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ABSTRACT

The objective of this study was to examine the direct effect of e-banking service quality dimensions on both customer satisfaction and customer loyalty of Commercial Bank of Ethiopia (CBE) in Bahir Dar. Quantitative research approach with explanatory research design was employed. Using convenience sampling technique, the data was gathered through already tested questionnaire from 380 E-banking service users of Commercial Banks of Ethiopia as respondents, in Bahir Dar Town. Seven service quality dimensions; efficiency, reliability, responsiveness, easiness, product portfolio, privacy and cost, derived from the SERVQUAL model with support of literature review were selected as forecasters of customer satisfaction and loyalty in E-banking. Structural Equation Model (SEM) and Confirmatory Factor Analysis (CFA) were used to analyze data. Research findings indicated significant impact of efficiency, responsiveness, easiness, privacy and Commission on Satisfaction and the significant impact of Satisfaction on loyalty.

Keywords: *E-banking Service quality Dimensions, Satisfaction, Loyalty*

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INTRODUCTION

The competition in banking sector augmented over the last few years and to stay competitive, banks are espousing novel tools and techniques to attain customer retention and satisfaction and E-Banking is one tool towards it. As (Karjaluoto, Mattila, & Pento, 2002) argued that banking has now liberated from time and geographical limitations.

Organizations in the move toward new quality concept and customer satisfaction need to assess their service quality. The new concept of quality lays the stress on understanding and study of customer expectations (Parasuraman, Zeithaml, and Berry, 1985: 41-50). It means that any improvement in service quality should be based on the feedback organizations receive from customers by giving constant attention to customer wishes, and in doing so, they will manage to improve overall organization performance (Parasuraman, Zeithaml, and Berry, 1990).

According to Parasuraman and Cronin Taylor, quality service is the introduction of customers' services which cause that customers feel satisfaction or dissatisfaction. On the other hand, service quality has a positive relationship with keeping the customers (Friman & Edvardsson, 2003).

In the face of rapid expansion of electronic payment systems throughout the world, the Ethiopian financial sector cannot remain an exception in expanding the use of the system (Garedachew, 2010). E-banking plays a crucial role in the banking industry by creating value for banks and customers. E-banking has enabled banking institutions to compete more effectively in the global environment by extending their and services beyond the restriction of time and space (Turban, 2008).

In Ethiopia, E-banking is one of the most recent channels of distribution used in the financial services organizations. This method was established in the mid-1990s, thereafter becoming more important (Allen L. & Rai A., 1996). It has been widely used in developed countries. However, in developing economies, the spread is much limited. As suggested by Classens, Glaessner, & Klingebiet (2002), developing countries in general have an advantage as they can learn from the experience of advanced economies. Today, almost all banks in Ethiopia are adopting electronic banking as a means of enhancing service quality of banking. It also increases customer satisfaction in banking services (Shittu, 2010).

Bank managers know that customers' satisfaction from service quality is the source of a competitive advantage and bank profitability (Amoah-Mensah & Aborampah, 2010). As a result, there is no doubt on the importance of customers' satisfaction and service quality is the ultimate target of service providers. However, customers' satisfaction is not sufficient today and companies should not be only pleased customers' satisfaction. They should be assured that satisfied customers are also loyal. Today, marketing art is that the customers of an organization are colleagues inside the organization and are supporters outside it. In the meantime, customers' commitment has found a special position (Luis et al, 2008). Therefore, companies attempt to establish long term relations with customers to create their loyalty and to improve profitability and Loyalty.

Commercial banks in Ethiopia have launched e-banking services as part of ensuring service excellence by reducing waiting time, errors, costs, and improve customer satisfaction. In order to encourage or discourage further e-banking expansion in Ethiopia, a better understanding of its impact on customer satisfaction is critical. However, despite the importance of e-banking in bringing customer satisfaction limited studies are available in Ethiopia both in terms of number and scope. Therefore, more studies are still required to understand the relevancy of e-banking in the country. Assefa (2013) conducted a study on the impact of e-banking on customer

satisfaction in two branches of private banks in Gondar City. The researcher used qualitative approach in analyzing this study and it was limited to customers of two privet banks only. Bultum (2014) also studied factors that affect adoption of e-banking in the Ethiopian banking industry. Still this study was entirely focused on factors that affect adoption of e-banking. Satisfaction of customers towards e-banking required to be investigated to understand the relevancy of e-banking in the country. Therefore, the present study bridged the gap of methodology by using quantitative approach which employs SEM model. Thus, the objective of this study is to examine the direct effect of e-banking service quality dimensions on both customer satisfaction and customer loyalty of Commercial Bank of Ethiopia (CBE) in Bahir Dar. It also examines the effect of customer satisfaction on loyalty

LITERATURE REVIEW

The Effect of E-Service Quality on Customer Satisfaction

According to Tse & Wilton (1988) customer satisfaction is the consumer's response to the evaluation of the perceived discrepancy between prior expectations and the actual performance of the product. The service quality variables identified by (Parasuraman et al., 1994) are reliability, responsiveness, competence, accessibility, courtesy, communication, credibility, security, understanding and tangibility. Service quality leads to overall customer satisfaction. It is one of the service factors contributing to customers' satisfaction judgments and can be considered in multi-level and multi-dimensional (Caruana & Malta, 2002).

Yang, Jun, & Peterson (2004) identified five online service quality dimensions (responsiveness, reliability, competence, access and security) and their relationships with the customer satisfaction. Wolfinbarger & Gilly (2002) observed that reliability and fulfillment are the strongest predictors for customer satisfaction. Lui & Arnett (2000) identified five critical dimensions of online service quality in relations to customer satisfaction in the website. Among these, the quality of information that is relevant, accurate, timely, customized and complete are given priority for the customer satisfaction in the online service. Johnston (1997) identified attentiveness, responsiveness care and friendliness as the main sources of satisfactions (satisfiers) in banking services, and integrity, reliability, availability and functionality as the main sources of dissatisfaction. Khalil & Pearson (2007) have found that trust significantly affects attitude towards internet banking acceptance. Joseph, McClure, & Joseph (1999) investigated the influence of internet on the delivery of banking services. They found six underlying dimensions of e-banking service quality as convenience and accuracy, feedback and complaint management, efficiency, queue management, accessibility and customization.

Zeithaml et al (2000) developed SERVQUAL for measuring e-service quality. They identified 11 dimensions: access, ease of navigation, efficiency, flexibility, reliability, personalization, security/privacy, responsiveness, assurance/trust, site aesthetics, and price knowledge.

Loiacono et al (2000) composed a 12-dimension scale named Web QUAL with the following dimensions: informational fit-to-task, tailored communication, trust, response time, ease of understanding, intuitive operation, visual appeal, innovativeness, emotional appeal, consistent image, on-line completeness, and relative advantage. Josef et al (1999) investigated the impact of such technologies as ATM, telephone and Internet on provision of banking services. At length, they detect six primary dimensions of e-banking service quality as follows: convenience, accuracy, feedback and complaint management, efficiency, queue management, accessibility, and customization. They found that 87 percent of the Internet banking

customers asked for online possibility of diverse financial transactions, including electronic and automatic payment of their accounts and bills, receiving online monthly account balance, and purchase of shares and insurance policy. Parmita Saha and Yanni Zhao (2005) examined the relationship of online services and customer satisfaction in Internet banking. They found a significant association between the online service quality dimensions fulfillment and efficiency and customer satisfaction with electronic service quality. Heidarzadeh and Adelpour (2008) documented the role and impact of certain dimensions of electronic service quality, general service quality and customer satisfaction on consumer online purchase decision making process in Iran. The results indicated that site aesthetics had no direct effect on customer behavior and only affected general quality of services. However, responsiveness and security / privacy were the dimensions which had a positive effect on service general quality and customer satisfaction, but no significant relationship was found between dimensions guarantee, reliability and personalization and service general quality and customer satisfaction in purchases over Internet.

The effect of Satisfaction on loyalty

Customer satisfaction is the critical concept in shaping loyalty (Anderson & Mittal, 2000; Eriksson & Vaghult, 2000; Oliver, 1997, 1999). It is commonly believed that satisfied customers are more likely to display loyalty behavior, i.e. repeat purchase and willingness to give positive word of mouth (Taylor, 1998; Bennett & Rundle -Thiele, 2004; Schultz, 2005). The importance of e-loyalty and e-satisfaction, and the close relationships among them have also been a critical issue in the study of online transaction (e.g., Park & Kim, 2003; Reichheld & Schefter, 2000; Yang & Peterson, 2004).

Satisfaction has been considered as one of the most important theoretical as well as practical issues for most marketers and customer researchers (Jamal, 2004). Oliver (1981, p. 29) firstly defined it in the consumption context as "the summary psychological state resulting when the emotion surrounding disconfirmed expectations is coupled with the customer's prior feelings about the consumption experience". In other words, we may say that satisfaction reflects a post-purchase evaluation of product quality given pre-purchase expectations (Kotler, 1991).

According to Glaveli Petridou, Liassides and Spathis (2006) responsiveness is an essential ingredient for bank to attract more customers and to have an enduring long success. In the studies related to e-Banking customer loyalty, there was an empirical irregularity among the researchers—Glaveliet. Al (2006) established the positive relationship of responsiveness with customer loyalty.

In previous studies, e-satisfaction has been determined to influence e-loyalty. Anderson & Srinivasan (2003) emphasized the impact of satisfaction on e-loyalty and noted that a satisfied customer is more likely to build a closer relationship with the online retailer.

The Model and Hypotheses

The presented model in this study was derived from the models proposed by Zeithaml et al (2000, 2002) and Parasuraman et al (1985, 1988, and 2005) as a combination of the two models. There are 9 constructs in this model, which includes 7 constructs of service quality dimensions: (Efficiency, responsiveness, Reliability, product portfolio, Easy to use, Privacy and Commission) as independent variables, customer satisfaction as intervening variable and Loyalty as the dependent variable. The model was summarized in Figure 1.

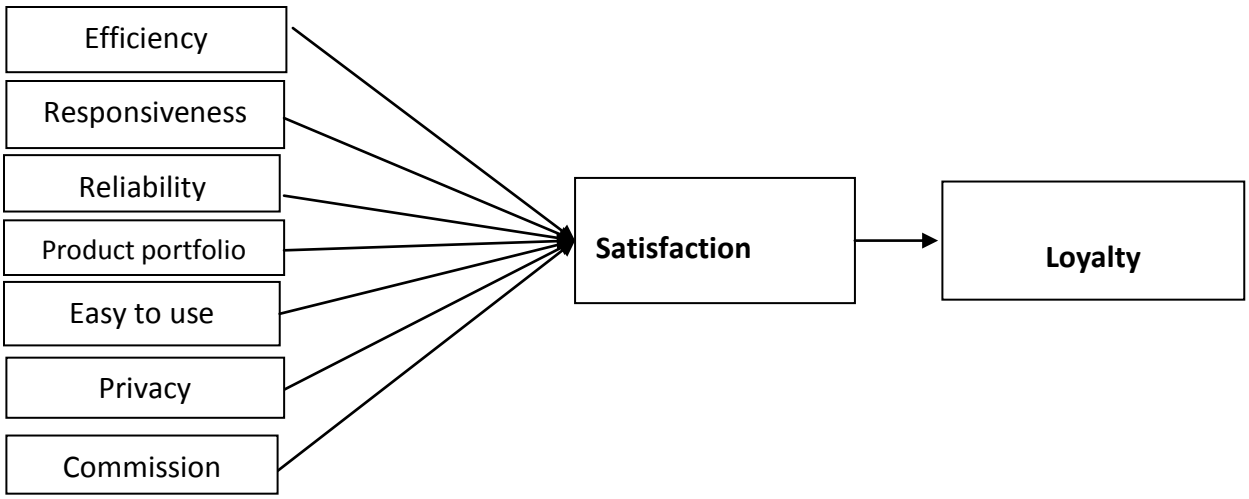

Figure 1: The conceptual frame work of the study

The study was guided by the following hypotheses:

H_1: Efficiency has a positive significant influence on customer satisfaction.

H_2: Responsiveness has a positive significant influence on customer satisfaction.

H_3: Reliability has a positive significant influence on customer satisfaction.

H_4: Product portfolio has a positive significant influence on customer satisfaction.

H_5: Easiness has a positive significant influence on customer satisfaction

H_6: Security has a positive significant influence on customer satisfaction

H_7: Cost Effectiveness has a positive significant influence on customer satisfaction

H8: Customer satisfaction has positive impact on customer loyalty.

METHODOLOGY

The population of the study consisted of all customers of different banks in Bahir Dar City, who were using any of the e-banking facility and therefore were considered as respondents. Since research population was indefinite, sample volume was computed as 380 by using this formula.

$$n = \frac{z^2 pqN}{E^2 (N-1) + z^2 pq}$$

$$= 1.96^2 * 2.5*54299 / 0.05^2 (54299-1) + 0.9604 = \mathbf{380}$$

To collect data, a self-administered questionnaire was developed based on the existing related literature. The survey instrument contained closed ended questions most of which was adapted from previous researches while fitting to the purpose was considered. In line with prior studies, the questionnaire comprised a combination of different resources in the relevant literature to be responded on a five-point Liker range scale (completely disagree, disagree, relatively agree, agree, completely agree), and they were distributed among respondents personally using convenience sampling technique.

In this study, generally there were 9 constructs in the model, which included 7 constructs of service quality dimensions: (Efficiency, responsiveness, Reliability, product portfolio, Easy to use, Privacy and Commission) as independent variables, customer satisfaction as intervening variable and loyalty as the dependent variable. For the seven independent variables constructs (e-service quality dimensions), a

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total of 34 items, (6 items for efficiency, 5 items for Responsiveness, 6 items for reliability and 5 items for easy to use. Product portfolio, privacy and commission each were measured by 4 items). These items were adapted from service quality dimensions used in e-bank-Qual of parasuraman, zeithaml & malhotra in (2005).

The intervening variable of the study, Satisfaction was measured by 3 items developed by Rod et al (2009) and 3 items for "Loyalty" developed by Boyl et al. (2011) and Aaker's (1991) was used.

RESULTS

Data Analysis and Test of Hypotheses

In data analysis, for assessment of the structural equations, confirmatory factor analysis (CFA) was employed. Finally, for test of research hypotheses, the structural equation modeling (SEM) was applied. These analyses were carried out by SPSS 23 and Amos 23.

To evaluate the validity of the measurement model, construct validity, consisting of convergent and discriminant validity was assessed through confirmatory factor analysis (CFA) using AMOS 23. The convergent validity was tested by investigating the factor loadings and the average variance extracted (AVE) measure which were deemed significant if they were 0.5 or higher (Hair et al., 2006).

The results indicated that the convergent validity and internal reliability were satisfactory. Based on the above-mentioned criteria, it was concluded that the convergent validity was completed. It meant that the items used to measure the construct do measure the construct.

Discriminant validity was assessed using the criteria established by Fornell and Larcker (1981). According to them, the AVE should be greater than the squared correlations between the two constructs. The constructs for all of the data were found to be empirically distinct and the discriminant validity was confirmed statistically.

Table1 are the value of AVE root square and the correlation of another construct. Based on the results, it was seen that the value of AVE root square **(bold printed)** was higher than the correlation between constructs.

A reliability test was to assess consistency in measurement items'Cronbach's alpha was used to measure the internal consistency of the measurement items .The value of cronbach's alpha should exceed 0.70 as suggested by Nunually (1978) and Hair et al (2009). Table 2 provided the Cronbach's alpha for scale items used in this study.

Table 1: Correlation between research variables and AVE

	1	2	3	4	5	6	7	8	9
Responsiveness	**(0.6)**								
Commission	.066	**(0.52)**							
Efficiency	.349	.089	**(0.70**)						
Privacy	-.043	-.004	.037	**(0.60)**					
Easy to use	-.052	-.064	-.011	.353	(**0.50)**				
Product portfolio	.074	.044	-.124	-.002	-.013	**(0.63)**			
Reliability	.594	.065	.335	.014	-.059	.091	**(0.62)**		
Satisfaction	-.214	-.264	.135	.462	.514	-.042	-.093	**(0.74)**	
Loyalty	-.235	-.211	.133	.456	.420	-.012	-.090	.845	**(0.62)**

Note: *Diagonal elements (values in parentheses) are the AVE square root. Off-diagonal elements are the correlations among constructs.*

Table 2: Construct Reliability

Name of Constructs	Cronbach's Alpha	No of items
Efficiency	.87	5
Responsiveness	.84	5
Reliability	.75	4
Product portfolio	.73	3
Easy to use	.77	5
Privacy	.80	4
Commission	.79	4
Satisfaction	.90	3
Loyalty	.73	3

The Measurement Model of the e-banking service quality Dimensions Factors

The model was evaluated using AMOS 23 (Analysis of Moment Structures) to test construct validity of the survey instrument against the sample data (Byrne, 2010; McInemey & Ali, 2006).

The initial model failed to fit the data, the fit indices indicated inadequate fit to the data, χ2/df = 10.452, p = .000; GFI = .792; AGFI=.643; RMSEA= .293. To remove poorly fitting items from the initial measurement model, we examined modification indices of the variables and identified the variable with the largest standardized residual and also observing low factor loading. Based on the examinations, we dropped two items from reliability **rel1** and **rel4**, one item from efficiency **ef1** and one item from product portfolio **pp3,** that exhibited relatively low factor loading & then re-ran the CFA on the subsequent model (Hofmann, 1996).

Table 3: Fit Indices of the Initial and Revised Model of the SERV QUAL Factors

The fit index	χ2	df	χ2/df	P-value	RMSEA	GFI	AGFF	CFI
Initial Model	2230.860	512	4.357	.0000	.132	.645	.587	.567
Revised model	1092.402	357	3.067	.0000	.070	.90	.86	.88

Table 4: Factor Loadings and Estimated Common Variance of the Variables

Construct	Items	Standardized Loading	Average variance extracted
		≥ 0.50	**≥ 0.50**
Efficiency	ef1	**.152**	**0.70**
	ef2	.870	
	ef3	.907	
	ef4	.783	
	ef5	.813	
	ef6	.771	
Responsiveness	res1	.549	**0.6**
	res2	.999	
	res3	.906	
	res4	.681	

	res5	.654	
Reliability	rel1	**.213**	**0.62**
	rel2	.80	
	rel3	.851	
	rel4	**.317**	
	rel5	.899	
	rel6	.60	
Product portfolio	pp1	.844	**0.63**
	pp2	.736	
	pp3	**.105**	
	pp4	.811	
Easy to use	eu1	.788	**0.50**
	eu2	.589	
	eu3	.681	
	eu4	.719	
	eu5	.423	
Privacy	pr1	.636	**0.60**
	pr2	.899	
	pr3	.863	
	pr4	.562	
Commission	co1	.665	**0.50**
	co2	.782	
	co3	.722	
	co4	.655	
Satisfaction	sa1	.812	**0.74**
	sat2	.913	
	sa3	.853	
Loyalty	lylty1	.820	**0.62**
	lylty2	.836	
	lylty3	.717	

The CFA results indicated that the measurement model of the initial e-banking service quality dimensions' factors failed to fit to the data. Based on the modification indices, the model was revised following the steps described in the previous section. The revised model consisted of 30 items, distributed as displays in table 4 above. The fit indices of the revised item revealed an acceptable fit, although $\chi 2=41092.402$ still significant, the RMSEA = 0.070<.08, and GFI= .90 and AGFI=.86. The overall conclusion from this step was that the revised model fits the data better than the initial model.

The Measurement Model of the Dependent Variable

The dependent variables (customer's satisfaction and liability) of the study consisted of 6 items, 3 items to measure each variable. The six items had good factor loading where each item loads more than 0.50 as illustrated in Table 4 above suggesting that the indicators are good measures of satisfaction and provide an evidence of convergent validity. The good-fitting model of customers' satisfaction and liability was illustrated in Table 5 below.

Table 5: Fit Indices Model of the Dependent Variable

The fit index	χ2	df	χ2/df	p-value	RMEA	GFI	AGFI
Initial Model	30.13	8	3.7	000	.003	0.915	.871

Structural Model Evaluation and Hypotheses Testing

The first step in model estimation was to examine the goodness-of-fit of the hypothesized model in Figure 1. In this study, the χ2/df was 1.32, which attested to the appropriate fitness of the model. An RMSEA equal to or lower than 0.05 is suitable for tested models, but scores above 0.05 and up to 0.08 propose an agreeable error of approximation in the model. Models with their RMSEA at 0.10 and higher are considered to have low fitness. GFI and AGFI show to what degree the model has better fitness when compared to the model's non-existence. The overall fit of the proposed model was quite satisfactory. Table 6 showed the common fit indices, recommended values and analytical results for total measurement model.

Table 6: Goodness Fitting Model for SEM

FIT Indices	Recommended criteria	Structural model
χ2/df	≤ 5.00 (Hair et al., 1998)	1.328
RMSEA (Root Mean Square Error of Approximation)	≤ 0.08 (Hair et al., 1998)	.041
GFI (Goodness of Fit Index)	≥0.90 (Hu and Bentler, 1999)	.990
AGFI (Goodness of Fit Index)	≥0.80 (Segars and Grover, 1993)	.934
NFI (Normed Fit Index)	≥ 0.90 (Hair et al., 1998)	.983
TLI (Tucker-Lewis Index)	≥ 0.90 (Hair et al., 1998)	.976
RMR (Root Mean Square Residual)	< 0.08	.047
CFI (Comparative Fit Index)	≥0.90 (Gefen et al., 2000)	.995

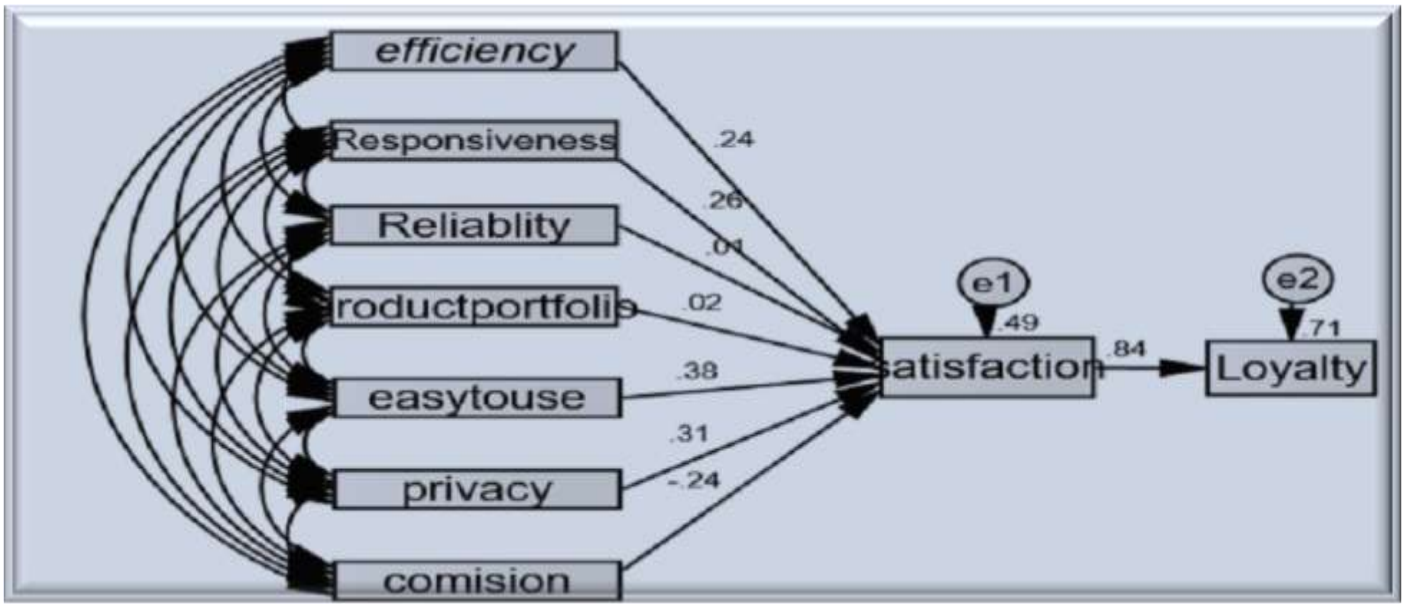

Figure 2: SEM Result

Hypotheses Testing

Figure 2 presented the SEM results of the path diagram and loadings specified in the AMOS 23 out put

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Table 7: Path Analysis by Structural Equation Modeling (SEM)

Hypothesis	β	C.R	p-value	Supported
Efficiency → Customers satisfaction	.24	4.16	***	**Yes**
Responsiveness → Customers satisfaction	.26	3.89	***	**Yes**
Reliability → Customers satisfaction	.01	. 175	.86	**No**
Product portfolio → Customers satisfaction	.02	. 42	.69	**No**
Easiness → Customers satisfaction	.38	6.86	***	**Yes**
Security → Customers satisfaction	.31	5.54	***	**Yes**
Cost/Commission → Customers satisfaction	-.24	-4.69	***	**Partial**
Customers satisfaction → Loyalty	.85	21.94	. ***	**Yes**

***** *P* < 0.001**

The total summary of the correlation coefficients between the selected seven e-service quality dimensions with customers' satisfaction and loyalty was depicted above in Table 7.

The result indicated that **efficiency** has a significant positive effect on customer satisfaction. The value of beta coefficient for this construct was (β = .24, t= 4.162, P<0.001), supporting **H_1.** This finding was consistent with the findings of Ma, Zhengwei (2012)

The second hypothesis revealed a positive and high significant relationship between responsiveness and customer satisfaction. The value of beta coefficient for this construct was **(β = .26, t= 3.894, P<0.001),** supporting **H_2.** The result was similar with the study of Kim and Kim (2010), Vijay M. KUMBHAR (2011), Hossein Vazifeh Doost, etl, (2014), Zafar, M. et al., 2012, Mu'azu, et al, 2013, Areeba Toor, etl, (2016). But it is inconsistent with the study of Khenget (2010), in their study discovered that, though there was positive relationship between responsiveness and customer satisfaction but it had insignificant effect on customer satisfaction.

The third hypothesis of the study was intended to test relation between reliability and customer satisfaction. A beta coefficient of the reliability variable **(β=0.01, p>0.05, t=0.175)** indicated an insignificant contribution to customer satisfaction. Which was inconsistent with the proposed hypothesis, so **H_3** was rejected.

This result was inconsistent with the study of (Areeba Toor, et al., 2016, Jun et al, 1999; Jannatul, 2009; Parsurman et al, 1988; Yang, Jun and Peterson, 2004, Lui &Amett, 2000), found that reliability provided a high degree of satisfaction on e-banking. However, it was similar with the study of Heidarzadeh and Adelpour (2008), Hossein Vazifeh Doost and Azadeh Ashrafi (2014).

The fourth hypothesis was the relationship between Product portfolio and customer's satisfaction is also positive but insignificant impact on customer satisfaction. According to this result **(β=0.021, p>0.05, t=.402) H_4** was not supported in which 'the product portfolio has a positive significant influence on customer satisfaction'.

The beta coefficient of Easiness of service quality dimension **(β = .38, t= 6.867, P<0.001),** showed positive impact on customer's satisfaction. Thus, the findings the study supported **H_5** (Easiness is significantly and positively related to customer's satisfaction). That is one percent improvement in easy to use the e-banking services, it is 99% possible that Satisfaction will increase 38%.

This implied that by improving easiness to use & functioning of ATM, mobile banking, internet banking, etc. will enhance customer satisfaction on

using e-banking of CBE. The result was consistent with the study of (Misic et al., 1999; Yoon, 2010, Asadollah kordnaeij et al., 2013).

The six hypotheses of the study, which suggested that the Security is significantly and positively related to customer's satisfaction, was supported at the **0.001** significance level **(β=0.307; t=5.541).** That is one percent improvement in security of e-banking technology, it was 99% possible that satisfaction will increase 30.7%.

The more secure the electronic systems become, the more likely the customer will be to use them. That means by creating and establishing trust, privacy, believability, truthfulness, and security, building customer confidence, freedom from danger about money losses, fraud, PIN, password theft; hacking etc. of e-banking, will fascinate the satisfaction of e-banking users.

The seventh hypothesis was intended to test relation between cost of e-banking and customer's satisfaction. The beta coefficient of cost of service quality dimension **(β = -.24, t= -4.693, P<0.001),** showed that the impact of commission on satisfaction is, negative and indirect; that is, decrease independent variable improves "Satisfaction" and vice versa. Thus, the findings of the study partially supported **H_7** (cost is significantly and positively related to customer's satisfaction).

The path coefficients of the customer satisfaction on customer loyalty was large and positive significant (**β 0.85, t= 21.94, P<0.001**), **Hence, H_8 was accepted**. This implyed that when the level of efficiency, easiness and privacy of e-banking services are rising, the customer's satisfaction increased too, which in turn enhance the loyalty of the customers to wards e-banking technology. If the customers of an organization are satisfied by their services the result is that, they will be loyal to them and consequently be retained by the organization, which is positive for the organization because it could also mean higher profits, higher market share, and increasing customer base (Karatepe et al., 2005). This agrees with the study of Seyed Fathollah (2015). This result was similar with the study of Luis et al, (2008) and Jiyoung et al. (2009)

DISCUSSION, CONCLUSIONS AND RECOMMENDATION

This study aimed to examine the effect of e-banking service quality dimensions (efficiency, reliability, responsiveness, product portfolio, easiness, cost and privacy) on customers' satisfaction and loyalty in CBE. The results of testing research hypotheses based on SEM were shown. As seen based on **t** statistic, except two hypotheses (H_3 and H_4) all hypotheses were supported at 99% confidence level. So, one can conclude that variables like Efficiency, Responsiveness, Easiness, Security and Cost in 99% confidence level on "Satisfaction". In the meantime, "Satisfaction on Loyalty in 99% confidence level.

As was noted above, the relationship of e-service quality dimensions with customer satisfaction was in part significant. So as the relationship of the dimension efficiency, responsiveness, easiness and privacy with customer satisfaction was relatively significant, whereas relationship of other dimensions, i.e. reliability, and product portfolio with customer satisfaction was not confirmed, while cost is partially accepted in which it has significant but negative relation with customer's satisfaction.

Further, the results showed that the impact of Satisfaction on loyalty is significant. On this basis, we concluded that by improving of efficiency, responsiveness, easiness and privacy, one can fascinate their satisfaction and improve customer's loyalty.

The results showed that the R^2 value of Satisfaction was **0.49,** indicating that **49%** of the variances in the

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construct of Satisfaction may be explained by "'Efficiency'', "Responsiveness", "Easiness", "Security" and "Commission" while the remained 51% was due to forecasting error and it included other influencing variables over Satisfaction.

The results also showed that the R^2 value of loyalty was **0.71**, indicating that **71%** of the variances in the construct of loyalty may be explained by that Satisfaction, while the remaining 29% was due to other factors that cannot included in the current study.

The major limitation of this study was small sample size taken for the study may not warrant appropriate conclusions to be drawn. The results of the quantitative analysis were only generalizable to the sampled bank branches. The empirical data collected did not provide the possibility to compare private commercial banks with government-owned commercial banks. Moreover, no comparison of e-banking service quality dimension was made between bank branches operating in urban areas with those operating in rural areas. Finally, the study did not provide much analysis on the qualitative dimension of e-service quality dimension.

Based on the findings, the following recommendations were made;

- The management needs to improve quality services so as to satisfy customer's needs and enhance the loyalty degree of the customers.
- The management of the bank should regularly run research activities in order to keep a regular track of customer satisfaction level since satisfied customer is the real asset for an organization that ensures long-term profitability even in the era of great competition.
- E-service providers should show appropriate care and interest for customers by timely responding to their requests and assisting them with useful information will enhance customer satisfaction with e-banking service quality, that in turn affect customer loyalty.
- Another point of concern among the customers was the issue of privacy and protection of their personal information, so as the more secure the electronic systems become, the more likely the customer will be to use them. And a successful experience with the e-banking services and transactions in a safe virtual environment will definitely enhance customer satisfaction with the provided services. So all the security measures and procedures should be considered for protection of customer personal and private information during any transactions and cash transfer. In this circumstances bank should improve their security for meeting customer's satisfaction.
- Since bank was a customer-oriented organization, hiring potential human resource was a must. And for this reason, the bank should hire self-motivated, enthusiastic employees who will like to deal with customer and will try to solve customer complaints and other issues in an effective manner. Only then the bank can render superior customer services and enjoy the benefit in the long run
- The price (fees/charges) is an essential aspect that affects the customers' satisfaction of e-banking service quality (Surjadjaja et al. 2003; Iqbal et al. 2003). The socio-economic environments in Ethiopia have made the people more prices sensitive. Banks should remember that customers always want more benefits with less cost. Thus, Price, fee, charges, - i.e. commission for fund transfer, and commissions should be reduced and charges taken by telecommunication company, devise designer company, internet service providers in order to enhance customer satisfaction.

- Electronic banking products such as ATMs, Mobile Banking, POS and Internet banking should be made as user-friendly and easy to use as possible as not many consumers are familiar with the Electronic Banking.

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