

# **Analysis of Customer Satisfaction: Bank of Bhutan Limited**

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Abstract- Druk Holding and Investments (DHI) that holds and manages twenty State Owned Enterprises (SOEs) in Bhutan assesses customer satisfaction annually for five service oriented companies through the independent survey to measure customer service related performances of the companies. This paper uses the data collected by the consulting team in 2013 that covers twenty districts of Bhutan. Of the five companies' data, this study chooses Bank of Bhutan Limited (BOBL) for indepth analysis as banking faces more competition in Bhutan compared to other sectors. The team collected the data using structured questionnaire covering different aspects of customer satisfaction. Data was collected from 2123 respondents representing various demographic characters. Besides looking into the descriptive aspects of the statistics, this paper analyses the relational between customer satisfaction level and gender, income groups and educational levels so that each group can be targeted with different strategies. Findings suggest that all types of customers consider service reliability and value for money (price) as the most important factors that attributes to their satisfaction. It was found out that generally females are more satisfied than male respondents at the same level of service quality indicators. Study further establishes the inverse relationships between customer satisfaction level and income and with educational levels of the customers.

Keywords: Customer Service Reliability; Customer Satisfaction Index; Bank of Bhutan

# 1. INTRODUCTION

The annual customer satisfaction survey of Druk Holding and Investments (DHI) companies mainly focuses on the derivation of the annual Customer Satisfaction Index (CSI) and identification of the areas of strength and weakness with respect to the different measurement variables, and services at various branches across the country. DHI sets the standard CSI for its different service oriented companies as a minimum requirement as part of its annual performance compact signed with the companies in the beginning of a year. The minimum CSI requirement of the Bank of Bhutan Ltd (BOBL) for the year 2013 was 3.70.

The CSI is derived from the measurable variables compacted within the eight key result areas (KRAs), which serve as the theoretical framework for this study. These eight KRAs include 1) Quality of Service, 2) Value for Money, 3) Service Efficiency, 4) Service Accessibility, 5) Customer Care, 6) Handling Complaints, 7) Trust Worthiness/Reliability and 8) Product/Service Innovation. Every KRA is composed of three to four

manifest variables measured using a scale of 1-5 (1 being poor level of service satisfaction and 5 being highest level of satisfaction).

The CSI is not just a measure of satisfaction scores, but the sum product of satisfaction score and the importance that customer places against each of the KRAs. However, the previous study has mostly focused on the descriptive aspects of the data revealed by the customers and most of the data remains as disguised redundant. Thus, this paper attempts to go a little beyond the previous studies by examining any significance of relationship of service satisfaction levels with selected demographic variables such as gender, income and education.

#### 1.1 Company Profile

Bank of Bhutan (BOBL), the oldest bank of the country, was established by Royal Charter in May 1968. It also acted as the Central Bank of Bhutan till the establishment of the Royal Monetary Authority of Bhutan in 1982. It was registered under the Companies Act of the Kingdom of Bhutan, 2000. It was established as a public sector



commercial bank and continued to perform as the country's only banking institution until 1997.

With the establishment of DHI in 2007, the control over the public sectors companies including Bank of Bhutan was taken over by DHI, which until then, was held by the Ministry of Finance.

Today, BOBL stands as the largest commercial bank with a total branch network of 45 offices spread across the country, with its presence in every district and major townships in Bhutan. The main products are deposits, loans, trade finance and money market. Banking operations were automated through adoption of core banking solution in 2009. In addition, 62 ATMs, Internet Banking, SMS Banking, POS, and Mobile & Agency Banking Services (M-BOB) were added as alternate delivery channels of banking services including acquiring and issuing of credit and debit cards. The BOBL is a principal member of VISA and MasterCard and also offers e-payment gateway services.

BOBL has a paid up capital of Nu. 3000 million as on 31st December 2015 and its shares are held by Druk Holding & Investments and the State Bank of India in the ratio of 80:20 respectively.

# 2. SIGNIFICANCE AND OBJECTIVES OF THE STUDY

BOBL competes with four other banks and four non-banking financial institutions. Intense competition and ever increasing demand for service quality puts BOBL under pressure all the time to continuously work towards service quality improvement and meeting increasing expectation levels.

Understanding the customers, their service preferences vis a vis the levels of satisfaction across different market segment will help BOBL concentrate their efforts in the priority areas for better results.

The study attempts to accomplish the following objectives:

- To find out the overall satisfaction level of the customers.
- To find out the level of satisfaction from specific service attributes vis a vis the level of importance attached by the customers in each service attributes.
- Relationship of service satisfaction levels with selected demographic variables (gender, income and education)

# 3. LITERATURE REVIEW

Customer satisfaction has been a popular topic in marketing practice and academic research since Cardozo's

(1965)[1] initial study of customer effort, expectations and satisfaction. Despite many attempts to measure and explain customer satisfaction, there still does not appear to be a consensus regarding its definition (Giese and Cote, 2000)[5]. Customer satisfaction is typically defined as a post consumption evaluative judgment concerning a specific product or service (Gundersen, Heide and Olsson, 1996)[6]. It is the result of an evaluative process that contrasts pre-purchase expectations with perceptions of performance during and after the consumption experience (Oliver, 1980).

Kotler (2000)[12]; Hoyer & MacInnis (2001)[9] as cited in Singh (2006)[18] define satisfaction as a person's feelings of pleasure, excitement, delight or disappointment which results from comparing a products perceived performance to his or her expectations. According to Hasemark and Albinsson (2004)[7] cited in Singh (2006)[18] "satisfaction is an overall attitude towards a product provider or an emotional reaction to the difference between what customers expect and what they actually receive regarding the fulfillment of a need".

Generally satisfaction can be defined as the contentment one feels when one has fulfilled a desire, need or expectation. Furthermore, Customer satisfaction can be a measure of how happy customers are with the services and products delivered by the companies. Keeping customers happy is of tremendous benefit to companies. Many studies points that the satisfied customers are more likely to stay loyal, consume more and are more likely to recommend their friends to the business. Similarly, Zairi (2000)[19] says that many studies have viewed the impact of customer satisfaction on repeat purchase, loyalty and retention and they have all echoed concern that customers who are satisfied are most likely to share their experiences with other people with regards to about five to six people

Leugenia Ham and Steven Hayduk (2004)[13] have found out that Service quality, customer satisfaction and behavioural intensions are global issues that affect all organizations, large or small, profit or non-profit, global or local. According to them, all organizations are influenced or discouraged, satisfied or dissatisfied with positive loyalty behavioural intensions or negative complaining reactions, propelled by the level of service quality received.

According to Hokanson (1995)[8], satisfaction is affected by many factors that include friendly employees, courteous employees, knowledgeable employees, and helpful employees, accuracy of billing, competitive pricing, service quality, good value and quick service.

Although there have been efforts to study the service quality, there has been no general agreement on the measurement of the concepts. Majority of the research uses the SERVQUAL (*Parasuraman et al.*, 1985; 1988)[15] methodology in an effort to measure service quality (e.g. Brooks et al., 1999; Chaston, 1994; Edvardsson et al., 1997; Lings and Brooks, 1998; Reynoso and Moore,1995; Young and Varble, 1997; Sahney et al., 2004).

Many of the customer satisfaction studies report overall satisfaction level of the services by calculating the arithmetic mean for all measurable items. This approach may not show true picture of level of satisfaction. Therefore, we not only concentrate on the overall arithmetic average of satisfaction level but also on the importance placed by the respondents on each of the latent variables (KRAs) in our effort to calculate the CSI.

# 4. METHODOLOGY

The theoretical framework theorizes the relationship among several factors relevant to the study. It is also referred to as the conceptual model. Theoretical framework is often used by the researcher to elaborate the relationships among variables that are of interest of the study.

SERVQUAL methodology, with slight modifications to incorporate the eight KRAs instead of 5 generic dimensions or factors, is used in this study. The reliability of internal consistency of the scale was found to be marvelous where Cronbach's alpha=0.958.

The schematic of the theoretical framework used for this study is given below:

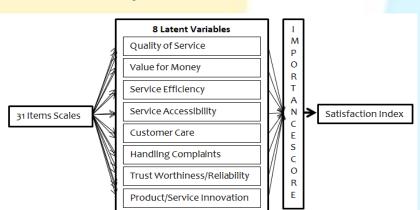


Figure 1: Theoretical framework

# 4.1 Questionnaire design and data collection

Data was collected using the structured questionnaire through self-administered interviews. The questionnaire was designed in a way that provided the spontaneous recording of response from the respondents. Questionnaire consisted of 31 measurable items termed as manifest variables that built up the eight Key Result Areas. Each of these manifest variables was measured on five point Likert scale as follows:

Table 1: Scales of measurement

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
5	4	3	2	1

Similarly respondents were asked to prioritize these eight KRAs according to their importance to their satisfaction using an eight point scale, 8 being the most important and 1 being the least important KRAs. For the purpose of

derivation of the CSI as per DHI standard, this 8 point scale was converted into 5 point scale.

### 4.2 Sampling method and Sample Size

The probability representative sampling was employed. The sample size for survey was determined using the W. Lawrence model. In coherence to it a sample size of 2178 (1% of 217821 population) was targeted. Of the targeted sample, 2.53% did not respond. The data was collected from all the twenty (20) districts of Bhutan.

# **4.3 Training of Enumerators**

The enumerators were trained in the conduct and process of data collection, ethical requirement of the survey, and were deployed to field for a period of one month.

#### 4.4 Data Management and Analysis

Data were statistically scrutinized, including cautious manual checks and editing to reduce any error of negligence. Data were processed and analyzed using SPSS.



#### 4.5 Formula and Calculation of CSI

In order to quantify customers' view or expectation level of performance with providing services, the CSI was calculated. Following scores were used to calculate the CSI.

- Satisfaction Score (S<sub>k</sub>)
- Weightage Satisfaction Score (W<sub>k</sub>)

And the formula for the calculation of CSI was derived as follow:

$$CSI = \sum_{k=1}^{N} \left[ \overline{S}_{k} \cdot W_{k} \right]$$

# 5. FINDINGS

# 5.1 Demographic Analysis

The demographic statistics of the respondents for this study is given in the table below:

Table 2: Demographic statistics of the respondents

	ariable ariable		N	Percentage
		Male	1308	61.6%
Gender		Female	815	38.4%
		18-25 years	490	23.1%
A	σo	26-35 years	1049	49.4%
A	ge	36-45 years	433	20.4%
		Over 45 year	151	7.1%
		Master and	98	4.6%
		above		
		Bachelors	857	40.4%
		Class XII and	967	45.5%
Education		below		
		Monastic	34	1.6%
		education		
		Non-Formal	39	1.8%
		Education		
		(NFE)		
		No education	128	6%
		Below Nu.	166	7.8%
	5,000			
Monthly Income		Nu 5,000 – Nu	396	18.7%
		10,000		
		Nu 10,000 – Nu	636	30%
		15,000		

Nu 15,000 – Nu	557	26.2%
20,000		
Nu 20,000 – Nu	232	10.9%
30,000		
Nu. 30,000 and	136	6.4%
above		

# **5.2 Satisfaction Analysis**

Satisfaction score at first was computed using the conventional methods and same was compared with the result obtained with the method of computation discussed above.

The satisfaction score against customer care and handling complaints are found to be lower when compared with scores of rest of the latent variables.

The table below lists the satisfaction score against each of the latent variable (KRAs):

Table 3: Mean of satisfaction score

<mark>Ke</mark> y Result Areas	Mean	
Quality of service	3.80	
Value for money	3.77	
Service efficiency	3.71	
Service accessibility	3.82	
Customer care	3.63	
Handling complaints	3.63	
Trust worthiness/Reliability	3.81	
Product/Service innovations	3.77	

To check whether these differences in the satisfaction score are significant when compared with the overall satisfaction aggregate index of 3.74, a one sample t-test was performed. The test showed that the differences in mean of some of the variable are significant. Referring the table below we can state that the respondents are less satisfied with services attributes such as customer care t(2122)=-7.00, p<0.001, d=0.30, and how the company handles the customer's complaints t(2122)=-7.28, p<0.001, d=0.32. The result of the test in given in the table below:

Table 4: Satisfaction score against each KRA

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	Test Value	Test Value = 3.74			
	t	Df	Sig. (2-tailed)		
Quality of service	4.83	2122	.000		
		1			



Value for money	2.26	2122	.024	
Service efficiency	-1.58	2122	.115	
Service accessibility	6.36	2122	.000	
Customer care	-7.00	2122	.000	
Handling complaints	-7.28	2122	.000	
Trust worthiness/Reliability	5.95	2122	.000	
Product/Service innovations	2.44	2122	.015	

### **5.3 Importance Score**

Importance score is the average of the importance placed on each of the KRAs by the respondents. This was collected to examine if the inclusion of importance score bring any changes on the satisfaction index obtained using the conventional method.

The importance score placed on each of these KRAs by the respondents is shown in the table below.

Table 5: Importance score against each KRA

Key Result Areas	Importance Scores
Quality of service (KRA1)	3.63
Value for money (KRA2)	3.15
Service efficiency (KRA3)	2.91
Service accessibility (KRA4)	2.75
Customer care (KRA5)	2.53
Handling complaints (KRA6)	2.29
Trust worthiness/Reliability (KRA7)	2.69
Product/Service innovations (KRA8)	2.50

Comparing the means of the importance scores in the table above, customers place more importance on the quality of services (M=3.63, SD=1.34) and are sensitive to the value for money (M=3.15, SD=1.34). In both these cases, the satisfaction scores are higher than the overall average score of 3.74 and are significant at 95% confidence level when t-test is conducted.

#### **5.4** Customer satisfaction index

The customer satisfaction index is computed as the sum of the products of satisfaction score and importance weight. The computation of CSI is shown in the table below.

Table 6: Customer Satisfaction Index

Key Result Areas	Satisfaction Score	Importance Scores	Importance Weight	Weightage Satisfaction score
	Satisfaction Score	Scores	importance weight	Weightage Satisfaction score
Quality of service	3.8	3.63	0.16	0.61
Value for money	3.77	3.15	0.14	0.53
Service efficiency	3.72	2.91	0.13	0.48
Service accessibility	3.82	2.75	0.12	0.47
Customer care	3.63	2.53	0.11	0.41
Handling complaints	3.63	2.29	0.10	0.37
Trust worthiness/Reliability	3.81	2.69	0.12	0.46
Product/Service innovations				
1 1 3 3 day 201 . 100 millio vacionis	3.77	2.5	0.11	0.42
CSI				3.75

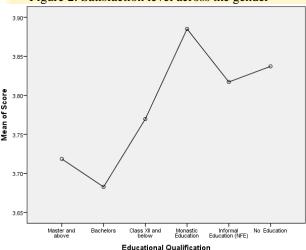
The traditional method of calculation showed the average satisfaction score of 3.74 as against 3.75 after inclusion of importance score. It is noted that there is no significant difference in the satisfaction index computed using these two different methods.

# 5.5 Relationship between satisfaction score and demographic variables

Along with the construction of the CS Index, we also examined the level of satisfaction with selected demographic variables (gender, income and education). This was expected to help the bank understand the needs of different category customers and target them for service improvement as per their needs.

An independent t test was executed to see if there exist any differences in the satisfaction level across the gender. The t statistics t(1878)=0.162, p=0.872 revealed that there was no difference in satisfaction score across the gender of the respondents.

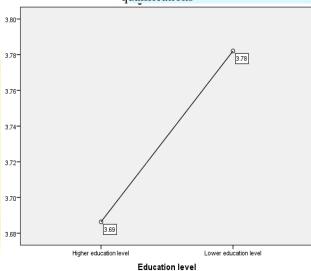
Figure 2: Satisfaction level across the gender



In order to check if there are any differences in the level of satisfaction among the respondents with different education attainment, a factorial analysis was performed. The statistics f(5)=4.734, p<.001, showed that there was a significant difference on satisfaction scores among customers with various academic qualifications. It is found that the customers with higher levels of formal educational qualification (master and bachelor's degree) are less satisfied as compared to other academic groups. It was found out that the customers having traditional/monastic education and those with less than the college education among the modern educated lots are more satisfied with the services of the bank compared to the other categories. The means plot shows that satisfaction score of the customers having high formal

academic qualifications are less satisfied than those with monastic, informal and with no educational background. This could be as a result of their limited business with the bank or that they are less demanding than the others.

Figure 3: Satisfaction level across various academic qualifications



For the purpose of the analysis, the academic attainment was dichotomized as higher education level and lower education level. The analysis result showed that there was a significant difference in satisfaction level between the respondents with high and low education levels t(1995.504)=-4.383, p<0.001. The same can be noted with inverse linear relation between the satisfaction score and the education level as shown in the graph above.

The lower satisfaction level among the customer with higher formal education could be as a result of their relatively higher expectation for service parameters or they could be comparing the service quality of BOBL with the other national or international banks since they are expected to have outside exposure. This provides the scope for the future researcher to compare the satisfaction level of the customer with higher education background who is also the customers of multiple banks.

In order to check the existence, if any, of the difference in satisfaction score between male and female customer with various academic qualifications, a factorial analysis of variance was performed. It was found that, generally, there is no significant difference in the satisfaction score between the male and female customer with various academic qualifications, f(5)=0.975, p=0.432.

However as we look at the profile plot of the estimate marginal means score between male and female customers with various academic qualifications, it reveals that the males with the informal education are less satisfied (M=3.71, SD=0.46) compared to the female customers (M=3.95, SD=0.39)

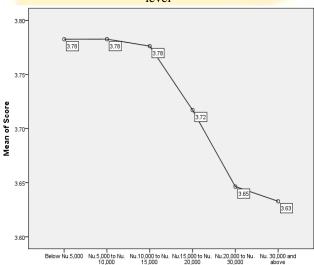
The Founder of CD Baby, Derek Sivers said, "The single most important thing is to make people happy. If you are making people happy, as a side effect, they will be happy to open up their wallets and pay you." And in order for them to open their wallet and pay you they should firstly have money in their wallet.

There is no doubt that the banks deal with the money and it is usually the one who has the money has the business with the bank. Ad Legend David Ogilvy said, "try to appeal to everyone, and you'll end up appealing to no one". As a popular saying goes, you can't be doing all things to all people.

Therefore, it is important that banks identify and live up to the satisfaction to retain or turn such customer who has high income and who does not shy to open up their wallets and pay.

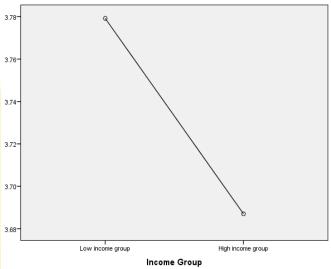
In order to check whether the satisfaction level was same across the customers of various income groups, a one-way anova was performed. The result f(5)=4.623, p<.001, showed that there was a significant difference in the mean satisfaction scores between the customers with various monthly income.

Figure 4: Relationship between income and satisfaction level



It is interesting to note the inverse relationship, almost in a linear fashion is established between the monthly incomes of the satisfaction scores of the respondents. Further to understand if the difference is significant, the income groups were divided into two groups by drawing an imaginary vertical line through the average income of the respondents (based on Bhutan's general living standard) and the significance between the means are tested.

Figure 5: Inverse relationship between income and satisfaction level



It shows that the mean scores are different (t statistics t(1871.41)=4.228, p<0.001); there is significant difference in level of satisfaction. It was found that the high-income group customers were less satisfied as compared to the lower income customers.

#### 6. CONCLUSION

Bank of Bhutan meets the pre-set CSI standard and assumes its customers fairly satisfied, however, the company has to be mindful of the differences in the satisfaction level of the different groups of customers for market segmentation. It shows that the customers with higher education levels are less satisfied as compared to the customers with lower education qualifications. It is crucial that the BOBL understands the expectations and desires for quality of services to retain less satisfied customers, It is generally believed that higher the qualification higher the earning capacity and more informed are the customers. And these are the group of customers who at large will have the business with other banks. It is highly recommended that BOBL provide special attention to this group of customers for the longterm benefit of the company. Satisfaction scores on different key result areas show that the BOBL needs to improve their customer handling procedures at the frontlines and dealing on customers' complaints.



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