

Impact of Internet Banking on Customer Satisfaction in Kathmandu

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Abstract

This study examines the impact of internet banking on customer satisfaction in Kathmandu. Customer satisfaction is dependent variable. The independent variables are accessibility, convenience and service security. Research is conducted using primary data collecting opinions of 123 respondents from Kathmandu city. Structured questionnaire was adopted for the survey and Likert scale items were used for the collection of cross sectional. The correlation and regression are used to identify the association and impact of independent variable on customer satisfaction. The result shows that convenience has positive relationship with customer satisfaction which depicts that convenience in use of internet banking, higher would be the customer satisfaction. The service security has also positive correlation with customer satisfaction. It means better the service security of internet banking, higher would be customer satisfaction. The accessibility is also positively correlated with customer satisfaction. The regression result for the accessibility found not statistically significant.

Keywords: accessibility, convenience, customer satisfaction, internet banking

Introduction

Internet banking has evolved and customers considered it as essential mechanism to operate their banking services. In recent time, many banking entities have offered the internet based services to the customers consisting uninterrupted full days services as means of distinct market channels (Jun & Cai, 2001). Thus, the satisfactory services is vital to generate delightful customer in which inevitability of banking services through internet is considered (Raza et al., 2015). Similarly, the sustainability of banking organization requires diversity in their service offering modality. Moreover, the traditional service based banks facing tough marketplace with heavy competitiveness has been shifted towards internet banking (Jun & Cai, 2001).

Thus, internet banking, it can be considered as offering service and products through network of computer (Belás et al., 2016). Similarly, the banking with electronic form is used for interpreting delivery of services and information through bank to their clients by the means of television or computer (Daniel, 1999). Moreover, improvement in service of banking industries as well as other industries are possible by exploring and using internet banking (Rod et al., 2009).

However, customer satisfaction of banking customer is attached with varieties of services offered by such industries including internet banking whereas making extension of internet banking needs to focus on customer satisfaction and their orientation (Sameer & Enas, 2019). On the other hand, the major role is played by internet based banking services to provide satisfaction to the customers by covering the vacant space between perceived worth of service and customers 'expectation in which customer satisfaction is considered as function of expectation level of customer and level of service quality offered by business entities (Jairus, 2018). It

is therefore, realized that the major activity conducting under marketing task consequently generates satisfaction for customers serving and connecting with many phases of purchasing behavior of customers (Jamal, 2004).

Rashidi and Mansoori(2015) conducted research on discussing the effects of internet banking on customer satisfaction in Iran found that the internet banking and customer satisfaction has significant relation. Ramseook-Munhurrin and Naidoo(2011)held a study on customers' perspectives of service quality in Internet banking in Mauritius found accessibility to be a predictor of customer satisfaction. Chau and Lai (2003) found significant influence of accessibility on perceived ease of use and perceived usefulness and even found as major factor in fostering a positive attitude in accepting services. Ahmad and Al-Zu'bi, (2011) conducted a study on e-banking functionality and outcomes of customer satisfaction indicated that accessibility has an influence upon Jordanian commercial banks which has a significant influence on customer satisfaction. It is stated that the significant impact on major determinants of acceptance is continued with a system independent, self-efficacy and use specific in which efforts in training is vital and feasible concentrating on manipulating effectiveness to develop enhanced system adaptation (Venkatesh & Davis, 1996). Ahmad and Al-Zu'bi, (2011) with the study of e-banking functionality and outcomes of customer satisfaction under empirical investigation conducted in Jordan revealed that the convenience has a significant influence on customer satisfaction.

Agarwal et al.(2009)assessed thecustomers' perspectives regarding e-banking in an emerging economy in India indicated that thesatisfaction of customer with security and trust provided by site of e-banking has high impact on overall satisfaction of customers while analyzing the impact of satisfaction among the verities of features of e-banking. Hammoud et al., (2018)conducted study on the impact of e-banking service quality on customer satisfaction an evidence from Lebanese banking sectorfound that the security and privacy has a positive and significant effect on customer satisfaction. Ramseook-Munhurrin & Naidoo (2011) concluded that security has not significantly contributed towards overall satisfaction and which argues that customers feel that banking sectors filed give services on this aspect in satisfactory way. Murugiah and Akgam (2015) found that there is negative relationship between security and customer satisfaction. Black et al. (2001) argued that participants heavily involves in sharing about hackers in the case of security that reflects the conditions of fears for conducting transaction through internet. George and Kumar (2014) the study revealed that Security and privacy dimensions have influence customer satisfaction.

In the context of Nepal, Banstola(2008) on study of prospects and challenges of e-banking in Nepal indicated that there is no significant correlation between use of E-banking and gender, marital status or salary of customer and use of e-banking signification association was found with age and education. Khatri & Upadhyaya-Dhungel (2013)stated that most of the customers of banks with their account holders involving using internet have knowledge on internet banking offered by banks but customers have no practice of using such internet services. The study concluded that level of security, advantages of internet banking and customers' habit remained

core causes behind less use of internet banking by their customers. Indicating to above stated discussions, it reflects that the consistency is varied in different forms and the study consisting of satisfaction measurement with internet banking is not found in Nepal. The study on internet banking comprising accessibility, convenience, service security and customer satisfaction are not yet examined in Nepal. The purpose of this study is mainly to assess the impact of internet banking on customer satisfaction in Kathmandu. This study examines the impact of accessibility, convenience and service quality of internet banking on customer satisfaction. The study has been organized describing sample, data and methodological aspects in section two. Similarly, the part of empirical results has comprised in section three and remaining coverage of conclusion and discussion along with its implication of study findings is addressed in final section of the study.

Methodology

The study was conducted to examine the impact of internet banking on customer satisfaction. Customers using internet banking services of different banks in Kathmandu are the population for the study. This study is based on primary data which were accumulated on accessibility, performance, convenience, service security and customer satisfaction. The questionnaire were distributed to 450 banking customers in Kathmandu city during February – March 2021 through online and received only from 123 (27%) respondents. The study is based on cross sectional data and pursued statistical tests comprising correlation, ANOVA and regression using SPSS 21 to examine the impact of internet banking on customers' satisfaction.

The Model

The estimated model for the study assumes that customer satisfaction depends on various aspects of internet banking services. Similarly, the influencing aspects of customer satisfactions consists of accessibility, convenience and service security. Thus, model for the study is as follow:

$$CS = \alpha + \beta_1 AC + \beta_2 CN + \beta_3 SS + \varepsilon$$

Where,

CS = Customer Satisfaction

AC = Accessibility

CN = Convenience

SS = Service Security

Accessibility was measured by using four items scaled as used by (Fojt, 1994) . The variable used in this study asked respondents to express their views to show level of agreement and disagreement through five point Likert scale 1 comprising strongly disagree and 5 strongly agree. The items used under this variable are internet based banking system is accessible and so on. The reliability of the accessibility was measured by the cronbach's alpha ($\alpha = 0.756$).

Convenience was measured with five item scale (Fojt, 1994). The items used under this variable asked respondents to show their opinion demonstrating the level of agreement and disagreement on five point Likert scale comprising 1 for stongly disagree and 5 for strongly

agree. The sample items used in this variables consists of internet banking gives adequate record of entire transactions, internet banking guarantees the entire transactions executed and so on. The reliability of the convenience was measured by the cronbach's alpha ($\alpha= 0.865$).

Service security was measured with six items scaled as used by (Asad et al., 2016, Rod et al., 2009). The respondents under this items were asked to show their level of agreement and disagreement through the five point Likert scale representing 1 for strongly disagree and 5 strongly agree. The variable used here contains the sample items as Internet banking system records all transactions appropriately, data of transaction and strong privacy is maintained by internet banking system and so on. The reliability of the service security was measured by the cronbach's alpha ($\alpha= 0.870$).

Customer satisfaction was measured with five items scaled as used by (Fojt, 1994). The respondents under this items were asked to show their level of agreement and disagreement through the five point Likert scale representing 1 for strongly disagree and 5 strongly agree. The variable used here contains the internet banking system satisfies me through effective processing of transaction with website, I feel that I have made appropriate decision for using interned based banking system and so on. The reliability of the customer satisfaction was measured by the cronbach's alpha ($\alpha= 0.856$).

Accessibility

Accessibility is defined as the means that anyone can paralely access information demonstrated through internet regardless of equipment and constraints of personal aspect (Hackett & Parmanto, 2009). Culnan (1985) defines accessibility as access to information sources in physical way, interface to source and retrieving ability with pertinent information form reflected sources. Fojt (1994)conducted the study on online banking adoption with factor validation and satisfaction causation study in the context of Indian banking customers found the positive effect of accessibility on overall customer satisfaction.

H₁: Accessibility has a positive significant influence on customer satisfaction in Kathmandu, Nepal.

Convenience

Awamleh & Fernandes (2005) made a study on internet banking with an empirical investigation into the extent of adoption by banks and the determinants of customer satisfaction in the United Arab Emirates concluded that convenience contribute significantly to satisfaction of internet banking customers. Ahmad and Al-Zu'bi (2011) argued that internet banking does provide convenience of higher degree which enables customers for accessing internet banking services all the times and in all places.

H₂: Convenience will have a positive significant effect on customer satisfaction in Kathmandu, Nepal.

Service Security

The term service protection (security) is defined as a protection of sensitive and

important data, personal information, maintaining secrecy of bank and transactions (Belás et al., 2016). Similarly, (Ribbink et al., 2004) defined service security in terms trust as the degree of customers confidence on internet and online exchanges. Ribbink et al. (2004) conducted a study on internet banking relating to an empirical investigation into the extent of adoption by banks and the determinants of customer satisfaction in the United Arab Emirates concluded that transaction security has significant relation on satisfaction of banking customers and it concludes that all banks. Ahmad & Al-Zu’bi, (2011)revealed that the functionality of internet banking with security influences satisfaction.

H₃: Service Security has a positive significant influence on customer satisfaction in Kathmandu, Nepal.

Customer Satisfaction

The term satisfaction is defined as an overall attitude of customer towards provider of service, or reaction with emotional way through the differences between expectation of customer and what they receive for fulfilling their desire, goals or needs(Hansemark & Albinsson, 2004).

Results

Descriptive Statistics

The study conducted on impact of internet banking on customer satisfaction based on 123 observations comprising the 27% of respondents from Kathmandu. The table 1 shows that (52 percent) respondents were in between the age 20 to 29 and age between 50 and above were around (2 percent). Majority of male (67 percent) participated in survey and female were (33 percent). The survey received the majority of participation from single (65 percent) under the marital status and around (3 percent) separated marital status. Online banking experience (in years) with majority were (42 percent) below two years. Similarly, (28 percent) participants were from private sector employee. Majority of respondents (50 percent) were from bachelor level of educational background. Monthly income between 30 thousand to 50 thousand income groups respondents (16 percent) were the majority of participants in the study.

Table 1
Profile of Respondents

Demography	Characteristics	Frequency	Percent
Age	20 – 29	64	52
	30 – 39	28	22.8
	40 – 49	7	5.7
	50 and Above	2	1.6
	Below 20	22	17.9
Gender	Female	41	33.3
	Male	82	66.7

Marital Status	Married	40	32.5
	Separated	3	2.4
	Single	80	65.0
Online Banking Experience (in years)	2 – 4	49	39.8
	5 – 6	14	11.4
	Above 6	8	6.5
Occupation	Below 2	52	42.3
	Business Person	8	6.5
	Government Employee	18	14.6
	Housewife	2	1.6
	Private Sector Employee	34	27.6
	Self Employed Professional	6	4.9
Educational Background	Student	55	44.7
	10+2 Level	19	15.4
	Bachelor Level	61	49.6
	Master and Above	41	33.3
	SLC/SEE Level	2	1.6
	Above Rs. 50,000	14	11.4
Monthly Income	Below Rs. 5000	39	31.7
	Rs. 10,001 – Rs. 20,000	13	10.6
	Rs. 20001 – Rs. 30,000	16	13.0
	Rs. 30,001 – Rs. 40,000	20	16.3
	Rs. 40,001 – Rs. 50,000	13	10.6
Frequency of internets used in a day	Rs. 5000 – Rs. 10,000	8	6.5
	1 – 3 hours	44	35.8
	3 – 5 hours	38	30.9
	5 – 7 hours	20	16.3
	7 hours above	12	9.8
	Below 1 hour	9	7.3

Correlation Analysis

The table has shown the Pearson's correlation coefficients between independent variables and dependent variables. Accessibility (AC), convenience (CN) and service security (SS) are the independent variables and customer satisfaction (CS) is dependent variable.

Table 2*Pearson's correlation matrix*

Variables	Mean	Std. Deviation	AC	CN	SS	CS
ACC	4.1073	.73876	1			
CON	3.8882	.77102	.775**			
SS	4.0293	.83398	.769**	.872**	1	
CS	3.8848	.82844	.717**	.799**	.823**	1

Notes: The asterisk signs (**) indicates that correlation is significant at the 1 percent level of significance.

The correlation result from the table 2 depicts that the convenience and service security have positive relationship with customer satisfaction. Similarly, accessibility has positively correlated with customer satisfaction which shows higher the accessibility of internet banking, higher would be the customer satisfaction. The result shows that an improvement in internet accessibility, convenient to use the internet banking services and security standard maintained by banking institutions lead to higher customer satisfaction.

Regression Analysis

Indicating the Pearson's correlation coefficients, the analysis of regression has been run and the outputs are shown in Table 4. Mainly, the table depicts the outputs of regression relating to accessibility, convenience and service security on customer satisfaction among the customers of Kathmandu city. Estimated regression results of accessibility, convenience and service security on customer satisfaction in Kathmandu. The results of the regression analysis is based on 123 observations by using linear regression model. The estimated model in this study is $CS = \alpha + \beta_1 AC + \beta_2 CN + \beta_3 SS + \epsilon$ where, independent variables are accessibility, convenience and service security. The dependent variable is customer satisfaction.

Table 3*Model Summary*

Model	R	R-Square	Adjusted R Square	Std. Error of the Estimate
1	.835 ^a	.697	.689	.41208

The table number 3 of model summary shows that the r-square value is 0.697 which shows strong relationship of dependent variable with independent variables. It shows that 69.7% of the variations with customer satisfaction is explained by accessibility, convenience and service security showing that 30% is explained by other variables.

Table 4*One Way ANOVA*

Model	Sum of Squares	Degree of Freedom	Mean Square	F	Sig.
Regression	46.376	3	15.459	91.036	.000 ^b
Residual	20.207	119	.170		
Total	66.583	122			

a. Dependent Variable: CS

b. Predictors: (Constant), SS, ACC, CON

The table number 4 of ANOVA shows that regression result depicts statistically significant as $p\text{-value} < 0.05$ which means the independent variables found significant for measuring customer satisfaction of internet banking in Kathmandu.

Table 5*Coefficient of regression equation*

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	VIF
	B	Std. Error	Beta			
1 (Constant)	1.020	.199		5.115	.000	
ACC	.135	.081	.141	1.664	.099	2.819
CON	.352	.087	.397	4.031	.000	3.813
SS	.298	.081	.352	3.665	.000	3.616

a. Dependent Variable: CS

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Table number 5 of coefficient of regression equation shows that as convenience in internet banking increases by one unit then customer satisfaction is predicted to increase by 0.352. It shows statistically significant. Service security shows that 1 unit increase in it is predicted to increase in customer satisfaction by 0.298. As indicated by $p\text{-value} > 0.05$, the accessibility predictor of customer satisfaction is found insignificant. VIF of accessibility, convenient and safety system are < 10 which means the case of multicollinearity does not exist.

Conclusion

The study examines the impact of internet banking on customer satisfaction in Kathmandu. This 123 respondents involved in the study from Kathmandu. The respondents opinions were collected through structured questionnaire and collected data were based on accessibility, convenient, safety system and customer satisfaction.

The result from the analysis depicted that accessibility convenient is positively correlated with customer satisfaction. It shows that convenience in use of internet, higher would be the customer satisfaction. This result is consistent with. The study also reveals the positive relationship of service security with customer satisfaction which indicates that the safety in internet use, higher would be customer satisfaction. This result is consistent with (Ofori et al., 2017). The accessibility of internet banking shows positive correlation with customer satisfaction but which found statistically insignificant.

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