

# Determinants of Customers E-Payment Utilization in Commercial Bank of Ethiopia the Case of Nekemte Town

*International Journal of Economics, Business and Management Studies*

Vol. 6, No. 2, 378-391, 2019

e-ISSN: 2226-4809/p-ISSN: 2304-6945



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## ABSTRACT

The study was intended to analyze the determinants of customers E-payment utilization in the Commercial Bank of Ethiopia Nekemte town. To achieve the objectives, both primary and secondary data were collected from the selected samples. The collected data were analyzed by employing descriptive statistics and ordered logit model by using STATA software version 12. The major finding of the study shows that among the demographic related factors customer's education and income level has positively influenced their E-payment Utilization activities, Whereas among the institutional related factors the network interruption and service charge levied by the bank has a negative influence while the customer satisfaction and cost reduction concern has a positive influence on their E-payment Utilization activities. Lastly, among the customer related factors both perceived risk and lack of willingness to use the service has a negative influence on their E-payment utilization activities in the study area. Based on the result, the authors recommended that the institution has to seriously focus on the improvement of frequent quality service delivery in its daily operations that encourage their E-payment utilization activities and the branch supervisors has to deal with the concerned body on the network interruption and service charge levied by the bank in order to facilitate the smooth functioning of customers E-payment utilization activities.

**Keywords:** E-payment, Utilization, Determinants, Customers, Nekemte town, Commercial Bank of Ethiopia.

**JEL Classification:** M00.

**DOI:** 10.20448/802.62.378.391

Citation | TesfayeEresso Gofe; DerejeRegasa Tulu (2019). Determinants of Customers E-Payment Utilization in Commercial Bank of Ethiopia the Case of Nekemte Town. *International Journal of Economics, Business and Management Studies*, 6(2): 378-391.

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**Funding:** This study received no specific financial support.

**Competing Interests:** The authors declare that they have no competing interests.

**History:** Received: 16 August 2019/ Revised: 23 September 2019/ Accepted: 25 October 2019/ Published: 2 December 2019

**Publisher:** Online Science Publishing

### **Highlights of this paper**

- The study was intended to analyze the determinants of customers E-payment utilization in the Commercial Bank of Ethiopia Nekemte town.
- Based on the result, the authors recommended that the institution has to seriously focus on the improvement of frequent quality service delivery in its daily operations that encourage their E-payment utilization activities and the branch supervisors has to deal with the concerned body on the network interruption and service charge levied by the bank in order to facilitate the smooth functioning of customers E-payment utilization activities.

## **1. INTRODUCTION**

The rapidly growing information and communication technology (ICT) is knocking the front door of every organization in the world. As a result, in the face of rapid expansion of electronic payment (E-payment) systems throughout the developed and the developing world, Ethiopian's financial sector cannot remain an exception in expanding the use of the system (Gardachew, 2010). The author also pointed out that technological innovations play a crucial role in banking industry by creating value for banks and customers, that it enables them to perform banking transactions without visiting the brick and mortar banking structure. On the other hand according to Turban (2008) E-Payment has enabled banking institutions to compete more effectively in the global environment by extending their products and services beyond the restriction of time and space and mirroring the development of E-commerce.

Thus, the increasing competitive environment in the financial service market has resulted in pressure to develop and utilize alternative delivery channels such as electronic banking (E-banking) that includes Automated Teller Machine (ATM), mobile and Internet (online) banking, electronic funds transfer, direct bill payments and credit card. The main move to e-banking is to cut costs while maintaining reliable customer services (Shaikh, 2014).

The modern business environment is dynamic and complex, throwing a wider range of challenges to customers of different institutions. This has forced the hand of businesses in innovation and invention, causing a scenario where a business is never resting on its laurels due to fear of being overtaken by competitors. E-Payment utilization is growing substantially faster hence becoming increasingly important as a source of business in the world economy. Banks have realized immense efficiency and effectiveness in disbursement of funds either to other banks or to individual client's accounts using ICT. Unfortunately, traditional e-payment systems such as Money Gram and Western Union are noted to have many limitations which inhibit consumers from adopting them. Some of these factors relate to lack of trust, security, usability, high transaction costs, lack of perceived advantage and potentially high perceived risk (Ozkan *et al.*, 2010).

Even though the National, regional or international set of laws, rules and other regulations are important requirements for the successful implementation of E-payment schemes, Some of the major elements include rules on money laundering, supervision of commercial banks and E- payment institutions by supervisory authorities, payment system oversight by central banks, consumer and data protection, cooperation and competition issues has categorized as a huge bottlenecks for the successful implementation of the payment method. As a result, some customers get frustrated with these incidences which result in distrust of the payment method hence low public acceptability and low level of awareness creation to the public in the study area in particular (Gardachew, 2010). Thus, this study focuses on the determinants of customer's e-payment utilization in Ethiopia the case of commercial bank of Ethiopia Nekemte town.

The main objective of the study was to investigate the determinants of customers E-payment utilization in the Commercial Bank of Ethiopia Nekemte town. Specifically the study was aimed to analyze the determinants of

Customers E-payment Utilization to examine the demographic factors; the institutional factors; and the Customer related factors that influence Customers E- Payment Utilization in the study area.

To identify the major determinants of customers E-payment utilization in the Commercial Bank of Ethiopia in the town with the above objectives, this research paper answers the following general questions, which are useful in identifying the determinants of customer's E payment utilization in the town:

- What are the demographic related factors that influence E- Payment Utilization of Customers in the study area?
- What are the institutional related factors that influence E- Payment Utilization of Customers in the study area?
- What are the Customer related factors that influence their E- Payment Utilization in the study area?
- After the detail analysis of the determining factors that affect E-Payment Utilization of the customers' of the Commercial Bank of Ethiopia in the study area, this study contributes to a better understanding with regard to the usage of E-Payment models and electronic payment systems in the Bank. As a result, this leads to generate mutual benefits for both the Bank as well as Its Customers with particular emphasis in the study area through which smooth, Secured and easy way of transactions to be happened at all.

## **2. LITERATURE REVIEW**

E-Payment is a form of banking service where funds are transferred through an exchange of electronic signal between financial institutions, rather than exchange of cash, checks, or other negotiable instruments (Kamrul, 2009). E-banking, also known as Electronic Funds Transfer is simply the use of electronic means to transfer funds directly from one account to another rather than by check or cash (Malak, 2007). The term of E-payment often refers to online banking/Internet banking which is the use of the Internet as a remote delivery channel for banking services (Furst and Nolle, 2002).

The appearance of E-Payment in Ethiopia goes back to the late 2001, when the largest state owned, commercial bank of Ethiopia (CBE) introduced ATM to deliver service to the local users. In addition to eight ATM Located in Addis Ababa, CBE has had Visa membership since November 14, 2005. But, due to lack of appropriate infrastructure it failed to reap the fruit of its membership. Despite being the pioneer in introducing ATM based payment system and acquired visa membership, CBE Lagged behind Dashen bank, which worked aggressively to maintain its lead in E-payment system. As CBE continues to move at a snail's pace in its turnkey solution for Card Based Payment system, Dashen Bank remains so far the sole player in the field of E-Banking since 2006 (Gardachew, 2010).

Banking in Ethiopia faces numerous challenges to fully adopt and utilize E-Banking applications and seize the opportunities presented by ICT applications in general. A study conducted on the opportunities and challenges of E-banking in Ethiopia and found that lack of suitable legal and regulatory frame works for E-commerce and E-payments, political instability in neighboring countries, high rates of illiteracy and absence of financial networks that links different banks are the major challenges. The research output showed Opportunities offered by ICT through e-learning programs and Commitment of the governments on development of ICT infrastructures is considered as drivers of using Ecommerce and E-payment systems (Gardachew, 2010).

Similar study found that the main obstacles to the development of E-payments are lack of customers trust in the initiatives, lack of payment laws and controlling system for E-payment, lack of skilled manpower and frequent power disruption, low level of internet penetration and poorly developed telecommunication infrastructure (Wondwossen and Tsegai, 2005).

### **3. EMPIRICAL REVIEW**

An empirical study related to E-Payment utilization has assessed several studies that there are several factors influencing the customers E-Payment utilization activities in the outside banking industry as follows. [Hamidinava and Madhoushi \(2010\)](#) studied to evaluate the Electronic Payment System in the view of Iranian bank users the specifications are classified into four sub-structures such as technical, legal, security and socio-economic and it was revealed that socio-economic index has major influence on adoption of E-payment services in Iran.

In another perspective, [Peter and Babatunde \(2012\)](#) viewed e-payment system as any form of fund transfer via the internet. Similarly, according to the study on the electronic payment system refers to an electronic means of making payments for goods and services procured online or in supermarkets and shopping malls. Another definition suggests that E-payment systems are payments made in electronic commerce environment in the form of money exchange through electronic means ([Adeoti and Osotimehin, 2012](#)). Likewise, his finding indicates that there is no significant relationship between perceived ease of use and adoption of Mobile banking technology. Another study shows that the perceived financial cost and perceived credibility are two crucial factors influencing people intention to adopt mobile banking and he also found that the intention to use mobile banking was influenced by the extent of security and privacy associated concern within the context of mobile banking ([Chian-Son, 2012](#)).

Some related studies are conducted by different researchers in different parts of the world. However, there are limited numbers of studies conducted in Ethiopia on the adoption of technological innovation and in fact mobile banking is in an infant stage for Ethiopian bank customers, but the need for research is essential in this stage, because previous studies which are done in mobile banking and factor affecting the adoption of E-payment usage have result different finding. In such away, study conducted on the opportunities and challenges of E-banking in Ethiopia. The aim of his study was focused on analyzing the status of electronic banking in Ethiopia and investigates the main challenges and opportunities of implementing E-banking system ([Gardachew, 2010](#)).

Also similar study carried out by [Wondwossen and Tsegai \(2005\)](#) on the challenges and opportunities of E-payments in Ethiopia; their objective was studying of E-payment practices in developing countries, Africa and Ethiopia. The authors employs interview and on site observation to investigate challenges to E-payment in Ethiopia and found that, the main obstacles to the development of E-payments are, lack of customers trust in the initiatives, Unavailability of payment laws and regulations particularly for E-payment, Lack of skilled manpower and Frequent power disruption.

### **4. CONCEPTUAL FRAME WORK**

As it has been reviewed from previous empirical studies in the above sections, factors that determines E-payment utilization in the study area were divided into demographic related factors, Institutional related factors and Customers' related factors that hinder their E-payment adoption behavior. Thus, this study has constructed the following conceptual framework based on the reviewed empirical findings as follows.

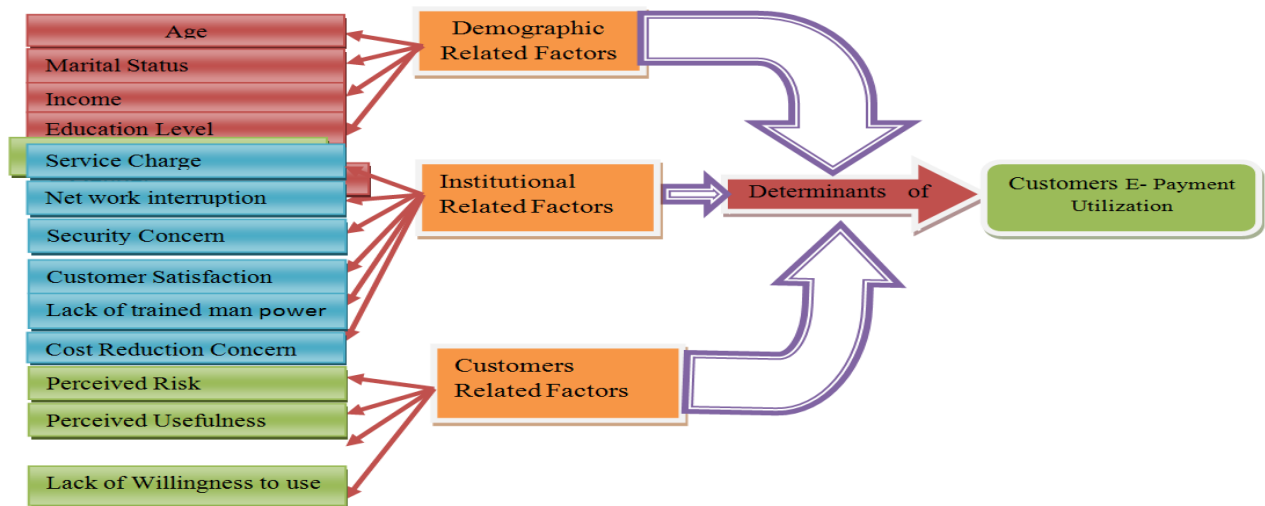


Figure-4.1. Conceptual frame work.

Source: Adopted and Modified from Gardachew (2010) and Nasri (2011).

## 5. METHODOLOGY

The Target population of the study composed of E-Payment using customers of the Bank which include eight operating branch customers using E-payment service i.e. Mobile banking, Internet banking, ATM and POS users of Nekemte, KumsaMoroda, Leka, Harosorga, Kesso, Komto, Bake Jama and BiftuNekemte branches comprising 47,618 customers as the total population for the study.

By focusing on the users of E- payment service, the study was employed explanatory survey and Convenience sampling technique. According to Mugenda and Mugenda (2003) this survey research design is a systematic gathering of information from a sample of respondents for the purpose of understanding and predicting some aspects of the behavior of the population of interest. This allowed for the collection of quantitative data which can be analyzed quantitatively through descriptive and inferential statistics. In order to gather relevant data the study was employed both the primary and secondary data sources for the credibility of the study.

In sample size determination, the study includes all customers using E- payment services and the sample size was determined by using (Watson, 2001) standardized statistical formula. It is selected because of that the formula used to calculates the number of sample size required from the strata's having large number of populations to the minimum represented sample size. Using the formula the required sample size computed is 258.

The gathered data from the respondents through structured questionnaire were analyzed by using explanatory descriptive statistics such as mean, standard deviation, standard error of the mean and employs Ordinal Logistic Regression model by using STATA software Version 12 to analyze the collected data that was presented in the form of table, bar graphs, pie charts and the presented data was also be interpreted to provide detailed conclusions and recommendations regarding to the effect of independent variables on the dependent variables that determines E-Payment Utilization in the study area.

The study variables composed of both dependent and independent variables through which the independent variables counter acts on the dependent variables. The dependent variables of the study were deals with the Determinants of Customers E-payment Utilization a case of Commercial Bank of Ethiopia in Nekemte town.

Based on the existing literature on the determinants of customers E-Payment Utilization (EPU) in the study area, the following explanatory variables was considered and it was analyzed by using Ordinal Logistic Regression Model. As a result, the variables that mainly affect repayment of customers' E-payment Utilization in the

Commercial Bank of Ethiopia Nekemte town are determined quantitatively in the model implicitly specified as follows:

**Table-5.1.** Summary for the descriptions of study variables.

Variables	Descriptions	Value of labels
Dependent variable	E-Payment Utilization (EPU)	0 = If, Rarely Users 1 = If Mid Users, 2= If Frequent Users
Independent variables		
Variable name	Demographic Related factors	
Gender	Gender of the respondents.	0 = Female, 1= Male
Age	Age of the respondents.	0 = If <25, 1= If 26-35, 2 = If 36-45, 3 = If > 46 years old.
Marital status	Marital status of respondents.	0 = Single, 1= Married,2 = Divorced, 3 =Widowed
Education level	The respondent's education level	0 = Primary School 1 =Secondary School,2 =Preparatory School 3 =TVET School, 4 = Degree and above.
Income level	The respondent's income level.	0 = If <1500,1= If 1501-3500, 2 = If 3501-5500, 3 = If 5501-8500, 4 = If >8500 in ETB.
	Institutional Related Factors	
Net work interruption	Net work interruption of Branches in the town	0 = If Strongly Disagree,1= If Disagree, 2 = If Neutral, 3 = If Agree, 4 = If Strongly Agree.
Service charge	Service Charge that collected by the Bank	0 = If Strongly Disagree,1= If Disagree, 2 = If Neutral, 3 = If Agree, 4 = If Strongly Agree.
Security concern	Security Concern in the Branch	0 = If Strongly Disagree,1= If Disagree, 2 = If Neutral, 3 = If Agree, 4 = If Strongly Agree.
Customer satisfaction	Customer Satisfaction from the Branch	0 = If Strongly Disagree,1= If Disagree, 2 = If Neutral, 3 = If Agree, 4 = If Strongly Agree.
Lack of trained man power	Lack of trained man power in The Branch	0 = If Strongly Disagree,1= If Disagree, 2 = If Neutral, 3 = If Agree, 4 = If Strongly Agree.
Cost reduction concern	Cost Reduction Concern from customers of the Branch	0 = If Strongly Disagree,1= If Disagree, 2 = If Neutral, 3 = If Agree, 4 = If Strongly Agree.
	Customers' Related Factors	
Perceived risk	Customers Perception towards Risk	0 = If Strongly Disagree,1= If Disagree, 2 = If Neutral, 3 = If Agree, 4 = If Strongly Agree.
Perceived usefulness	Customers Perception towardsits Usefulness	0 = If Strongly Disagree,1= If Disagree, 2 = If Neutral, 3 = If Agree, 4 = If Strongly Agree.
Perceived ease of use	Customers Perception towardsits Ease of Use	0 = If Strongly Disagree,1= If Disagree, 2 = If Neutral, 3 = If Agree, 4 = If Strongly Agree.
Lack of willingness to use	Customers Lack of Willingness to Use E-Payment Service in the study area.	0 = If Strongly Disagree,1= If Disagree, 2 = If Neutral, 3 = If Agree, 4 = If Strongly Agree.

Source: Primary data 2019.

### *5.1. Econometric Model Specification*

The researcher were employed Ordered Logistic Regression Model that is often used to approximate the mathematical relationships between the explanatory variables having more than two ordered dichotomous values of the dependent variable which is the extension of binomial logistic regression model. Thus, using the following regression model equation through which the customers E-Payment Utilization was used as dependent variable that is valued as 0 = If Rarely Users (Once Monthly and Above) 1 = If Mid Users (Once a Week) and 2= If Frequent Users (Daily).

As a result, this model is selected due to the nature of that response the dependent variable (E-Payment Utilization) is bearing multiple ordered or ranked responses (Turban, 2008). Thus in this study, the factors determining customers E-Payment Utilization include; Demographic, Institutional and Customers Related Factors was used as independent Variables in the study area. As a result, in order to analyze the determinants of E-Payment utilization in the study area, this study employs Ordered Logistic Regression Model analysis using the regression model equation stated as follows:

$$Y_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \dots + \beta_n X_n + \epsilon_i$$

Where:  $Y_i$  = the dependent Variable (E-Payment Utilization).

$\beta_0$  = Constant.

$\beta_1 \dots \beta_n$  = Coefficient of the independent variables.

$X_1 \dots X_n$  = Independent variables included in the study area.

$\epsilon_i$  refers to an Error terms involved in the study variables (Verbeek, 2008).

### *5.2. The Model Specification Tests*

In order to check the model the Goodness-of-Fit Test, Correlation Covariance Test, Multicollinearity test, and The Link Test in the model were used.

### *5.3. Goodness-of-Fit Test*

The measure of goodness-of-fit test used in the ordered logit regression model was the pseudo  $R^2$ , Chi-square and p- value of the model output. In such away, pseudo  $R^2$  is a measure that at least lies in the Adeoti and Osotimehin (2012) interval (Windmeijer, 1995). Usually the value found in range 0.1 up to 1 is normal in ordered logit regression model (Pindyck and Rubinfeld, 1998).

### *5.4. Correlation Covariance Test*

This test used to detect the existence of correlation covariance among the variables included in the model which has to be less than 0.5 across the horizontal and vertical lines comparatively which indicates that the relationship between the dependent and independent variables either moves to the similar direction or to different direction (Verbeek, 2008).

### *5.5. Multicollinearity Test*

In our case before running the ordered logit regression model, explanatory variables were checked for Multicollinearity (Verbeek, 2008). Since, Multicollinearity is a problem when the explanatory variables in multinomial logit model are highly correlated and provide redundancy information about the response.



5.6. The Link Test in the Model

The link test used to evaluate the relationship among the dependent and independent variables in the model by analyzing Prob> F, P>t, hatsq and etc in order to test the significance and fit the model.

6. RESULTS AND DISCUSSIONS

6.1. Demographic Characteristics of the Sampled Respondents

Based on summary statistics of respondent’s demographic characteristics were presented with particular reference to gender, age, marital status, education level and Income Level were discussed in the table consecutively as follows.

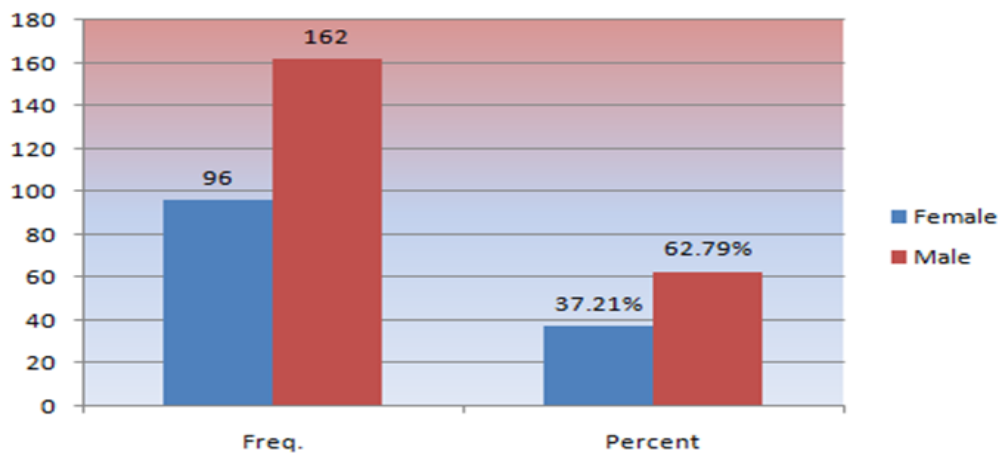


Figure-6.1.1. Gender of the respondents.

Source: Primary data 2019.

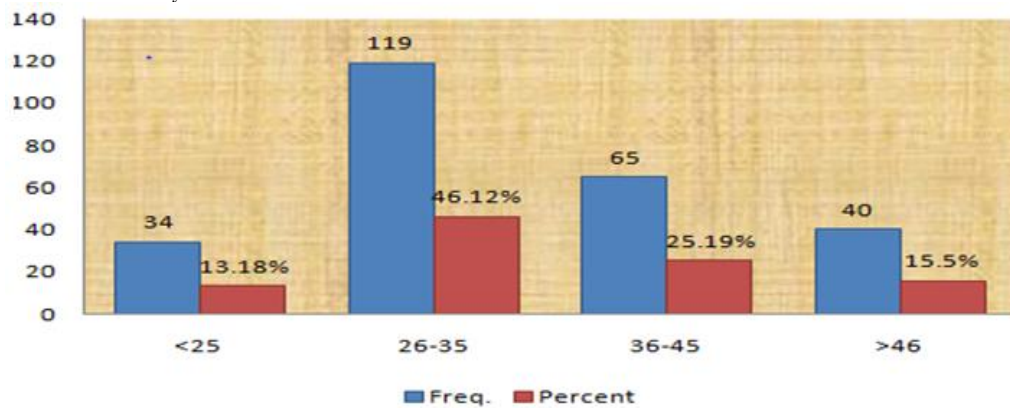


Figure-6.1.2. Age of the respondents.

Source: Primary data 2019.

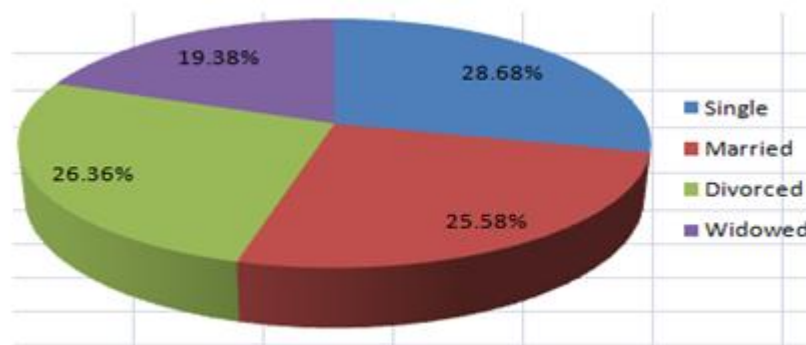


Figure 6.1.3. Marital statuses of the respondents.

Source: Primary data 2019.



Table-6.1.1. Education levels of the respondents.

Respondents Education Level	Frequency	Percentage
Primary School	98	37.98
Secondary School	44	17.05
Preparatory School	38	14.73
TVET School	36	13.95
Degree and Above	42	16.28
Total	258	100.00

Source: Primary data 2019.

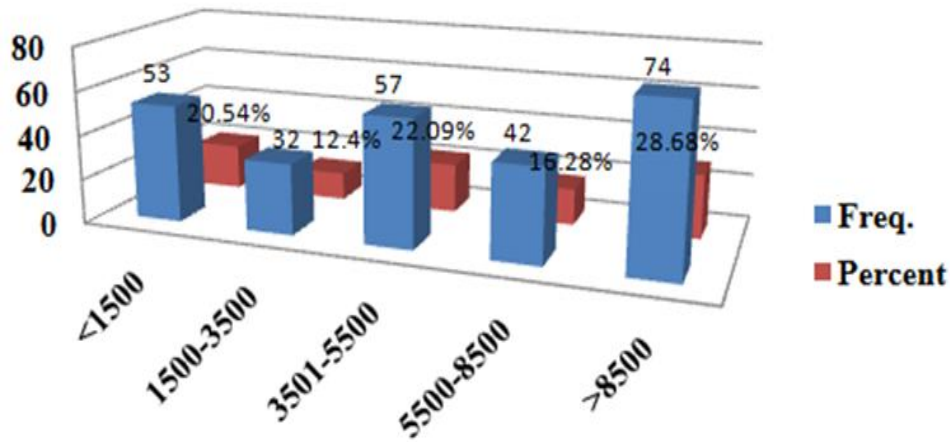


Figure-6.1.4. Income levels of the respondents.

Source: Primary data 2019.

### Percentage share of respondents E-payment utilities

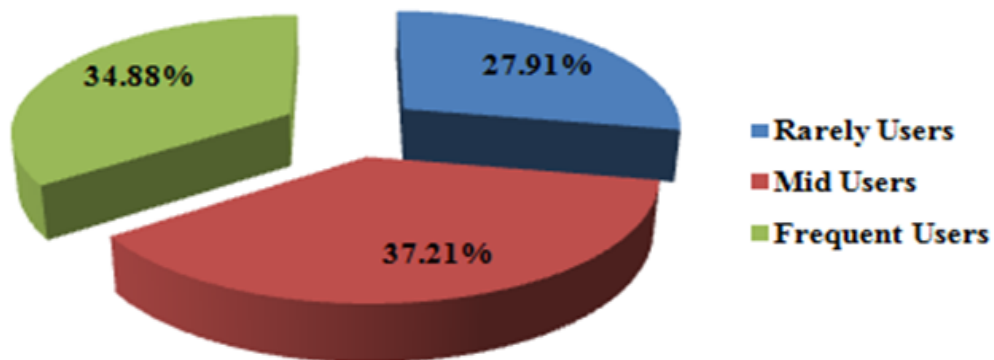


Figure-6.1.5. respondents of E-payment utilization activity.

Source: Primary data 2019.

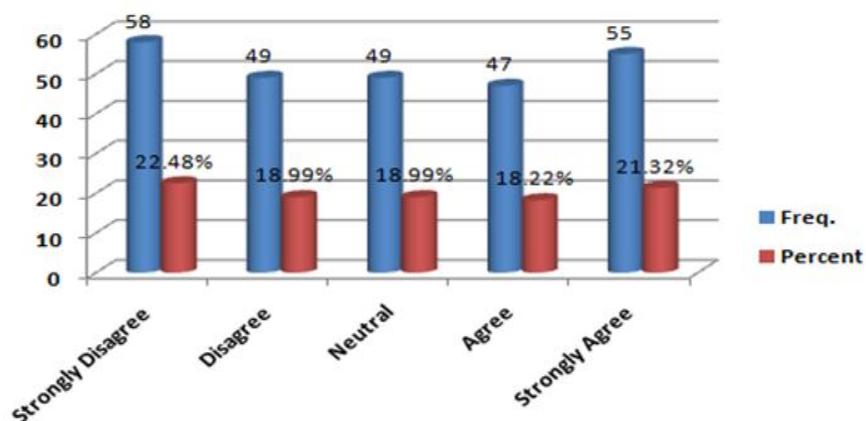


Figure-6.1.6. Respondents point of view on the lack of trained man power.

Source: Primary data 2019.

Table-6.1.2. Respondents point of view on the cost reduction concern.

Customer's Opinion on Cost Reduction Concern	Frequency	Percentage
Strongly Disagree	34	13.18
Disagree	40	15.5
Neutral	71	27.52
Agree	44	17.05
Strongly Agree	69	26.74
Total	258	100

Source: Primary data 2019.

## 6.2. Ordinal Logistic Regression Model

### 6.2.1. The Summary Statistics of the Variables in the Model

The summary statistics in this study composed of both dependent and independent variables in the model were presented by using the mean, standard deviation, minimum and the maximum values across all individual observations.

Table-6.2.1.1. Multicollinearity test.

Independent variables	VIF	1/VIF =TOL
Gender	1.11	0.899950
Age	1.06	0.942615
Marital status	1.11	0.896918
Education level	1.14	0.880067
Income level	1.33	0.751210
Network interruption	1.09	0.921474
Service charge	1.06	0.940226
Security concern	1.17	0.855918
Customer satisfaction	1.11	0.899858
Cost reduction concern	1.37	0.727770
Lack of trained man power	1.10	0.911685
Perceived risk	1.44	0.692788
Perceived usefulness	1.12	0.896069
Perceived ease of use	1.39	0.719798
Lack of willingness to use	1.09	0.917813
Mean VIF	1.18	

Source: Primary data 2019.

The two popular methods which used to detect the presence of Multicollinearity are Variance Inflation Factor (VIF) and Tolerance (TOL) that calculated as follows;  $VIF_i = \frac{1}{1-R_i^2}$ ,  $TOL = 1-R_i^2$  Where,  $R^2$  is calculated by regressing the variables, a common rule of Verbeek indicates that if VIF is 10 or greater than 10 and a TOL is equal to 0.10 or less it may indicate the presence of multicollinearity problem in the model otherwise free from the problem.

Table-6.2.1.2. The link test.

Source	SS	Df	MS	Number of obs. = 258	F( 2, 255) = 58.14
Model	50.343379	2	25.17168	Prob> F = 0.0000	
Residual	110.400807	255	.432944	R-squared = 0.3132	Adj R-squared = 0.3078
Total	160.744186	257	.625463	Root MSE = .65799	
E-Payment Utilization	Coef.	Std. err.	T	P>t	[.95% Conf. Interval]
_hat	1.663848	.360098	4.62	0.000	.9547029 2.372993
_hatsq	-.3154336	.1651425	-1.91	0.057	-.6406505 .0097833
_cons	-.2895605	.1866016	-1.55	0.122	-.657037 .0779159

Source: Primary data 2019.

Table-6.2.1.3. Ordered logistic regression model result.

Number of obs. = 258  
 LR chi2(15) = 90.13  
 Prob> chi2 = 0.0000  
 Pseudo R2 = 0.1600

Determinants of E- Payment utilization	Coef.	Std. err.	Z	P>z	[95% Conf.	Interval]
Demographic related factors						
Gender <sup>a</sup>	.1597202	.2669943	0.60	0.550	-.3635789	.6830194
Age	-.0805444	.1406558	-0.57	0.567	-.3562247	.1951358
Marital status	-.1000148	.1209703	-0.83	0.408	-.3371122	.1370826
Education level	.4764606	.0924689	5.15	0.000*	.2952248	.6576964
Income level	.1727034	.1000862	1.73	0.084***	-.0234619	.3688687
Institutional related factors						
Network interruption	-.2984402	.1045683	-2.85	0.004*	-.5033903	-.0934901
Service charge	-.1975248	.0878538	-2.25	0.025**	-.3697115	-.0253346
Security concern	-.0903426	.0889359	-1.02	0.310	-.2646538	.0839685
Customer satisfaction	.2039763	.0909627	2.24	0.025**	.0256927	.3822599
Cost reduction concern	.2787934	.1098182	2.54	0.011**	.0635536	.4940332
Lack of trained man power	.147882	.0905407	1.63	0.102	-.0295745	.3253386
Customers related factors						
Perceived risk	-.3268089	.1002629	-3.26	0.001*	-.5233206	-.1302972
Perceived usefulness	-.0217966	.0909838	-0.24	0.811	-.2001215	.1565284
Perceived ease of use	-.0722453	.1059017	-0.68	0.495	-.2798089	.1353182
Lack of willingness to use	-.2167154	.0942054	-2.30	0.021**	-.4013546	-.0320762
/cut1 -1.163721		.5922108	-2.324433		-.0030089	
/cut2 .9117329		.588051	-2.2408259		2.064292	

Source: Primary data 2019.

As detailed in the 6.5 above, at the top of the output we see that 258 the number of observations in this data set were used for analysis. The likelihood ratio Chi-square (15) of 90.13 with p- value of 0.0000 and Pseudo R2 of 0.1600 tells us that this model composed of more suitable and significant.

As a result, from the result of Ordered Logistic Regression Model analysis on the determinants of E-payment utilization in the study area using the following regression model equation the signs and significant variables (Coefficients of β's) were obtained that is stated as follows;

$$Y_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \dots + \beta_n X_n + \epsilon_i$$

$$EPU = \beta_0 + \text{Education Level} + \text{Income Level} - \text{Network Interruption} - \text{Service Charge} + \text{Customer Satisfaction} + \text{Cost Reduction Concern} - \text{Perceived Risk} - \text{Lack of Willingness to Use} + \epsilon_i.$$

Where  $Y_i$  = the dependent Variable (E-Payment Utilization) or EPU.

$\beta_0$  = Constant.

$\beta_1 \dots \beta_n$  = Coefficient of the independent variables.

$X_1 \dots X_n$  = Independent variables included in the study area.

$\epsilon_i$  refers to an Error terms involved in the study variables (Verbeek, 2008).

### 6.3. Interpretations and Discussions of the Model Result Based on Respondents

#### 6.3.1. Interpretations of the Coefficients in the Model

In the model output the effect of those variables on the Customer's E-Payment Utilization activities tends to categorize either in Rarely Users or in Frequent Users whereas the Middle Users were considered as the Base Line for both responses in the ordered logistic regression model.

#### *6.4. The Effect of Demographic Related Factors that Influence the Customer's E-Payment Utilization Activities*

With the higher years of E-payment using customer's education level, the more likely to be in the higher category (Frequently Users) of the Customer's E-Payment Utilization Activities which means that the more qualified E-payment using customer's, the more likely they develops or experienced the E-Payment Utilization Activities in the study area and statistically significant at 1% level of significance

#### *6.5. The Effect of Institutional Related Factors that Influence the Customer's E-Payment Utilization Activities*

With the higher the network interruption occurred in the study area, the more likely to be in the lower category (Rarely Users) which means that with the higher network interruption that the branch encountered in its operation, the more likely customers discouraged to the E-Payment Utilization Activities in the study area and statistically significant at 1% level of significance. With the higher satisfaction obtained from the branch's operation by E-payment using customer's, the more likely to be in the higher category (Frequently Users) of the Customer's E-Payment Utilization Activities which means that as the higher satisfaction obtained by E-payment using customer's, the more likely they encouraged to the E-Payment Utilization Activities in the study area and statistically significant at 5% level of significance. With the higher cost reduction of E-payment using customer's, the more likely they tends to be in the higher category (Frequently Users) of the Customer's E-Payment Utilization Activities which means that as the E-payment using customer's cost is reduced highly, the more likely they encouraged to the E-Payment Utilization Activities in the study area and statistically significant at 5% level of significance.

#### *6.6. The Effect of Customers Related Factors that Influence their E-Payment Utilization Activities*

With the higher E-Payment Using customers Perceived Risk in the study area, the more likely they tends to be in the lower category (Rarely Users) which means that with the higher customers perception of risk on the E-Payment Utilization Activities, the more likely they discouraged and statistically significant at 1% level of significance.

With the higher E-Payment Using customers Lack of Willingness to Use in the study area, the more likely they tends to be in the lower category (Rarely Users) which means that with the Lack of Willingness to Use E-Payment service, the more likely they discouraged and statistically significant at 5% level of significance.

## **7. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

### *7.1. Summary of the Major Findings*

As a result, the collected data were analyzed by using the descriptive analysis made by using statistical tools such as, tables, percentage, mean and frequency distribution. Whereas the econometric analysis were employed ordered logit model in order to examine the Customers' E-payment Utilization activities in the Commercial Bank of Ethiopia Nekemte town to identify the factors that determine (demographic, institutional and customers related factors) them to use E-payment Service Either Rarely (Once a Month and Above), Mid (Once a Week) or Frequently (Daily) With respect to some explanatory variables included in the study. Thus, the finding point out that, among the demographic related factors, customer's education and income level has positively influence their E-payment Utilization activities in the study area. Whereas among the institutional related factors, the network interruption and service charge levied by the bank has a negative influence and customer satisfaction and cost reduction concern has a positive influence on their E-payment Utilization activities in the study area. Lastly,

among the customer related factors: both perceived risk and lack of willingness to use the service has a negative influence on their E-payment Utilization activities in the study area.

## **8. CONCLUSIONS AND RECOMMENDATIONS**

This study were conducted on the Determinants of Customers E-payment Utilization activities in the Commercial Bank of Ethiopia Nekemte town by employing both the descriptive and ordered logit model in order to identify the factors that determine of Customer's E-payment Utilization activities by categorizing them as the Demographic, institutional and the Customers related factors.

Thus, the authors were identified that Determinants of Customers E-payment Utilization activities were influenced positively by the Demographic related factor like; their Education and income level where as the institutional related factor were negatively influenced the Customers E-payment Utilization activities by the Network interruption and Service charge levied by the institution in the study area. On the other hand, the customer Satisfaction rendered by the institutional and cost reduction concern to its customers was positively influenced their E-payment Utilization activities in the town.

Based on the analyzed data and econometric output, the author were recommended that customer satisfaction and the cost reduction concern while using E-payment service are the most and best driving force that encourages Customers E-payment Utilization activities and enables them to use the service frequently in addition to their education and income level. Thus, the institution has to seriously focus on its improvement throughout its operation in the study area.

Furthermore, the problem of Network interruption and Service charge levied by the institution leads to discourage Customers E-payment Utilization activities or enables them to use the service rarely. So that the institution or the branches has to deal with the concerned body in order to facilitate the smooth functioning of Customers E-payment Utilization activities in the study area.

Similarly, customer's perception towards the risk of using E-payment and their lack of willingness to use was enables them to use the service rarely. So that the institution has to create a means through which it increases the customers trust either by giving orientation, advise or panel discussion with their E-payment using customers specially at service recruitment stage for the new customers in the study area.

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