

Measuring Customer's Attitude Towards Internet Banking Adoption In Ethiopia

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Abstract: The main purpose of this paper was to measure customer's attitude towards internet banking adoption in Ethiopia using TAM and DTPB. It adopted descriptive and explanatory research design. The sample size of 400 customers of Ethiopian public and private banks was drawn from Bahir Dar city, Jinka town, and Injibara town. The study findings of correlation analysis showed that all constructs TAM and DTPB (Compatibility, Subjective norm, trust, perceived usefulness and perceived ease of use) were positively and significantly affect customer's attitude towards IB. The findings of the multiple regressions analysis showed that the observed changes in customers attitude attributed by the TAM and DTPB (Compatibility, Subjective norm, trust, perceived usefulness and perceived ease of use) is 52.1% (adjusted $r^2 = .521$). The findings revealed that all variables included in the models (Compatibility, Subjective norm, trust, perceived usefulness and perceived ease of use) were significant in affecting customers attitude towards IB. Results also revealed that the variable perceived usefulness plays the most important role, followed by compatibility and perceived ease of use in predicting customers attitude towards IB, while trust has lower predicting power than others.

Key words: Internet banking, customer's attitude, banking industry, TAM, and DTPB

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I. Introduction

Technology is affecting the life of every individual both qualitatively and quantitatively in the present environment. The quick expansion of information technology has imbibed into the lives of millions of people and introduced major changes in the worldwide economic and business atmosphere. In recent years the market has advanced new technologies within the banking industry. Banking services have been growing through information technology across the world. These technological advancements affected the banking sector, which has been led to develop new concepts such as e-finance, e-money, and e-banking to maximize return and to attract more customers (Priyangika, Perera, & Rajapakshe, 2016). Interconnectivity of personal computers across the country and intercontinental relationship through the internet has opened a wealth of opportunities in every day to day activities of life (Jasmine & Pavithra, 2018). Internet technology affects the transformations of banks to terminate old models of how banking services are developed and delivered. This application of the internet on banking services is known as internet banking. According to (Gautama & Khare, 2014) internet banking refers to the use of a bank's website through which customers access their banking accounts, conduct financial transactions, and obtain general information regarding banking products and services with an Internet connection at any time they wish. It is viewed as a supplemental channel used in combination with other channels to provide convenient banking services. By using Internet banking, banks attempt to change the mix of financial services provided and how they deliver these services (Srikanth & Rao, 2013).

Internet banking as a new delivery channel facilitated banking transactions for both customers and banks (Chikwendu, 2013). For customers, the internet banking allows consumers easier access to financial services, reduce costs associated with a branch visit like going to the branch and waiting on lines, eliminates physical and geographic boundaries and time limitations of banking services (Yang et al., 2007). From a bank's perspective, Internet banking has led banks and financial institutions to improve the effectiveness of distribution channels through reducing transaction costs and increasing the speed of service (Al-Smadi, 2012). Due to the advantages of both service providers and consumers during financial transactions, internet banking services have rapidly grown in the financial market as the best tool to provide services.

Banking industry is one of the industries where consumers play an important role (Sarker, Bose & Khan, 2012). Huge number of customers is involved in banking industry taking the banking services regularly. Customers are often very much demanding and decisive in their attitude regarding the type and quality of services offered by the banks; hence it is very difficult to maintain customer, and it is a challenging task for banks (Ijaz & Ali, 2013). To win the customers loyalty and ensuring their interest, banks are required to

maintain the long-term relationship with their customers through the development of new services and technologies that can handle their continuous demanding needs. According to (Jehan & Ansari, 2018) the advancements of information communication technology (ICT) helps improve customer satisfaction and influence customer attitudes towards Internet banking.

Customers may have various attitudes towards objects which are important for banking industries. Different people choose different banking services based on their attitudes and preferences (Priyangika, Perera, & Rajapakshe, 2016). A customer attitude toward a product or service is influenced by a match of the service user imagine with the customer self-concept (Alsamydia, Sanad, & Albairrooti, 2014). Customer's type of attitude towards internet banking services has a direct impact on the intention to use it and on the adoption of the technology. According to (Hernandez & Mazzon, 2007) attitude has a strong, direct and positive effect on consumers' intentions to actually use the new technology or system.

In Ethiopia, despite the history of modern banking accounts for nearly a hundred years of services, the sector is subjected to Governmental reforms and policy changes. Started from 1991 the government of Ethiopia privatizes the banking sector without allowing for foreign participation. Due to this, The Ethiopian banking sector remains isolated from the impact of globalization. (Kiyota, Peitsch, & Stern, 2017). This restriction has a negative impact on the development and transfer of technology in the sector. According to (Getinet, Srour, & Vivarelli,

2013), globalization can imply a substantial technological up-grading in developing countries through opening different channels. (Garedachew, 2010) ,also stipulates Ethiopian banking system is underdeveloped compared to the rest of the world, there is an immediate need to embark on capacity building arrangements and modernize the banking system by employing modern technologies.

According to (Worku, Tilahun, & Tafa, 2016), the practice of internet banking in Ethiopia is a recent phenomenon. Even though the expansion of e- banking throughout the developed and the developing world is rapid, Ethiopia's financial sector remains behind in expanding the use of the service (Garedachew, 2010). In the country banks mostly apply traditional banking systems rather than adopting electronic banking systems including internet banking. Cash and checks are still a dominant medium of exchange (Zelege, 2014). As a result, the country has not yet realized the full benefit of technological advances in internet banking system. Customers in Ethiopia are late adopters of the Internet and its applications with regards to internet banking system (Worku *et al.*, 2016). This might have influence on customers towards accepting the practice. According to (Min Kim, Widdows, Yilmazer, nd) although consumers have had an interest in advanced electronic banking services and tended to have various financial sources or tools for money transactions; they have not quickly changed their main propensity to use banking services or goods that they are already familiar with. Abdulselem (2019) also founded that in Ethiopia there is lack of customer awareness with E-banking services. This means that both marketers in banks and financial institutions, and consumer educators still need to make an effort to investigate customer's attitude towards the adoption of Internet banking. Measuring customer attitude has become a critical issue in the contemporary business world. In recent days consumer's attitude has become an important area for the commercial banks. Therefore a banking organization must prioritize the provision of high quality service through the technological adoption to change its customer's attitude. This will help to gain positive attitude from customers. It is critical for banks to be aware of customer attitude and systematically review determines of consumers' attitudes, in order to offer sufficient value on those criteria while meeting growing customer demands. They are playing a vital role in enhancing the quality of the banking services in to achieve positive customer's attitude.

Objectives of the study

General objective

The general objective of study isto measure the attitudes of the customers on the banking services provided by private commercial banks and public commercial banks and makes significant comparison.

Specific objectives

The specific objectives of the research are to

1. Describe the level of customer's attitude towards internet banking services.
2. Identify the relationship between attributes of internet banking services and customers attitude.
3. To determine the extent to which attributes of internet banking affect customer's attitude.

II. Review of related literature

In the area of research to investigate the individual on Information technology and Information systems, many models were suggested by the researchers. These include the Theory of Reasoned action (TRA), Theory of planned behavior (TPB), Technology Acceptance Model (TAM, and Unified Theory of Acceptance and Use of Technology (UTAUT).

Technology Acceptance Model (TAM): Technology acceptance model (TAM) has been developed by Davis (1989) is the most famous model to determine the acceptance and use of new information technology within organizations (Park, 2009). The goal of TAM is to provide an explanation of the determinants of technology acceptance and user behavior across a broad range of end-user computing technologies (Mwiya et al., 2017). Even though Technology acceptance model (TAM) was also criticized for not addressing external factors like the effect of social factors (subjective norm) and important variables for adopting information technology like customer awareness, perceived risk and perceived trust, many authors preferred it for studying factors determine technology adoption (Wondwossen & Sharma, 2019).

The model suggests that the perceived usefulness and perceived ease of use of a technology are the main factors that influence a potential user's decision on whether or not to use the technology.

The 'Ease of Use' (Perceived Ease of Use) refers to the degree in which the user thinks that the system used will be easy to use and free of effort. A complicated system to use will be perceived as less useful and probably will be abandoned by the user. Perceived usefulness explains the user's perception to the extent that the system will improve the user's day to day workplace performance (Surrendering, 2012). Furthermore, perceived ease of use has an impact on perceived usefulness which stems from the fact that the easier a system is to use, the more useful it can be.

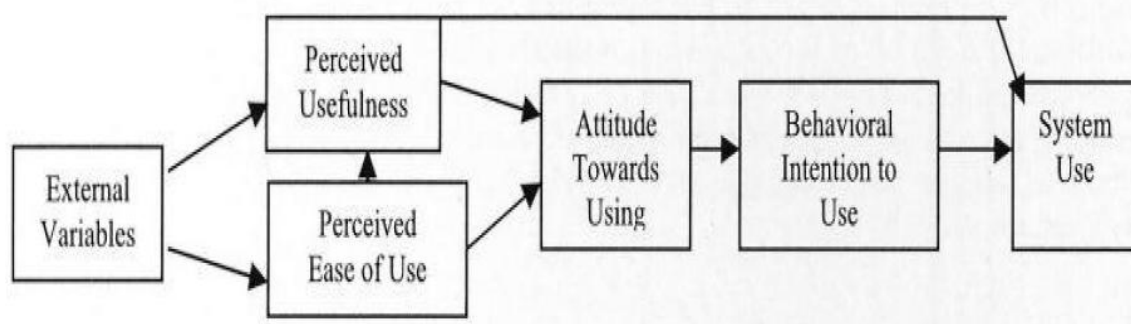


Figure 1; Technology acceptance model cited at (Zelege, 2014)

Theory of planned behavior (TPB)

The original version of the Theory of Planned Behavior model developed by Icek Ajzen (1985), "From intentions to actions: was an extension of theory of reasoned action (TRA) which accounted for conditions where individuals did not have complete control over their behavior which was broken down further into intended behavior and perceived behavioral control (Balabanoff, 2014). The TPB model focuses on behavioral intention being a function of attitude and subjective norm. In TPB the attitude (AT), subjective norms (SN), perceived behavior controls (PBC) are the three most important factors explaining new technology adoption behavior ()

To more reasonably explain and to predict human behavior on different conditions, In addition to the pure Theory of Planned Behavior, the decomposed Theory of Planned Behavior model (DTPM) was introduced. This model is based on the idea of Taylor and Todd (1995) that believed TPB can be broken down into multidimensional constructs (Faezeh, Nor Saadah, & Awang, 2015). The attitude part of TPB is decomposed into the three constructs which included perceived usefulness (relative advantage), perceived ease of use, and compatibility with technology innovation (Tao & Fan, 2016).

The DTPB is a kind of improved behavior model which is based on the innovation diffusion theory (IDT), TPB, TAM, and it adopts the multidimensional belief structure to study individual antecedents of constructs. Therefore, it is very resilient to consider multiple impact factors for adoption of the technology and it can help the managers to consider the factor of affecting the consumers' behavior (PC Lai, 2017).

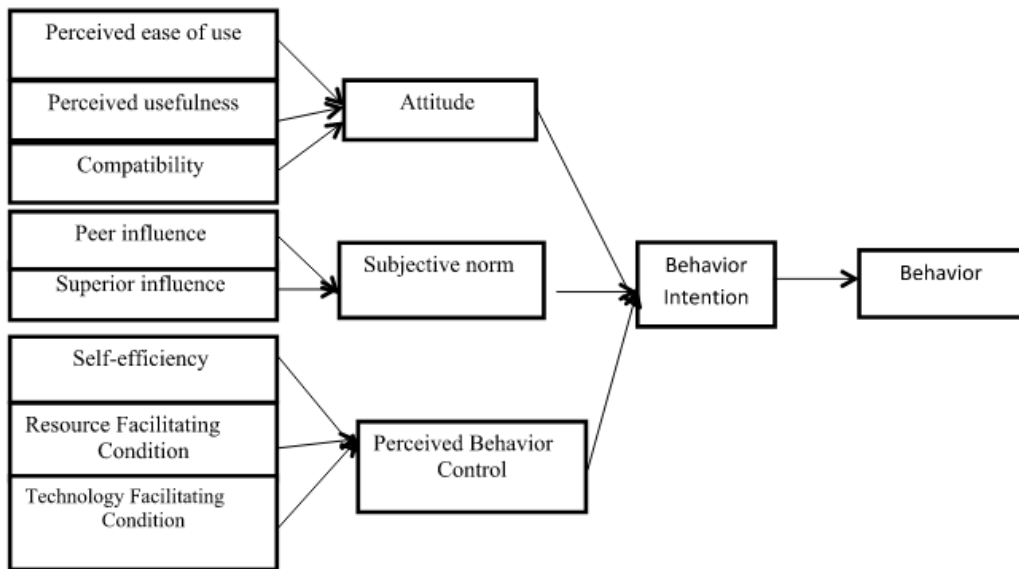
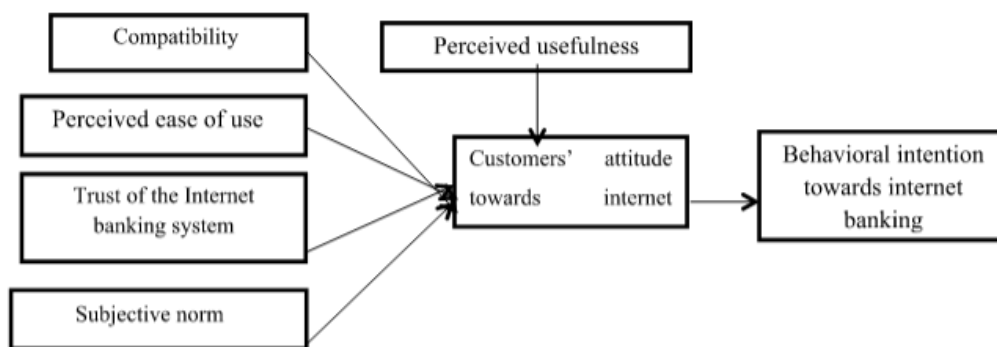


Figure 2, Decomposed theory of planned behavior

Conceptual framework of the study



Sources: developed by the researcher based on technology adoption model and decomposed Theory of planned behavior (DTPB)

III. Materials and Methods

Research design: This study employed both descriptive and explanatory research design. Descriptive research design is selected because it is a powerful form of quantitative analysis and enables to describe the area of the research, characteristics of the variables and analyze data logically. Moreover, the method permits description of the collected data in words, pictures, charts, or tables. As this study to establish causal relationships between variables, explanatory design was used to determine the relationship between the dependent (Customers attitude towards internet banking) and independent variables (Compatibility, Subjective norm, trust, perceived usefulness, perceived ease of use), and to address the effects on the attitude of customers towards internet banking.

Target population and sample size: This study was aimed to measure customer's attitude towards internet banking adoption in Ethiopia. The population of this study is all customers who regularly take financial services from Ethiopian private and public commercial banks which accounts for nearly 10 million individuals. The researcher selected respondents from Bahir Dar City, Ingibara town and Jinka town. According to (Derbisa, 2018) a sample size of 384 and more is appropriate for a total population more than one million. Due to this, 400 respondents are selected for this study.

Sources of Data and methods of data collection: This study focuses on primary data. A primary survey has been conducted to discover the services attributes which are instrumental to the customer in forming attitudes. Therefore several important attributes have been found and customers are surveyed based on those attributes using five-one like rate scale questionnaires. The items are all close ended items to get opinions of the respondents. The questionnaire carefully developed in a way that measures the attitude of customers towards internet banking adoption.

Data Analysis: In general there are two types of data analysis techniques namely: qualitative and quantitative where by the choice of these methods greatly depends on the type of information the researcher has at hand. If most of information collected contains numerical, the analysis calls for quantitative tools and descriptive statistics can be used to characterize the data.

On the other extreme, if most of the data collected are in words (which means data gathered using individual interviews, open-ended questions and focus group discussion), it is logical enough to apply qualitative data analysis tools.

The data collected were analysed quantitatively. For quantitative data the researcher used graphs, tables, frequencies and percentages to show the highest number of group responses or the most common opinions from the group responses. Descriptive statistical tools like mean, median, standard deviation and others were employed and SPSS (statistical package for social science) software was applied.

Multiple Regression Model: To estimate the influence of internet banking attributes on the customer's attitude multiple regression analysis was used. The researcher has treated the customer's attitude as the dependent variable and TAM and DTPB models: Compatibility (Co), Subjective norm (Sn), trust (Tr), perceived usefulness (PU), and perceived ease of use (PEOU) as the independent variables.

$$At = f (Co, Sn, Tr, Pu, Peou)$$

The researcher has run the regression to determine the predictive capacity of independent variable over customers' attitude. The basic model installed was depicted as follows:

$$Y = \hat{\alpha} + \beta x + u \text{-----} (1)$$

The above equation, which is assumed to hold the population interest, defines the simple linear regression model. The equation is also known as the two –variable linear regression model or bivariate linear regression model since it relates the two variables: x and y. The researcher used step wise regression model to identify the most determinant independent variable on the customer's attitude towards banking services.

$$Y_i = \beta_0 + \beta_1x_1 + \beta_2x_2 + \dots \beta_5x_5 + u_i \text{-----} (2)$$

$$Y_i = \beta_0 + \beta_1Co_1 + \beta_2Sn_2 + \beta_3Tr_3 + \beta_4Pu_4 + \beta_5Peou_5 + u_i \text{-----} (3)$$

Equations (2&3) are multiple regressions that have more than one independent variable. Y_i explains the dependent variable of customer's attitude which is determined by the six explanatory or independent variables x_i and by other variables beyond the catch of the researcher instrument are denoted by u_i . In the model $x_1, x_2, x_3, x_4,$ and x_5 represents independent variables such as Compatibility, Subjective norm, trust, perceived usefulness, and perceived ease of use respectively.

The constants $\beta_0, \beta_1 \dots \beta_5$ are the parameter of the model, and they describe the directions and strengths of the relationship between customer's attitude and internet banking attributes/ dimensions determine model. β_0 is constant and $\beta_1, \beta_2 \dots \beta_5$ are coefficients to estimate, and u_i is the error term.

IV. Results and discussions

Demographic characteristics` of the respondents

Table 1; Demographic characteristics` of the respondents

	Description	Frequency	Percentage
1. Gender	Male	264	66.0%
	Female	136	34.0%
	Total	400	100.0%
2. Age	18-30	212	53.0%
	31-40	168	42.0%
	41 and above	20	5.0%
	Total	400	100.0%
3. Level of education	Primary education	60	15.0%
	Secondary	142	35.5%
	Diploma	86	21.5%
	Bachelor	95	23.8%
	Masters	14	3.5%
	PhD	3	0.8%
	Total	400	100%
4. Occupation	Student	45	11.25%
	Governmental organization	117	29.25%
	Private organization	86	21.5%
	Self- employed	152	38%
	Total	400	100%

Source: own survey (2019)

As it is shown on the above table, 264 respondents, representing 66.0% are males and 136 respondents, representing 34.0% is female. This shows the gender distribution for male customers is larger than the female.

In the case of classification of respondents by age, 212 respondents representing 53.0% of respondents are their age between 18 – 30 years, 168 respondents representing 42.0 % are their age between 31- 40 years and the remaining 20 respondents representing 5.0% are their age above 41 years. This indicates that the majority of respondent's age is lies between 18 – 30 years. This implies majority of respondents have a positive attitude towards IB because the younger generation is more familiar with internet based work, so they will tend to use IB more than the others. For example, Kerem (2002) showed that the Internet users tend to be young adult and they would be very much attracted to utilize innovative banking services,

With regard to educational level of respondents, the table shows that 33 respondents, representing 18.3% of the customers have secondary education, 53 respondents, representing 29.4% holds diploma, 82 respondents, representing 45.6% holds Bachelor degree, 10 respondents, representing 5.6% holds master's degree, and the remaining 2 respondents, representing 1.1% are PhD holders. This shows that nearly 81.7% of respondents have educational preparations of diploma and more than diploma. This implies that majority of respondents have an awareness related to IB practice and its platforms. Based on this, researchers conclude that majority of respondents have positive attitude towards IB adoption and usage. For example, Mattila, Karjaluoto, & Pento (2003), found that the level of education increases the likelihood of using internet banking.

With regard to Occupation of respondents, the table shows that 6 respondents, representing 11.25% of the respondents are students, 117 respondents, representing 29.25% are engaged in governmental organizations, 86 respondents, representing 21.5% are engaged in private organizations, and 152 respondents, representing 38% are engaged in personal business. This shows that the highest percentages of respondents are participating in personal businesses.

Descriptive Statistics

As shown on the table below, Mean for individual construct and over all mean for each dimension were calculated to measure customers attitude towards IB. According to Munizu, 2013 as cited by (Haile & Raju, 2016), for easier interpretation of the results of the study, researcher should refers to the interpretation of scores 1.00-1.80= worst, 1.80-2.60= low, 2.60-3.40= enough, 3.40- 4.20= high and 4.20-5.00= very high. Based on this, the researcher concludes customers in Ethiopia has positive (high) attitude towards IB.

Table 2; Mean Scores and Standard Deviationfor constructs

Constructs	N	Mean	SD
Perceived usefulness	400	3.97	0.032
Internet banking makes it easier to do banking activities.	400	3.93	1.002
Internet Banking enables one to do banking activities more quickly.	400	3.99	.969
I think Internet banking enables one to complete banking activities more conveniently.	400	3.98	1.020
I think Internet banking allows one to manage banking activities more efficiently	400	4.00	.952
I think Internet banking is useful in conducting banking activities	400	3.94	1.032
Perceived ease of use	400	3.89	0.035
I think it is easy to learn how to use Internet banking	400	3.88	1.060
I think it is easy to get Internet banking to do what I want it to do	400	3.92	0.984
I think it is easy to become skillful at using Internet banking	400	3.83	1.053
I think Internet banking is an easy way to conduct banking transactions	400	3.91	0.987
I think it is easy to remember the procedure.	400	3.92	1.022
I think Internet banking is technologically easy to get started	400	3.91	1.069
	400	3.65	0.034
Trust of the banking system			
I think Internet banking has enough safeguards to make me feel comfortable using it	400	3.61	1.254
I feel assured that legal structures adequately protect me from problems associated with using Internet banking services	400	3.67	1.169
I feel confident that technological advances (such as encryption) on the Internet make it safe for me to use Internet banking	400	3.69	1.110
In general the Internet is a safe environment in which to transact banking activities	400	3.66	1.177
	400	3.86	0.068
Subjective norms			
People who influence my behavior believe I should use Internet Banking	400	3.79	1.059
People who are important to me believe I should use Internet Banking	400	3.83	1.071
People whose opinions I value believe I should use Internet banking	400	3.95	0.996
People who influence my decisions think I should use Internet Banking	400	3.88	1.030
	400	3.94	0.049
Compatibility			
Internet Banking is well suited to my lifestyle	400	3.89	1.034
Internet Banking fits well in the way I like to manage my finances	400	4.02	0.987
I am knowledgeable about the various methods for accessing my account	400	3.93	0.891
Automated banking services make me feel comfortable	400	3.89	1.007
I believe that many transactions can be done by Internet banking	400	3.97	0.980
Using internet banking for me is the same as paying by cash	400	3.94	0.969
	400	4.04	0.018
Attitude			
Using Internet banking is a good idea	400	4.06	0.909
I like the idea of using Internet banking	400	4.03	0.934

Using Internet banking is a pleasant idea	400	4.05	0.957
Using Internet banking is an appealing idea	400	4.02	0.931

Source: Own survey, 2019

According to Table 2, respondents perceive Internet banking services to be useful (perceived usefulness). The overall means and standard deviation for the perceived usefulness construct had 3.97 and 0.032 respectively, which means that respondents generally perceive Internet banking services as useful. Customers feel that Internet banking helps them to do their banking by enabling them to do it quickly, more conveniently and more effectively.

With regard to compatibility, respondents perceive Internet banking services as compatible with their job responsibilities and value system. The overall mean and standard deviation scores for perceived ease of use were 3.94 and 0.049 respectively. This implies that customers perceive IB as suitable to life style or existing value, fitness to financial requirement (current needs), and comfortable to perform banking activities. However, in comparing the overall mean and standard deviation values for perceived usefulness and compatibility, the researcher noticed that the values for perceived usefulness were higher than compatibility.

With regard to perceived ease of use, respondents perceive Internet banking services as easy to use. The overall mean and standard deviation scores for perceived ease of use were 3.89 and 0.035 respectively. This implies that customers perceive internet banking as easy to learn the procedures, easy to get started and easy-to-remember URL address, well organized, easy in site navigability, concise and understandable contents, terms, and conditions.

The outcome of the analysis portrays customers' levels of trust in the Internet banking system, with an overall mean of 3.65. This implies that customers highly perceive internet banking as a safe environment in which to conduct banking activities; however, in comparing the mean values of trust with the other constructs employed in the study, it is noteworthy that trust is least comparable with the other constructs. This means that both marketers in banks and financial institutions, and consumer educators still need to make an effort to build customer's confidence and partner's reliability and integrity towards IB.

With respect to subjective norm, the overall mean value of 3.86 shows that customers' attitude towards Internet banking is almost influenced by the people important to them. This means that there is strong social pressure like superiors (parents or teachers) or peers (friends, colleagues, or classmates) use internet banking in the country. This result agrees with the findings of research conducted by Yaghoubi&Bahmani (2010) among Iranian Internet banking customers, which found a very strong relationship between subjective norm and customers' attitude towards Internet banking services. The results of the analysis showed that they generally have a strong positive attitude towards Internet banking, with an overall mean of 4.04. In particular, customers generally agree that Internet banking is a good idea (4.06), likeable (4.03), a pleasant idea (4.05), and an appealing idea (4.02).

Correlation Analysis: Based on the following table (table 3), the result of correlation matrix between each technology acceptance model (TAM) and DTPB and attitude of customers (At) is analyzed as follow: As per the table 4.1 showed, Compatibility (Co), positively related to attitude of customers (At) with a Pearson correlation coefficient of 0.517($r=0.517$) and significance value 0.000. This significance tells that there is high effect and positive relationship between Compatibility (Co) and attitude of customers (At). Table 3 also depict that as there is high effect and positive association between Subjective norm (Sn) and attitude of customers (At) with a Pearson correlation coefficient of 0.609 ($r=0.609$) significance value 0.00. This significance tells that there is high effect and positive relationship between Subjective norm (Sn) and attitude of customers (At).

On the other hand the Pearson correlation test indicated in the table 3 also showed that there is high effect and positive correlation between trust (Tr) and attitude of customers (At) with a Pearson correlation coefficient of 0.578($r=0.578$) and significance value is 0.000. This significance tells that there is significant association of trust and attitude of customers.

As per the above table 3, the correlation test conducted between perceived usefulness (Pu) and attitude of customers, clearly indicates that there is high and positive relation between the two. The result of correlation coefficient showed 0.583($r=0.583$) and significance value is 0.000 which indicates as there is significant relation between them. The correlation test on perceived ease of use (Peou) and attitude of employees also shown a high effect and positive correlation with a Pearson correlation coefficient of 0.632 ($r=0.632$) and significance value 0.000. This significance tells that there is significant relation between perceived ease of use and attitude of customers towards it. As table 3 below, indicated all the independent variables are positively correlate with the dependent variable at 0.00 level of significant. This shows that there is a significant and positive relationship between independent variables and dependent variable (customer's attitude towards IB).

Table 3; Correlation between independent variables to dependent variable

		Co	Sn	Tr	Pu	Peou	At
Co	Pearson Correlation	1					
	Sig. (2-tailed)						
	N	400					
Sn	Pearson Correlation	.654**	1				
	Sig. (2-tailed)	.000					
	N	400	400				
Tr	Pearson Correlation	.584**	.612**	1			
	Sig. (2-tailed)	.000	.000				
	N	400	400	400			
Pu	Pearson Correlation	.507**	.602**	.694**	1		
	Sig. (2-tailed)	.000	.000	.000			
	N	400	400	400	400		
Peou	Pearson Correlation	.485**	.525**	.665**	.605**	1	
	Sig. (2-tailed)	.000	.000	.000	.000		
	N	400	400	400	400	400	
At	Pearson Correlation	.517**	.609**	.578**	.583**	.632**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	400	400	400	400	400	400

Source: own survey (2019)

Multiple Regression analysis

A Multiple Linear Regression analysis was conducted to investigate the relative influence of each variable on customer's attitude. In this part, customer's attitude towards internet banking was regressed against the five variables (Compatibility, Subjective norm, trust, perceived usefulness and perceived ease of use). The results are presented in table 4.12, 4.13 and 4.14 below.

Table 4: model summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.725 ^a	.526	.521	.694

Source: own survey, 2019

a. Predictors: (Constant), Compatibility, Subjective norm, trust, perceived usefulness and perceived ease of use

R defines the relationship among the variables and that should be more than 0.5 and the table result shows that (R=0.725) which is greater than 0.5 (Bashir, 2017). The magnitude of the adjusted R Square is 0.521. This means that 52.1 percent of the dependent variable (customer attitude towards internet banking) can be explained or influenced by the independent variables, while the remaining 47.9 percent is explained by other causes. The model summary result clearly revealed that the model is reasonably fit for further analysis. R2 values of 0.26 and above are considered substantial as Cohen (1988) discussed cited in (Rahman and Kamarulzaman, 2012).

Table 5; Anova

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	210.832	5	52.708	97.540	.000 ^b
	Residual	190.065	394	.481		
	Total	400.898	400			

Source: own survey, 2019

a. Dependent Variable: customers attitude towards IB

b. Predictors: (Constant), Compatibility, Subjective norm, trust, perceived usefulness and perceived ease of use

The ANOVA results associated with the model are presented in table 4.13 and shows that F-stat which is used to measure the overall significance of the model is 97.540 and the p-value was 0.000 (p<0.05). This indicates that the overall model was reasonable fit and there was a statistically significant association between determinants of internet banking and customer's attitude

Table 6: Regression Coefficient between independent variables and dependent variable

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
Coefficient	(Constant)	1.143	.264		4.337	.000
	Compatibility	.372	.050	.340	6.288	.001
	Subjective norm	.148	.038	.131	2.564	.003
	Trust	.119	.030	.108	2.091	.003
	perceived usefulness	.421	.054	.392	7.864	.000
	perceived ease of use	.241	.043	.205	4.228	.001

a. Dependent Variable: customers attitude towards IB

b. Predictors: (Constant), Compatibility, Subjective norm, trust, perceived usefulness and perceived ease of use

Source: Own survey, 2019

Table 6 above displays the estimates of the multiple regression of customer's attitude towards IB against its variables for the sample of 400 individuals from three selected places in Ethiopia. On the basis of the analysis of multiple regression result, it can be said that the relationship between the independent variables (viz. Compatibility, Subjective norm, trust, perceived usefulness and perceived ease of use) and dependent variable (i.e. customer attitude towards IB) is significant at 5 percent significance level.

Unstandardized beta coefficients (also known as rate of change) indicated how much the dependent variable varies with an independent variable, when all other independent variables are held constant. Standardized regression coefficients, were used to determine the relative importance of the TAM and DTPB dimensions in predicting attitude of customers towards IB. The beta coefficients indicated that how and to what extent the TAM and DTPB dimensions "influence customers" attitude (Islam and Niaz, 2014). On the basis of the result of multiple linear regression analysis result, multiple regression models can be written as follows;

$$Y_i = 1.143 + 0.340 X_1 + 0.131 X_2 + 0.108 X_3 + 0.392 X_4 + 0.205 X_5 + 0.05$$

Where, Y_i is the dependent variable (Customers attitude towards IB),

The value 1.293 is the constant (the value of y when the value of all independent variables are 0), whereas, X_1, X_2, X_3, X_4 and X_5 refers Compatibility, Subjective norm, trust, perceived usefulness and perceived ease of use. Finally, the researchers set its confidence level at 95 percent with 5 percent (0.05) error term.

The standardized beta coefficient column shows the contribution that an individual variable makes to the model. The higher the value of beta coefficient shows the great contribution or impact of the independent variable in explaining and predicting the dependent variable. Among all the TAM and DTPB constructs, perceived usefulness with its beta coefficient value of 0.392 has emerged as the most important construct in predicting customers attitude followed by compatibility, PEOU, trust, and subjective norms with beta value of 0.340, 0.131, 0.108, and 0.205 respectively. Generally, as indicated from the regression result, the researchers identified that all of the proposed TAM and DTPB dimensions have positive and significant influence on Customers attitude towards IB.

Finally, the findings of this study comply with the results of earlier studies. These findings provide significant support for the Compatibility, Subjective norm, trust, perceived usefulness and perceived ease of use literatures which advocates that variables have positive and significant influence up on customer's attitude towards IB. For instance, the study conducted by Priyangika *et al.*, (2016) revealed that perceived ease of use and perceived usefulness factors has a significant effect on attitude towards Internet banking. The finding of Amila Perera (2018) also indicates that Relative advantage, Perceived ease of use, and Perceived usefulness has a significant impact on internet banking adoption in Colombo district.

Furthermore, a study conducted by Selvanathan *et al.*, (2016) showed that trust, and customers' experience are the major factors influencing adoption of internet banking in Malaysia while cost and ease of use were found to be insignificant. Jehan & Ansari, (2018) also concluded trust is the most crucial factor for the consumers of internet banking followed by ease of using internet banking services.

V. Conclusion and future research directions

This study aimed at measuring customer's attitude towards internet banking adoption and usage intention in Ethiopia using TAM and DTPB. The study implemented measures such as mean and standard deviation to depict the extent of customer attitude of the various dimensions of TAM and DTPB variables and to investigate the current status of customers' attitude towards IB and user intention. The mean values represent the average response of all the respondents regarding a particular item on the scale. It shows they have higher perception to all TAM and DTPB variables which ranged from 3.65 to 4.04.

Findings of correlation analysis showed that all constructs of TAM and DTPB (Compatibility, Subjective norm, trust, perceived usefulness and perceived ease of use) were positively and significantly affect customer's attitude. The findings of the multiple regressions analysis showed that the observed changes in customers attitude attributed by the independent variables (TAM and DTPB) is 52.1% (adjusted $r^2=0.521$). The findings revealed that all variables included in the models (Compatibility, Subjective norm, trust, perceived usefulness and perceived ease of use) were significant in affecting customers attitude towards IB. Results also revealed that the variable perceived usefulness plays the most important role, followed by compatibility and perceived ease of use in predicting customers attitude towards IB, while trust has lower predicting power than others. The results of this study will have important implications and is believed to be helpful for the banking sector in Ethiopia. The study recommends that future studies should include more variables from different theories and models as well as additional social issues.

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