Service sector contributes its largest share in the economy of India and banking industry is one of the largest service industries in the country. The Indian banking industry has undergone the transformation process in last few decades and it is still becoming advanced year by year. The Government of India is putting their best efforts to cover all financial transactions under the banking net and to make available the banking services to each household. The Government of India is infusing fresh capital to make the public sector bank to comply with the Basel-III norms and considering the mergers of these banks to form big banks to depict them as a large banking institution at world level. While on other side, the government is encouraging the private players and big corporate houses to come in banking service industry. This enhances the competition among bank leaders to compete with each other. The bank leaders are providing latest technology based banking services to attract, enhance and retain the customers. Due to this, it becomes essential to know the level of customer’s service quality perception, customer satisfaction and his future behavioral intentions towards the usage of such services.

The present study is in quest of meeting the above mentioned objectives by surveying 750 customers of 15 banks (Public, Private and Foreign banks) to understand their perceptions towards service quality, customer satisfaction and their behavioral intentions regarding the TBBS offered by these selected banks. The study collected primary data using SSTQUAL scale as suggested by Lin and Hsieh (2006) from the customers of selected banks in NCR region of Delhi, India. The collected data was organized, summarized and classified into MS Office excel sheets and further analyzed using SPSS version 19. The statistical techniques of Arithmetic Mean, Standard Deviation, Variance, Reliability Test (Cronbach Alpha), t-Test, F-Test (ANOVA), Karl Pearson’s Coefficient of Correlation and Multiple Regression were used to draw findings from the data.
The following sections contain major findings, suggestions and scope of future research.

5.1 Major Findings

A research is conducted to find solution of a particular business problem or to measure the present level of any concept. The present study measures the level of customer service quality perception (CSQP), Customer satisfaction (CSAT) and customer’s behavioral intentions (CBI) with their interrelationships. The followings sections describe the findings related to above mentioned independent and dependent variables.

5.1.1 Findings Regarding Customer Service Quality Perception (CSQP)

The customer service quality perception towards TBBS offered by the selected banks was measured using SSTQUAL scale (Lin & Hsieh, 2006) consisting of TBBS quality dimensions as functionality, enjoyment, security, assurance, design, convenience and customization (also known as TBBSQUAL in banking industry). Each of the dimensions contains more than one survey item to measure the respective dimension. For the purpose to draw inference the each dimension responses score on seven point Likert Scale (where 1 = Strongly Disagree to 7 = Strongly Agree) were averaged for all customers.

The responses show that the banking customer has good perception towards the TBBS offered by the selected banks. Overall on an average the findings suggest that the CSQP has an average of 5.61 with standard deviation of 0.60 on seven point Likert-Scale where 1=strongly disagree to 7= strongly agree and N = 750. The findings suggest that the customers are moderately in agreement with CSQP provided by selected banks. The private sector banks are leading in CSQP with an average of 5.85 with standard deviation of 0.51 followed by the public sector banks with an average of 5.53 with standard deviation of 0.68; then foreign banks with an average 5.46 with standard deviation 0.51. The test results of ANOVA show that the private sector banks are providing significantly high CSQP as compared to public sector banks and foreign banks. While there is no significant
difference exist between level of CSQP of public and foreign banks. This finding appears to indicate that the private sector banks customers have best level of Customer Service Quality Perception as compared to customers of public sector and foreign banks. As per the study, The HDFC and Axis bank have the highest level of CSQP towards TBBS offered by them. Though the HDFC topped the list of selected banks but the ANOVA test results showed that there is no significant difference between the CSQP of these two banks.

5.1.2 Findings Regarding the TBBSQUAL Dimensions

The study results show that the assurance dimensions has rated highest among TBBSQUAL dimensions with an average of 5.75 and S.D = 0.91. The respondents find the TBBS offered by the selected banks well known and having good reputation. The respondents find the TBBS offered by the selected banks aesthetically good and use up to date technology with Mean=5.68 and SD= 0.81. The respondents find the TBBS clear, error free and taking less effort to work on with an average of 5.56. The respondents also find the TBBS secure, convenient and customized with averages ranges from 5.54 to 5.59. The findings appeared to show that the on an average respondents are least in agreement with the customization of the TBBS and most agree with assurance and design part of the TBBS. The bank leaders should focus on more customized TBBS to the customers to make them satisfied. The customers find the security and assurance dimensions relevant in the context of TBBS. The respondents are showing an average of their opinion 5.60 regarding their overall satisfaction and an average of their opinion 5.66 to reuse and recommend the TBBS to their friends. This shows a moderate level of satisfaction and customer’s future actions to reuse the TBBS offered by the selected banks.

5.1.3 Findings Regarding Customer Satisfaction (CSAT)

As discussed in chapter-2, it is well understood that the satisfaction comes after fulfillment of some needs or basic requirements. As per Maslow in 1954, the human satisfies its needs in defined arrays or steps one after one. In an attempt to
define customer satisfaction Kotler and Susanto in 2000 described customer satisfaction as the level of customer’s feelings after comparing the performance with expectations. In case of performance equal to expectations, customer feels satisfaction and if performance is less than the expectations, customer will be dissatisfied. While measuring the customer satisfaction, the current study uses the three items taken from American customer satisfaction index which were also used by Lin and Hsieh (2006).

The findings suggest that overall on average customers satisfied with the TBBS offered by the selected banks with an average of 5.60 with S.D. = 0.73 on seven point Likert-Scale where 1=strongly disagree to 7= strongly agree. This shows a moderate level of satisfaction among the customers towards TBBS offered by selected banks. Approximately 93% of the respondents are in agreement with, ‘Overall, I am satisfied with the TBBS offered by the bank.’ This shows that overall on average customers are satisfied with the TBBS offered by the selected banks. This is a positive sign for the bank leaders to expand the current level of TBBS to other areas on the basis of findings of this study. While looking at the descriptive question, ‘The TBBS offered by the bank exceed my expectations’ around 86% of the respondents are agreeing with this and 14% are not. As in India around 40% population is still to come under the banking services net, the bank leaders should work little more to provide them with TBBS as per their expectations. As stated in the chapter 2, the gap between expectation and perception leads to dissatisfaction, the bank leaders are required to focus on this aspect. Approximately 88% of the respondents are in agreement with, ‘The TBBS offered by the bank are close to my ideal TBBS’. The test results of ANOVA show that the private sector banks are providing significantly high CSAT as compared to public sector banks and foreign banks. While there is no significant difference exist between level of CSAT of public and foreign banks. This finding appears to indicate that the private sector banks customers have best level of CSAT towards TBBS as compared to customers of public sector and foreign banks.
As per the study, The HDFC and Axis bank have the highest level of CSAT towards TBBS offered by them. The descriptive statistics applied on the collected primary data show that the HDFC bank customers are highly satisfied with the TBBS offered by the said bank. The Axis Bank, Federal Bank, Canara Bank and Deutsche Bank are on 2nd, 3rd, 4th and 5th position respectively on the basis of CSAT. The detailed list for all 15 banks is given in Annexure-Y.

The bank leaders may be able to assess customer satisfaction with the help of Customer Satisfaction regression model that uses multiple regression analysis. The Multiple Regression Model-I shows that the TBBSQUAL dimensions of customization, enjoyment, functionality and design (independent variables) combined together seems to explain customer satisfaction (dependent variable). The bank leader can use the following equation to assess customer satisfaction:

\[
CSAT = 0.45 + 0.29 \text{CUSTOM} + 0.27 \text{ENJOY} + 0.23 \text{FUNCTN} + 0.13 \text{DESIGN} + \text{error}
\]

This equation is providing the major determinants of CSAT on which bank leaders can work on to make customers satisfied. The service security, assurance and convenience dimensions did not find contributing in the fitness of model, due to this they have been not been included in the model. The customer at the level of self-actualization state expects customized services from the service provider and at the same time fulfillment of the lower level needs (security, assurance and convenience) by the services will not make him satisfied. It seems that customer may feel dissatisfaction in the absence of security, assurance and convenience but their presence did not find significant for predicting the customer satisfaction. These finding can be supported by the Herzberg’s motivator-hygiene theory in which motivator factor & hygiene factors are explained. The motivator factors are those factors that lead to satisfaction and hygiene factors are the factors those prevents dissatisfaction. On the basis of this the service customization, enjoyment, functionality and design dimensions of TBBS are the ‘motivator’ factors and the service security, assurance and convenience dimensions are hygiene factors.
5.1.4 Findings Regarding Customer Behavioral Intentions (CBI)

Customer Behavioral intentions (CBI) are the motivational factors which affect customer’s behavior. The behavioral intentions are the indications how determinedly the customer is willing to try the service or product or to purchase it or to go by a particular behavior (Ajzen, 1981). As per Zeithaml et al., (1996) CBI can be taken as the indications that indicate about the customer whether he will stay with services of service provider or not. It simply means that whether the customer will remain using the services of any organization or it will discontinue using the services. Ajzen (1991) emphasized that customer perceptions and his attitudes are having meaningful role in predicating the actual behavior of the customer. As per theory of planned behavior, behavioral intentions lead to predict human behaviors. Ajzen (1991) postulated that while determining behavioral intentions following three factors are crucial:

1. Attitude toward a behavior
2. Subjective norms
3. Perceived behavioral control.

Ajzen (2005) indicated that customer’s attitude determines customer’s behavioral intentions and actions. The findings suggest that overall on average customers showed positive behavioral intentions towards the usage of the TBBS offered by the selected banks with an average of 5.66 with S.D. = 0.80 on seven point Likert-Scale, where 1=strongly disagree to 7= strongly agree. This shows a moderate level of behavioral intentions among the banking customers towards TBBS offered by selected banks.

Approximately 88% of the respondents are in agreement with CBI1, ‘The probability that I will use the TBBS offered by the bank again is’, CBI2, ‘The likelihood that I would recommend the TBBS offered by the bank to a friend is’ and CBI3, ‘If I had to do it over again, I would still use the TBBS offered by the bank.’ This shows a good level of positive intentions among customers to reuse
the TBBS and recommend the TBBS to their friends. This may lead to positive word of mouth to other customers and the usage of TBBS is likely to rise. The customers also showed positive intentions to repeat the usage of TBBS offered by their respective banks. But the ANOVA analysis suggests that there is a significant difference among the CSQP of the TBBS offered by these fifteen banks. So if the customers use the TBBS for more than one bank, then he may perceive the TBBS differently. This may lead to change in the CBI for the TBBS of that bank which has less level of CSQP. So the bank leaders should continuously improve their TBBS as per the market leaders in the Indian banking industry.

The findings appear to indicate a statistically significant relationship exist between CBI and all service quality dimensions covered in the study. Each of the seven service quality dimensions show to have a significant positive bivariate correlation with CBI. The bank leaders may be able to assess CBI with the help of Multiple Regression Model-II & III. The Multiple Regression Model-II shows that the TBBSQUAL dimensions of customization, functionality, enjoyment, design and assurance (independent variables) combined together to explain customer behavioral intentions (dependent variable) The bank leader can use the following equation to understand the interrelationship among CBI and TBBSQUAL dimensions:

$$CBI = 0.29 \text{CUSTOM} + 0.23 \text{FUNCTN} + 0.20 \text{ENJOY} + 0.15 \text{DESIGN} + 0.11 \text{ASSUR} + \text{error}$$

The model indicates that this combination of the TBBSQUAL dimensions can explain approximately 52% of the variability in CBI towards TBBS in India. The bank leaders may focus on maintaining and improving the TBBSQUAL dimensions of customization, functionality, enjoyment, design and assurance in order to align customer’s behavioral intentions of reusing the TBBS in positive direction. The TBBSQUAL dimensions of customization, functionality, enjoyment, design are the common determinant to make customers satisfied and to shape positive behavioral intentions to reuse the TBBS and recommend the
usage to their friends. The CBI can also be assessed using a combination of ‘CSAT & TBBSQUAL’ dimensions as independent variables. The Multiple Regression Model-III shows that the ‘CSAT & TBBSQUAL’ dimensions of assurance, customization, functionality, design (independent variables) combined together to explain customer behavioral intentions (dependent variable). The regression equation for the said model is given by:

\[
CBI = 0.51 \text{CSAT} + 0.11 \text{ASSUR} + 0.13 \text{CUSTOM} + 0.13 \text{FUNCTN} + 0.09 \text{DESIGN} + \text{error}
\]

The model indicates that this combination of the TBBSQUAL dimensions with CSAT can predict approximately 60% of the variability in CBI towards TBBS in India. So it is clear that the bank leaders should focus on improving satisfaction which leads to make customer's behavioral intentions positive. It can be concluded that the findings of the present study appear to confirm the previous researches that CSAT is major antecedent of CBI.

5.1.5 Findings Regarding Demographic Factors

Findings about Age

The study uses one way ANOVA to make inference regarding the significance of difference among variables in terms of age, gender, bank wise and years of experience with bank. Comparing the means among different age groups gives the no significant difference among different age groups on the basis of seven dimensions of TBBSQUAL and two dependent variables CSAT & CBI. None of the variables shows the significant difference among the said age groups. The findings suggest that the bank leaders may provide the homogenous TBBS to customers of all age groups. The data appears to show that all different age participants has no significant difference in their perceptions towards functionality, enjoyment, security, assurance, design, convenience, customization, customer satisfaction and customer behavioral intentions.
**Findings about Gender**

The findings of the study show that there is no significant difference among variables on the basis of gender. This implies that the banks may not require any special improvements or changes in service quality of TBBS while offering these services to males and females. The bank leaders may provide homogeneous TBBS to males and females, the findings are based on the sample.

**Findings about ‘Years of Experience with Bank’**

The findings of the present study regarding the ‘years of experiences with bank’ show the significant differences among measurement of variables service ‘design’, ‘convenience’, ‘customization’ and ‘customer behavioral intensions’ based on ‘years of experiences’ with their selected bank. The group having below five years of experience and 5-10 years of experience with bank perceives the TBBS overall on average better than those of other group of 10-15 years. The groups of below 5 years and 5-10 years of experience with bank perceive the service ‘design’ almost equally. The group consists of respondents having experience below five years of using TBBS find the TBBS more convenient than the respondents having experiences more than 15 years. But the same group has the same level of perception with groups having experience 5-10 and 10-15 years of using TBBS. The bank leaders should provide different service design, convenience and customization for newer customers as compared to old ones.

The group of having less than five years of experience of using TBBS has better behavioral intentions than those of other groups. This group has the highest possibility of recomending their current bank’s TBBS to their friend and to use the services over it again.

**5.2 Suggestions**

In the light of above findings, first of all, it is suggested that the bank leaders should work on the customer’s service quality perceptions as the study found CSQP have the moderate levels of average scores. On the basis of CSQP in the list of top five banks out of selected fifteen banks, three banks are from private
sector banks and one bank from each of public and foreign banks. The foreign and public sector banks should focus on improving their CSQP regarding their TBBS prevailing in India.

**Secondly**, there is scope of improvement in the level of the Customer satisfaction of TBBS offered by the selected banks in India. HDFC bank’s customers reported highest level of CSAT (6.15 on seven points Likert-Scale) followed by Axis and Federal bank among selected banks. Moreover, on the basis of CSAT scores in the list of top five banks out of fifteen selected banks, private banks are dominating over public & foreign banks. The ‘Canara bank’ topped among the selected public sector banks while ‘Deutsche bank’ among selected foreign banks on the basis of average CSAT. The foreign and public sector banks should focus on improving their CSAT regarding their TBBS prevailing in India.

**Thirdly**, the bank leaders should work on meeting customers’ expectations of their ideal TBBS while making them satisfied. The bank leaders may focus on maintaining and improving the TBBSQUAL dimensions of **customization, functionality, enjoyment, design and assurance** to align customer’s behavioral intentions of reusing the TBBS in positive direction in India. The TBBSQUAL dimensions of customization, functionality, enjoyment, design are the common determinant to make customers satisfied and to shape their positive behavioral intentions to reuse the TBBS and recommend them to their friends.

The findings suggest that the bank leaders may provide the homogenous TBBS to customers of all age groups and irrespective of their genders. This can reduce the cost of providing different level of TBBS to said groups. While the bank leaders should provide different service design, convenience and customization for newer customers as compared to old ones.

### 5.3 Further Research Directions

Research is a continuous and never ending process. One research establish foundation to new research and opens the horizons for subsequent research. The present study is a sincere and humble attempt made by researcher to assess the
customer service quality perception of technology based-banking services offered by selected banks in India. Though, the study conducted on 15 banks having largest network of branches & ATMs covering public, private and foreign banks and surveyed 750 customers residing in NCR of Delhi using a new survey instrument in the context of India yet the findings may not be generalised for a country having population more than 1.2 billion with ample of diversity in culture, education and technology usage. The future researchers may think of conducting similar study on another set of banks in other part of the country using the SSTQUAL scale containing more number of respondents.

The present study used convenience sampling technique to recruit the respondents to participate in survey. The future research may use some another sampling technique to solve the purpose. The researchers can survey a sample consisting of respondents from different part of the country other than that of NCR.

Thus there are numerous of opportunities are present for future researches on the TBBS offered by different banks operating in India.

5.4 Limitations of the Study

Though, the present study is a sincere and comprehensive effort to measure service quality perception of TBBS in India yet while talking about the country having a population of more than one billion, generalization seems to have limited fit to the results of the study. The current research study is limited to customers of selected 15 commercial banks from Indian banking industry (that constitutes public, private and foreign sector banks), who agreed to participate voluntarily within the time available to conduct the study. The examination included customer perceptions of TBBS service quality, CSAT, and CBI. The use of non probability sampling was a limitation due to inability to access confidential customer databases from banks to perform a probability sampling, a convenience sampling technique became inevitable to perform. Many researchers have used convenience sampling when measuring service quality and SAT (Kaynak, 2005; Alkibsi, 2010; Padhy, P., & Swar, B. 2009).