-Bera measure. If the probability of Jarque-Bera value is greater than 0.05, it's an indicator for the presence of normality (Brooks 2008 as quoted by Yonas, 2013).

The normality tests for this study as shown in graph 4.3, the kurtosis is close to 3, skewness close to 0 and the Jarque-Bera statistic has a p-value of 0.059 which is over 0.05 implying that the data were consistent with a normal distribution assumption.

Graph 4.3 normality test



Source: survey data (2017)

4.5.2 Multicollinearity test

Correlations or multiple correlations of sufficient magnitude to have the potential to adversely affect regression estimates. According to (Churchill and Iacobucci 2005), multicollinearity is

concerned with the relationship which exists between explanatory variables. When there exists the problem of multicollinearity, the amount of information about the effect of explanatory variables on dependent variables decreases and as a result, many of the explanatory variables could be judged as not related to the dependent variables when in fact they are. How much correlation causes multicollinearity, however, is not still clearly defined. Many authors have suggested different level of correlation to judge the presence of multicollinearity. While (Hair, et al. 2006) argued that correlation coefficient below 0.9 may not cause serious multicollinearity problem.(Malhotra 2007) stated that multicollinearity problem exists when the correlation coefficient among variables is greater than 0.75. This indicates that there is no consistent agreement on the level of correlation that causes multicollinearity(Yonas, 2013).

Therefore, in this study correlation matrix for four of the independent variables is shown below in Table 4.5. The result of the estimated correlation matrix shows that the highest correlation of 0.596 which is between design and Employee displayed emotions. Since there is no correlation above 0.75 and 0.9 according to (Malhotra 2007) and (Hair, et al. 2006) respectively, it can be concluded that there is no problem of multicollinearity.

Table 4.5: Correlation matrix between independent variables

Correlations matrix

	Ambient condition	Design	Employee displayed emotions	Customer Condition
Ambient condition	1	.581**	.438**	.136**
Design	.581**	1	.596**	.223**
Employee displayed emotions	.438**	.596**	1	.296**
Customer Condition	.136**	.223**	.296**	1

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

Source: Survey data (2017)

4.5.3 constant variable or the errors have zero mean($E(\epsilon) = 0$)

The constant variable assumption states that the average value of the errors should be zero. According to (Brooks 2008) if the regression equation contains a constant term, this presumption will never be breached. Therefore, since from the regression result table the constant term (i.e. β_0) was included in the regression equation; this assumption holds good for the model.

4.5.4 Heteroscedasticity test

Heteroskedasticity is a systematic pattern in the errors where the variances of the errors are not constant. When the variance of the residuals is constant it is referred as homoscedasticity, which is desirable. To test for the absence of heteroscedasticity white test was used in this study. In this test, if the p-value is very small, less than 0.05, it is an indicator for the presence of heteroscedasticity (Gujarati 2004).

But from Table 4.6 presents three different types of tests for heteroscedasticity. Since the p-values of all the three tests are considerably in excess of 0.05 it's a clear indicator that there is no evidence for the presence of heteroscedasticity. Hence, the model passes the second test.

Heteroskedasticity Test: White
Table 4.6

F-statistic	3.886433	Prob. F(16,349)	0.3410
Obs*R-squared	55.34995	Prob. Chi-Square(16)	0.2154
Scaled explained SS	47.79815	Prob. Chi-Square(16)	0.0124

4.5.2. Regression analysis Result

Table 4.6 Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.782 ^a	.611	.607	.50838

a. Predictors: (Constant), , Ambient conditions, Employee displayed emotions, Design factors and customer climate.

The model summary provides R, R-square and adjusted R square values. The R value represents a simple correlation which is .782 that indicates high degree of correlation. From the R values, adusted R square is important in this analysis. The adjusted R square (= .607) indicates how of the total variation in the dependent variable “customer satisfaction “ can be explained by the independent variables such as “ ambient condtions, design factors, employee displayed emotions

As provided by the above table 4.7, ($r = 0.601$) the result showed that there is positive strong correlation between employee displayed emotions and customer satisfaction. A P- value of 0.000 showed that there is statistical significance between employee displayed emotions and customer satisfaction. The result suggested that improving the condition of employee displayed emotions were associated with the higher level of customer satisfaction. Improving the quality of employee displayed emotions means serving customers with smile face, politeness, respectful ness, friendliness, helpfulness, thankfulness and emphatful. So according to the study result, improving employee displayed emotions means improving customer satisfaction.

The coefficient results of the above table also showed there is positive correlation between design factors and customer satisfaction. ($r = 0.197$, $p = 0.000$). The P-value 0.000 indicated that there is statistical significance between design factors and customer satisfaction. The design factors related shops facilities cleanness, internal and external appearance , size of the shop, suitability and sufficiency of seats , arrangement of furnitures, status of communication materials, signages and conditions related to layout. So, the result showed that improving the quality of design factors were associated with improved customer satisfaction.

Regarding Ambient condition, the regression coefficient table above showed that there is positive correlation with customer satisfaction($r=0.114$, $p=0.005$). According to the p-value And customer climate.” It can be also explained that 60.7% of the variations of customer satisfaction can be explained by ambient conditions, design factors, employee displayed emotions and customer climate; and the rest 39.3 % of the variations of customer satisfaction that can be explained by independent variables such as socially symbolic and natural dimensions; or by other variables outside the variables explained in this research eg. The condition of parking area a

4.5.3 Regression coefficients

Table 4.7: Regression coefficients

Model		Coefficients				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.028	.234		-.117	.007
	Ambient condition	.133	.048	.114	2.796	.005
	Design factors	.299	.069	.197	4.316	.000
	Employee displayed emotions	.676	.047	.601	14.242	.000
	Customer Climate	-.087	.041	-.074	-2.154	.032

a. Dependent Variable: Customer Satisfactions
Source: survey data(2017)

0.005, there is statistical significance between the two variables. So, the result concluded the improving ambient conditions such lighting, odor, color, temperature and air is associated with improved customer satisfaction.

The result table above showed that there is negative correlation between customer climate and customer satisfaction($r= -0.087$, $p=0.032$). a p-value indicated there is statistical significance between customer climate and customer satisfaction. The result suggested that improving the

customer climate (decreasing customer density) associated with improved customer satisfaction.

4.5.4 Hypothesis testing

The creation of pleasant and attractive service delivery environment has become important in a today's competitive fast changing world to enhance customer experience and to attract customers. This study tried to show the areas needed improvement in ethio telecom regarding service delivery environment. The objective of this study was to investigate the impact of service delivery environment dimensions on customer satisfaction in ethio telecom shops. Four hypotheses were proposed to study the topic. To test the hypotheses and find out the relationship between independent variables(service delivery environment dimensions) and dependent variable(customer satisfaction), the regression analysis was employed. The independent variables are ambient conditions, design factors, employee displayed emotions and the customer climate. The regression equation used to predict the impact of independent variable on dependent variable is $Y = a + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + e$

Where Y= customer satisfaction

a = y-intercept

β_1 = Beta weight or regression coefficient of ambient condition

β_2 = Beta weight or regression coefficient of design factor

β_3 = Beta weight or regression coefficient of employee displayed emotion

β_4 = Beta weight or regression coefficient of customer climate

X1= ambient condition

X2= Design factors

X3= Employee displayed emotions

X4= Customer climate

e= Residual value/error term

The four hypotheses discussed are as follows:

H1: Ambient condition of ethio telecomshops positively related to the customer satisfaction.

H0: Ambient condition of ethio telecomshops not positively related to the customer satisfaction.

From the regression analysis result table 4.7, ambient condition had significant and positive contribution for customer satisfaction, since the p-value 0.005 which is less than the significant level 0.05 and the coefficient of ambient condition 0.133 was positive and 13.3% of customer satisfaction is explained by ambient condition. Therefore, when perception of customers towards ambient condition is good, customer satisfaction will also be high and vice versa. Ambient condition had positive significant contribution to customer satisfactions. This indicates that as quality of ambient condition increases with significant increase of customer satisfactions. As a result, we can conclude that the null hypothesis (H0) is rejected and the alternative hypothesis is not rejected(accepted).

Eventhough many empirical studies supported my findings, some past researches did not agree with my findings. For example, the research conducted by Andaleeb and Conway (2006) showed that physical environmental factors not having a significant relationship with customer satisfaction. However , most secondary research supported the idea that ambient condition influence customer satisfaction . For example, a research conducted by Soriano (2002) in Spain stated that attributes ambient were significant ($p < 0.05$) to customer satisfaction. and Bartlett and Han (2007) in China repeated the result of Soriano about the relation of ambient condition and customer satisfaction. They mentioned in their research that odor, space, lighting,noise and atmosphere are critical dimensions for many people. This implies that in order for customers to be satisfied, these dimensions have to be well managed and gain a positive perception from customers. So, ambient condition is a significant predictor of Customer Satisfaction and we can generalize the results for the entire population.

H2: Design factors of ethio telecom shops positively related to the customer satisfaction.

H0: Design factors of ethio telecom shops not positively related to the customer satisfaction.

According to table 4.7, $Y = a + 0.299X_2$. A change in design factor changes customer satisfaction at the rate of 0.299. A positive coefficient on X_2 ($\beta_2=0.299$) which means that design factor has positive effect on customer satisfaction. Since the p-value 0.000 which is less than the significant level 0.05 and the coefficient of ambient condition 0.133 was positive and 29.9% of customer satisfaction is explained by design factors. This study showed that design factors affect customer satisfaction of ethio telecom enterprise customers. As a result, we can conclude that the null hypothesis (H_0) is rejected and the alternative hypothesis is accepted.

There were many studies which support my finding regarding design factors influence. According to the study made by Zijlstra and Mobach(2011), design and layout should be focused on maximizing the positive and meaningful impact for the customer in service environment. Newman(2007), effective and helpful signage added to a good spatial organization induces a good customer s' behavior and a positive image of the service. Besides my this study, the above studies emphasized the importance of design, layout and functionality of the service environment to the customer satisfaction. So, design factors should be managed to increase satisfaction of customers.

H3: Employee displayed emotions of ethio telecom shops positively related to the customer satisfaction.

H0: Employee displayed emotions ethio telecom shops not positively related to the customer satisfaction.

From the regression analysis result table 4.7, employee displayed emotion had highly significant and positive contribution for customer satisfaction. Since the p-value 0.000 which is less than the significant level 0.05 indicated that there is a statistical significance between employee displayed emotions and customer satisfaction. The coefficient of employee displayed emotions 0.676 which indicates that 67.6% of customer satisfaction is explained by employees displayed emotions. Employee displayed emotion had positive significant contribution to customer

satisfactions. This indicates that a change in employee displayed emotions associated with the change in customer satisfactions. As a result, we can conclude that the null hypothesis can be rejected or the alternative hypothesis can be accepted.

H4: customer climate of ethio telecom shops negatively related to the customer satisfaction.

H0: customer climate of ethio telecom shops not negatively related to the customer satisfaction.

According to table 4.7, $Y = a + (-0.087)X_4$. The result showed that there is negative correlation between customer climate and customer satisfaction ($r = -0.087$, $p = 0.032$). A P-value indicated there is statistical significance between customer climate and customer satisfaction. This negative coefficient X_4 ($\beta_4 = -0.087$) which means the customer climate has a negative impact on customer satisfaction. 0.032 p-value indicates that there is a statistical significance between customer climate and customer satisfaction. The customer climate negatively influences customer satisfaction. i.e. Increase in customer climate or customer density results in a decrease in customer satisfaction in ethio telecom enterprise service centers. Studies support my findings that customer crowd negatively affects customer satisfaction. For example, (Zijlstra and Mobach, 2011), in their research confirmed that crowd has a negative impact on consumer's mood. This implies that in order for customers to be satisfied, customer crowd have to be well managed and gain a positive perception from customers.

The result suggested that improving the customer climate (decreasing customer density) is associated with improved customer satisfaction.

Table 4.12 : Summary Hypotheses Testing

	Hypotheses	Sig.	Result
1	<i>Ambient condition of ethio telecom enterprise shops positively related to the customer satisfaction</i>	.000	accepted
2	<i>Design factors of ethio telecom enterprise shops positively related to the customer satisfaction</i>	.000	accepted
3	<i>Employee displayed emotions ethio telecom enterprise shops positively related to the customer satisfaction</i>	.000	accepted
4	<i>Customer climate of ethio telecom enterprise shops negatively related to the customer satisfaction.</i>	.002	accepted

Chapter 5

Summary, Conclusion and Recommendation

5.1. Summary

The purpose of this research was to study the impact of service delivery environment of ethio telecom Addis Ababa enterprise customers. This study was done because the researcher noticed the lack of literature and research about service delivery environment in service industry especially in telecom industry of ethiopia. The researches done especially in developed world indicated that service delivery environment dimensions such as ambient condition, design factors, employee displayed emotions and customer climate had impact on customer satisfaction.. This research used both primary and secondary research works to respond to the research questions: What is the role of ambient conditions, design factors (layout, equipment's, furnishings, symbols and signage's), employee displayed emotions and customer climate on customer satisfaction in ethio telecom Addis ababa enterprise shops.

As stated by Bitner(1992), service delivery environment is refers to an environmental setting in which a market place exchange is performed, delivered and consumed with in a service organization. According to Bitner, service delivery environment (services cape) represents physical dimension (ambient and design elements) used by service organizations to perform and deliver their services to customers. However, many service organizations realize they cannot just rely on the physical setting because factors like service employees and customers also play an important role in services delivery (Tombs and McColl- Kennedy, 2003). For example, even though the physical environment is excellent, if the employees fail to greet and treat customers in a proper manner, it will create a negative influence on customer satisfaction towards the service organization. Based on the idea of Bitner, Rosenbaum and Massiah(2011) suggested new service delivery environment framework which has four dimensions such as physical dimension, social dimension, socially symbolic dimension and natural dimension. The framework proposed by Rosenbaum et.al (2011) completes Bitner's assumptions regarding service delivery

environment. However, to further understand the framework this study used only the physical dimension and social dimensions and the rest two dimensions left for other researchers to study.

In Ethiopian service industry context, the impact of service delivery environment dimensions on customer satisfaction is not studied or the researcher couldn't find any research regarding the topic. So, this study tried to fill the gaps by investigating the impact of service delivery environments dimensions on customer satisfaction by taking into account Ethiopian telecom industry.

The target population of the research was ethio telecom Addis ababa enterprise customers. The research employed a quantitative approach and used both descriptive and casual design to answer research question of the study. The sample size was 383 based on the advice of popular research advice.com. Out of nine enterprise service centers in Addis Ababa, five shops such as central Addis Ababa zone, East Addis Ababa zone, west Addis Ababa zone, North Addis Ababa zone and South addis Ababa enterprise shops were selected as a sample. The non-probability sampling was chosen and convenient sampling was used to select the respondents. The research used both primary and secondary data sources to gather data.

In order to support the hypotheses or research questions, five point likert scale questionnaire was used and distributed to enterprise customers who were asked to indicate their level of satisfaction (agreement) with service delivery environment dimensions such as ambient conditions (lighting, color, odor, noise), design factors (facility, equipment, furnishing, layout, appearance, signages), employee displayed emotions (employees facial expression, politeness, thankfulness, respectfulness, friendliness, empathy) and customer climate.

Reliability test was conducted in both service delivery environment dimensions and overall customer satisfaction in order to prove their reliability for further analysis. The reliability coefficient of both the dependent and independent variables indicated that all the dimensions are highly reliable (Cronbach alpha Reliability > 0.70 which is 92.7%). So, the reliable dimensions were internally

consistent. Regarding Pearson correlation, both independent variables of the study had positive correlation with dependent variable, but employee displayed emotion had large/strong positive correlation which is 0.747. Both of the independent variables had significantly positive correlation with dependent variable. Regression analysis showed that there was positive correlation between service delivery environment dimensions and customer satisfaction and 60.7% of the variations of customer satisfaction can be explained by the independent variables of the study.

The findings of this paper support the Bitner's (1992) framework of physical focused service delivery environment as well as the framework proposed by Rosenbaum et al (2011) to complete Bitner's assumptions regarding service delivery environment. The results indicate that service delivery environment dimensions such as ambient conditions, design factors (special functionality, layout, signs), employee displayed emotions and customer climate are important dimensions in influencing customer satisfaction in ethio telecom service centers. Even though all service delivery environment dimensions have impact on customer satisfaction, employee displayed emotional factors should be given attention in order to satisfy the enterprise customers.

5.2. Conclusion

Service delivery environment dimensions are increasingly gaining importance in the service industry in order to be successful in the competitive market and to meet fast changing needs of customers'. The purpose of this study was to explore the impact of service delivery environment dimensions on customer satisfaction in the case of ethio telecom addis ababa enterprise customers. Based on the framework of Rosenbaum and Massai (2011), the student researcher based on the two dimensions of service delivery environment dimensions such as physical and social service delivery environment dimensions. The study identified ambient conditions, design factors, employee displayed emotions and customer climate as independent variables and customer satisfaction as dependent variable. The Pearson correlation and regression analysis showed that there was positive correlation between independent variables

such as ambient conditions, design factors and employee displayed emotions; and dependent variable customer satisfaction. And the analysis showed that there was negative correlation between customer climate and customer satisfaction. The study implied that improvement on service delivery environment dimensions can leads to improvement on customer satisfaction. Especially, employee displayed emotions were identified as the main influencer of customer satisfaction followed by design factors and ambient conditions. The statistical analysis showed that there is significant relationship between service delivery environmental dimensions and customer satisfaction. There fore, all of the four of the hypotheses of the study were accepted.

5.3 Recommendations for the company

The main purpose of this research is to identify the physical and social service delivery environment dimensions which affect customer satisfaction of ethio telecom enterise customers in Addis Ababa. Based on the study findings, the researcher would like to recommend focus areas of service delivery environment dimensions in order to enhance the satisfaction of customers:

- ❖ According to the research findings, employees displayed emotions are the most influencing dimensions that affect the customer satisfaction in ethio telecom shops. As indicated by the study, Employee displayed emotions had highly positive relationship with customer satisfaction. So, attention should be given to this dimension more. The elements which constituted employee displayed emotions in the study were employees uniform neatness, greeting and treating the customers with smile face, treating customers politely, willingness to deal with customers' multi-linguality, respectfulness and being emphatic to customers. So, management of ethio telecom should work on providing practical based training for changing attitudinal aspect of its employees . In order for customers to be satisfied, these employee displayed emotions elements have to be managed well and gain a positive perception from customers. The researcher hopeful that the findings from this research offers ethio telecom managers valuable information and insight to design the service delivery environment to enhance customer satisfaction.

- ❖ Besides employee displayed emotions, the design factors had positive relation with customer satisfaction in this study. The design elements of the study includes spatial layout, facilities functionality and signages. Since design factors were the second most influencer of customer satisfaction in this study, ethio managers should give focus to improve the design elements of service delivery environment such as layout and decor of the shop, external as well as internal appearance of the shop, suitability and sufficiency of waiting area seats, arrangement of facilities/furnitures in the shops, signages condition and so on to gain positive perception of customers.
- ❖ The study findings also indicated that the relationship between ambient condition and customer satisfaction is positive and the descriptive analysis of respondents regarding ambient condition indicated that the mean response showed agree level. The ambient condition elements of the study were noise, temperature, odor, lighting and air condition in the shop. Therefore, ethio telecom managers should give attention to further improve the ambience condition in order enhance customer satisfaction.
- ❖ According to the research, customer density(crowd) is negatively related with customer satisfaction. As indicated by the research, customer crowding have negative impact on customers' mood and create stress on other customers during service performance. The descriptive analysis also showed that there is significant crowd in ethio telecom shops. So, the researcher recommended that ethio telecom managers should implement strategies to minimize the crowd on shops may be by improving the quality of service employees through providing different skills and attitudes based trainings, by increasing the number of service employees and by increasing the number of service centers.
- ❖ In addition to close ended likert scale questionnaire, one open ended question was provided to the respondents in order to address the issues havn't covered by the likert scale questionnaire. So, the respondents used open ended questionnaire focus on the following issues related to service delivery environment:
 - The respondents were not comfortable on manual security checking on the gates of ethio telecom service centers. So, The researcher recommended that

ethio telecom should use electronic security checking devices for the comfort of customers as well as reliable accomplishment of security checking.

- According to few respondents, Few employees of enterprise service center were not wearing uniforms and badges. The researcher recommended that the employees should wear uniforms and badges in order them to be easily identified by the customers. So, Ethio telecom management should work to create environment in which its employees wear badges and uniforms regularly to gain positive perception of customers.

5.4. Suggestions for further study

- ❖ As indicated in the limitation section of the study, the lack of prior research done on the impact of service delivery environment in relation to customer satisfaction. So, this study will give insight to make further studies on the topic.
- ❖ According to Rosenbaum and messiah(2011), the framework proposed has four dimensions such as physical, social, socially symbolic and natural. This study focused only on the first two dimensions(physical and social). So, inorder to understand the overall impact of the service delivery environment, all of the four dimensions should be studied.
- ❖ As indicated above, this study provided attention for general dimensions of physical and social dimensions such as ambient condition, design factors , employee displayed emotions and customer density. Further study should be done to investigate the impact of specific elements of dimensions. For example, ambient conditions includes lighting, noise, temperature, odor and air condition. So, all specific elements of the dimensions should be studied to understand overall impact of the dimensions.

Therefore, deepen understanding of the the impact of each and every service delivery environment variables helps to propose the right type of dimension elements for different type of service environments in order to satisfy the need of customers.

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Appendexes

English Questionnaires

Addis Ababa University School of commerce department of Marketing Management

Questionnaire

Dear Sir/Madam,

I am graduating student at Addis Ababa university school of commerce and conducting the research for partial fulfillment of completion of master's degree in marketing management. To collect data for my study entitled “ *The impact of service delivery environment on customer satisfaction in case of Ethio telecom* ” , I designed the questionnaire to be filled by ethio telecom Addis Ababa enterprise customers. So, The survey is anonymous and your answers will be handled strictly confidential and will exclusively be used for the purpose of this research. Therefore, I request you to answer the questions as honest and objective as possible as for the success of the research.

I would like to thank you in advance for your indispensable cooperation and support in this Endeavor.

If you would like further information about this study, or have problem filling this questionnaire please contact me via my phone number 0911500570 or through my email address Desta11m@yahoo.com/Destamake@gmail.com.

- Please answer all the questions in three parts.
- Make a tick “✓” mark in appropriate box only.
- Thank you for your precious time

Part I) Demographic information

1. Gender : male Female
2. Age: 18-25 26-35 36-45 46 and above.
3. Level of education:
 - Diploma and below First degree Second degree and above.
 - others (specify).....
4. Which category best describe your company:
 - International organizations Financial institutions production company
 - Government company Private enterprise Public service enterprise
 - Others (specify).....
5. Nationality:
 - Ethiopian Non- Ethiopian (specify).....

Part II) Service delivery environment

A) Physical service delivery environment

Please state your opinion towards **physical service delivery environment** of Ethio telecom Enterprise service centers. Please make “v” mark in your appropriate choice according the following rating. (Strongly agreed=5, agree = 4, Neutral=3 disagree= 2, strongly disagree= 1)

No	Physical environment (PE)	Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
PE1	Ethio telecom enterprise shop has suitable temperature	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
PE2	Air condition is good in Enterprise shop (not suffocated).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
PE3	There is sufficient lighting in the shops.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
PE4	The service delivery environment of the shops has an appealing odor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
PE5	The shop has pleasant noise level	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
PE6	Facilities in the shop are clean	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

PE7	External appearance of the shop looks attractive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
PE8	Internal layout of the shops is attractive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
PE9	Communication materials (eg. Posters..) in the shop provide the most updated information about ethio telecom products and services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
PE10	The size of the shops is large enough for customers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
PE11	Waiting area seats are suitable for customers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
PE12	There are Sufficient seats in the waiting area of the shop	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
PE13	Arrangement of furniture (table,chair..)suitable for customers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
PE14	The External signage lead customers to the shops.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
PE15	The signs in the shop provide adequate direction.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
PE16	Signs (eg. "No smoking" ...) placed in suitable and visible to customers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

B) Social service delivery environment

Please state your opinion towards social service delivery environment of Ethio telecom Enterprise service centers. Please make (√) mark in your appropriate choice according the following rating. (Strongly agreed=5, agree = 4, Neutral=3 disagree= 2, strongly disagree= 1)

No	Social environment (SE)	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
SE1	Employees wear neat uniforms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
SE2	Employees greet customers with smile face	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
SE3	The staff talk politely with customers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
SE4	The sales people give thanks to customers at the end service performance to create long term relationship	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
SE5	Employees deal with different nationalities (Multi-lingual) with courteous.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
SE6	Employees are respectful to customers in the shops	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
SE7	Employees treat customers in a friendly manner	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
SE8	Employees respond to customers' needs in a helpful and pleasant tone of voice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
SE9	Employees listen to customers with empathy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SE10	Customer density (crowd) affect other customers mood in the enterprise shops.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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Part III) Customer satisfaction

Please state your satisfaction level towards service delivery environment of Ethio telecom Enterprise service centers. (Please make (v) mark in your appropriate choice according to the following ratings. Strongly Satisfied=5, Satisfied= 4, Neutral=3 Dissatisfied= 2, strongly dissatisfied= 2)

	Overall customer satisfaction level	Stron gly Satisfi ed	Satisfied	Neutral	Dissatisfi ed	Strongly Dissatisfied
CS	Indicate your overall satisfaction level on service delivery environment of ethio telecom enterprise shops	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Do you have anything else to add regarding Ethio telecom enterprise shops service delivery environment?.....

.....

Thank you!!!!

4. የርስዎ ድርጅት በየትኛው የኢንተርኔት ምዘድ ደንቦች ዘርፍ ይመደባል?

አለም አቀፍ ድርጅት..... የገንዘብ ተቋም አምራች ድርጅት

መንግስታዊ ድርጅት..... ግል ድርጅት..... የህዝብ አገልግሎት ተቋም

ሌላ ከላይ ይግለጹ.....

5. ዜግነት ኢትዮጵያዊ..... ኢትዮጵያዊ የልሆኑ(ይጥቀሱ).....

ክፍል 2: አገልግሎት መስጫ አካባቢ(service delivery environment)

ሀ. ፊዘካል አገልግሎት መስጫ አካባቢን(physical service delivery environment) በሚመለከት፤

የኢትዮ ቴሌኮም ኢንተርኔት ምዘድ ሾፕ ፊዘካል የአገልግሎት መስጫ አካባቢን በሚመለከት የተዘጋጁ መጠይቆች ያለዎትን አመለካከት(ሀሳብ) ወይም የመስማማት ደረጃዎትን ከመጠይቆቹ ፊትለፊት ከተዘጋጁ በታላይ ብቻ “ህ” ምልክት በማድረግ የመስማማት ደረጃዎትን እንዲገልጹ እጠይቃለሁ። የመመዘኛ አካሄዱ (5) በጣም እስማማለሁ (4) አስማማለሁ (3) መካከለኛ (2) አልስማማም (1) በጣም አልስማማም የሚለውን የሚወክሉ መሆናቸውን እገልጻለሁ።

ተ.ቁ	ፊዘካል የአገልግሎት መስጫ አካባቢን በሚመለከት	በጣም እስማማለሁ	እስማማለሁ	መካከለኛ	አልስማማም	በጣም አልስማማም
1	በኢትዮ ቴሌኮም አገልግሎት መስጫ ውስጥ ያለው ሙቀት ለደንበኛ ምቹ ነው					
2	በሾፕ ውስጥ አየር ጥር (ያልታመቀ) ነው					
3	በአገልግሎት መስጫ ውስጥ በቂ ብርሀን አለ					
4	በሾፕ ውስጥ መልካም ጠረን አለ					
5	በሾፕ ውስጥ ያለው የድምጽ መጠን ለደንበኞች ተስማሚ ነው					
6	በሾፕ ውስጥ የሚገኙ እቃዎች ንጹህ ናቸው					
7	ጣቢያው ጣቢያው ውጫዊ ገጽታ የሚስብ ነው					

8	የአገልግሎት መስጫ ጣቢያው ውስጣዊ ገጽታ የሚሰጠው ነው					
9	በሾፕ ውስጥ የሚገኙ የማስታወቂያ ቁሳቁሶች (ፖስተር..ወዘተ) ስለምርቶችና አገልግሎቶች ወቅታዊ መረጃ ይሰጣሉ					
10	የሾፕ ስፋት ደንበኞችን በተገቢው መልኩ ለማስተናገድ በቂ ነው					
11	የደንበኞች ማረፊያ ወንበሮች ምቹ ናቸው					
12	የደንበኞች ማረፊያ አከባቢ በቂ ወንበሮች አሉ					
13	በሾፕ ውስጥ የሚገኙ የአገልግሎት መስጫ ቁሳቁሶች (ወንበር፣ ጠረጴዛ....)አቀማመጥ ምቹ ነው					
14	በሾፕ ውስጥ የተሰጠው (የተቀመጠው) ማስታወቂያ በርድ(external signage) ደንበኞችጣቢያውን እንዲያገኙ ይረዳል					
15	በሾፕ ውስጥ ያሉ ምልክቶች ደንበኞችን በትክክል የአገልግሎት አቅጣጫን እንዲለዩ ያደርጋል					
16	ምልክቶች(ለምሳሌ ማጫስ ክልክል ነው) በተገቢውና በሚታይ ቦታ ተቀምጧል					

ለ. ሶሻል የአገልግሎት መስጫ አካባቢን (Social service delivery environment) በሚመለከት፡

የኢትዮ ቴሌኮም ኢንተርፕሪይዝ ሾፕ ሶሻል የአገልግሎት መስጫ አካባቢን በሚመለከት ለተዘጋጁት መጠይቆች ያላዎትን አመለካከት ወይም ሀሳብ የመስማማት ወይም አለመስማማት ደረጃዎቻቸውን መጠይቆች ፊት ለፊት ከተዘጋጀው በታላቅ ላይ ብቻ “v” ምልክትን በማድረግ የመስማማት/ያለመስማማት ደረጃ እንዲገልጹ እጠየቃለሁ። የመመዘኛው አካሄድ (5) በጣም እስማማሁ (2) እስማማለሁ (3) መካከለኛ (4) አልስማማም (5) በጣም አልስማማም የሚለውን የሚወክሉ መሆናቸውን እገልጻለሁ።

ተ.ቁ	ሶሻል የአገልግሎት መስጫ አካባቢን በሚመለከት	በጣም እስማማለሁ	እስማማለሁ	መካከለኛ	አልስማማም	በጣም አልስማማም
1	የአገልግሎት መስጫ ላይ የሚሰሩ ሰራተኞችን ጽሁፍ ይገልጻል ይለብሳሉ					
2	ሰራተኞች ለደንበኞች በፈገግታ የተሞላ ሰላምታ ይሰጣሉ					
3	የሾፕ ማህበረሰብ ደንበኞችን በትኩረት ያነጋግራሉ					
4	አገልግሎትን ከሰጡ በኋላ ሰራተኞች ከደንበኞች ጋር የረጅም ጊዜ ግንኙነት ለመፍጠር በማሰብ ለአገልግሎት ወደእነሱ ስለመጡ በማመስገን ይሸኛሉ					
5	ሰራተኞች የተለያዩ ቋንቋ የሚጠቀሙ ደንበኞችን ከመጡ በትኩረት ለመርዳት ጠረት የደርጋሉ					
6	ሰራተኞች ደንበኞችን ከበሬታ በተሞላበት ስሜት ያስተናግዳሉ					

7	ሰራተኞች የደንበኞችን የጓደኝነት ስሜት እንዲሰማቸው በሚያደርግ ሁኔታ እንክብካቤ ያደርጋሉ					
8	ሰራተኞች የደንበኞችን ፍላጎት ለመረዳት ያላቸውን ፍላጎት በሚገልጽ ሁኔታ ምላሽ የሰጧሉ					
9	የሾፕ ሰራተኞች የደንበኞችን ችግር እንደ ራሳቸው ችግር በመቁጠር ስሜት ያስተናግዳሉ					
10	በሾፕ ውስጥ ያለው የደንበኞች ብዛት (ብዙ ወረፋ) የሌሎች ደንበኞችን ስሜት ይጎዳል					

ክፍል 3. የደንበኛ እርካታን (Customer satisfaction) በሚመለከት

በኢትዮ ቴሌኮም ኢንተርኔት-ደዘ አገልግሎት ማእከላትን የአገልግሎት መስጫ አካባቢን (service delivery environment) በሚመለከት በአጠቃላይ ያለዎትን የእርካታ ሁኔታ ከተዘረዘሩት አምስት አማራጮች መካከል አንዱ ላይ ብቻ “v “ ምልክት በማድረግ ይግለጹ።

ተ. ቁ	አጠቃላይ የአገልግሎት መስጫ አካባቢን በሚመለከት	በጣም እስማማለሁ	እስማማለሁ	መካከለኛ	አልስማማም	በጣም አልስማማም
1	በአጠቃላይ በኢትዮ ቴሌኮም ኢንተርኔት ደዘ አገልግሎት በሚሰጥበት አካባቢ ላይ ያለዎትን የዕርካታ ደረጃ ይጠቁሙኝ					

በአጠቃላይ የኤትዮ ቴሌኮም የአገልግሎት መስጫ አካባቢን በሚመለከት ተጨማሪ አስተያየት ካለዎት እንዲገልጹ እጠይቃለሁ.....

አመሰግናለሁ።

Apendexes

SPSS output

Table 1 Frequency distribution of age of respondent

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 18-25	12	3.3	3.3	3.3
26-35	81	22.1	22.1	25.4
36-45	184	50.3	50.3	75.7
46 and above.	89	24.3	24.3	100.0
Total	366	100.0	100.0	

Table 2 Frequency distribution of Gender of respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Male	248	67.8	67.8	67.8
Female	118	32.2	32.2	100.0
Total	366	100.0	100.0	

Table 3 Frequency distribution of Level of education of respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Diploma and below	34	9.3	9.3	9.3
First degree	222	60.7	60.7	69.9
Second degree and above	110	30.1	30.1	100.0
Total	366	100.0	100.0	

Table 4 frequency distribution of company category of respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
International organizations	51	13.9	13.9	13.9
Financial institutions	56	15.3	15.3	29.2
production company	37	10.1	10.1	39.3
Valid Government company	62	16.9	16.9	56.3
Private enterprise	98	26.8	26.8	83.1
Public service enterprise	62	16.9	16.9	100.0
Total	366	100.0	100.0	

Table 5 frequency distribution of Nationality of respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Ethiopian	336	91.8	91.8	91.8
Non-Ethiopia	30	8.2	8.2	100.0
Total	366	100.0	100.0	

Table 6 Frequency distribution Overall satisfaction level on service delivery environment of ethiotelecom enterprise shops

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly dissatisfied	5	1.4	1.4	1.4
Dissatisfied	33	9.0	9.0	10.4
Valid Neutral	47	12.8	12.8	23.2
Satisfied	243	66.4	66.4	89.6
Strongly Satisfied	38	10.4	10.4	100.0
Total	366	100.0	100.0	

Table 7 Reliability Statistics of ambient condition

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.832	.836	5

Table 8 Item Statistics of ambient condition

	Mean	Std. Deviation	N
Ethio enterprise shop has suitable temperature	3.85	.879	366
Air condition is good in Enterprise shop (not suffocated).	3.62	1.045	366
There is sufficient lighting in the shops	4.04	.684	366
The service delivery environment of the shops has an appealing oder	3.52	1.000	366
The shop has pleasant noise level	3.71	.832	366

Table 9 Reliability test of design factors

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.844	.853	11

Table 10 Item Statistics of design factors

	Mean	Std. Deviation	N
Facilities in the shop are clean	4.17	.703	366
External appearance of the shop looks attractive	4.08	.774	366
Internal layout of the shops is attractive	4.10	.767	366
Communication materials(eg. Posters..) in the shop provide the most updated information about Ethio telecom products and services	3.64	.948	366
The size of the shops is large enough for customers	4.08	.819	366
Waiting area seats are suitable for customers	4.05	.825	366
There are Sufficient seats in the waiting area of the shop	3.25	1.142	366
Arrangement of furniture (table,chair..)suitable for customers	4.14	.669	366
The External signage lead customers to the shops	3.74	.965	366
The signs in the shop provide adequate direction	3.53	.881	366
Signs (eg. "No smoking" ...) placed in suitable and visible to customers	3.58	.823	366

Table 11 Reliability test of employee displayed emotions

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.901	.908	9

Table12 Item Statistics of employee displayed emotions

	Mean	Std. Deviation	N
Employees wear neat uniforms	3.30	1.070	366
Employees greet customers with smile face	3.98	.814	366
The staff talk politely with customers	3.93	.870	366
The sales people give thanks to customers at the end service performance	3.48	1.141	366
Employees deal with different nationalities (Multi-lingual) with courteous	3.13	1.111	366
Employees are respectful to customers in the shops	4.03	.797	366
Employees treat customers in a friendly manner	3.92	.895	366
Employees respond to customers' needs in a helpful and pleasant tone of voice	3.70	1.017	366
Employees listen to customers with empathy	3.91	.898	366

Table 17 Regression coefficient of Ambient condition

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.784	.238		7.493	.000
Ethio enterprise shop has suitable temperature	.156	.053	.170	2.956	.003
Air condition is good in Enterprise shop (not suffocated).	.117	.057	.151	2.039	.042
There is sufficient lighting in the shops	-.045	.077	-.038	-.588	.557
The service delivery environment of the shops has an appealing oder	.133	.061	.165	2.202	.028
The shop has pleasant noise level	.177	.052	.182	3.380	.001

a. Dependent Variable: Overall satisfaction level on service delivery environment of ethiotelecom enterprise shops

Table 18 Regression coefficient of design factors

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.275	.271		1.016	.310
Facilities in the shop are clean	.142	.081	.123	1.750	.081
External appearance of the shop looks attractive	.027	.078	.026	.341	.733
Internal layout of the shops is attractive	.053	.070	.050	.758	.449
Communication materials(eg. Posters..) in the shop provide the most updated information about Ethio telecom products and services	.113	.043	.132	2.643	.009
The size of the shops is large enough for customers	.004	.055	.004	.074	.941
Waiting area seats are suitable for customers	.115	.058	.117	2.006	.046
There are Sufficient seats in the waiting area of the shop	.136	.034	.192	3.961	.000
Arrangement of furniture (table,chair..)suitable for customers	.112	.065	.093	1.732	.084
The External signage lead customers to the shops	.010	.041	.011	.232	.817
The signs in the shop provide adequate direction	.043	.049	.047	.886	.376
Signs (eg. "No smoking" ...) placed in suitable and visible to customers	.159	.051	.162	3.114	.002

a. Dependent Variable: Overall satisfaction level on service delivery environment of ethiotelecom enterprise shops

Table 19 Regression coefficient of employee displayed emotion

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.641	.167		3.835	.000
Employees wear neat uniforms	.074	.031	.097	2.399	.017
Employees greet customers with smile face	.042	.067	.042	.628	.531
The staff talk politely with customers	.210	.075	.225	2.812	.005
The sales people give thanks to customers at the end service performance	.023	.037	.033	.642	.521
Employees deal with different nationalities (Multi-lingual) with courteous	.033	.030	.045	1.087	.278
Employees are respectful to customers in the shops	.011	.054	.011	.201	.841
Employees treat customers in a friendly manner	.136	.060	.150	2.256	.025
Employees respond to customers' needs in a helpful and pleasant tone of voice	.103	.047	.130	2.195	.029
Employees listen to customers with empathy	.187	.055	.208	3.411	.001

a. Dependent Variable: Overall satisfaction level on service delivery environment of ethiotelecom enterprise shops

Table 20 Rgression coefficients of overall customer climate

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.928	.265		11.043	.000
Customers density(crowd) affect other customers mood in the enterprise shops	.192	.061	.163	3.158	.002

a. Dependent Variable: Overall satisfaction level on service delivery environment of ethiotelecom enterprise shops