



## E-BANKING PERFORMANCE EVALUATION OF NATIONALIZED BANKS IN INDIA – AN EMPIRICAL STUDY

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### ABSTRACT

*Explosive growth in Information and Communication Technology have removed narrowed digital divide and turned business sphere to electronic world. Specifically, technological innovations have led credence to global transformation of operational dimension of traditional banks over a decade ago. Internet technology has brought about a paradigm shift in banking operations to the extent that banks embrace internet technology to enhance effective and extensive delivery of wide range of value added products and services. Electronic banking is the use of electronic and telecommunication networks to deliver a wide range of value added products and services to bank customers. The use of information technology in banking operations is called electronic banking. Electronic banking is a product of e-commerce in the field of banking and financial services. Banks are also offering payment services on behalf of their customers who shop in different shops. It is an umbrella term for the process by which a customer may perform banking transactions electronically without visiting a brick-and-mortar institution. Today's business environment is extremely dynamic and experience rapid changes as a result of technological improvement, increased awareness and demands that banks serve their customers electronically.*

**KEYWORDS:** *business environment, E- Banking, profitability, technological innovations*

### INTRODUCTION

E- Banking is a service of electronic banking (E-Banking). It enables bank customers to access accounts and general information on bank products and services through the Internet. Besides existing channels such as ATM, PC banking, Home banking, the adoption of Internet banking adds another delivery channel and forms the multichannel model seen widely in banking industry nowadays. Internet banking holds huge potential as a convenient and efficient delivery which has not been provided before by banks. At its ultimate end, Internet banking may become a new business model totally different from the traditional one (Internet-only Model – bank) with no branch, all banking activities is performed online The applications of technology and Internet banking in particular have brought great changes to the banking industry.

### STATEMENT OF THE PROBLEM

The growing specialization of the Banks services and the increasing dependence of the common man upon the Banks management have made the E-Banking a very complex organization. Within the organizational matrix of the Banks various units interact and try to achieve the goals of the Banks.

recent empirical studies indicate that electronic banking is not having an independent effect on banking profitability, although these findings may change as the use of the Internet becomes more widespread. None of these studies focused on the effect of internet banking on operational performance of nationalized banks. Hence, this study sought to fill the existing research gap by investigating the effect of internet banking on operational performance of nationalized banks in Kalburgi and Bidar districts of Karnataka.

### REVIEW OF LITERATURE

Milimd Sathye (1999), the author stated that internet and other virtual banking and significantly lower the cost structure than traditional delivery channel. So, the bank should encourage customers to use internet for banking transactions. The analysis of the study showed that security concerns and lack of awareness stand out as the reasons for non-adoption of internet banking by Australian customers.

Elizabeth Daniel (1999), the objective of the study was to analyze the current provision of electronic services of major retail banking organizations in UK. To make services more adoptable, customers should be provided maximum choice and convenience. Restriction and limitation within

organization to operate the services and its market share or strength were viewed as important to decide and operate e-banking services.

Mishra A. K (2005), scanned the motives for the customer satisfaction with the services delivered by the Urban Cooperative Bank (UCB) .UCB was new in the banking system and they know this fact that customer satisfaction is the only key factor which can help them to survive in this competitive environment. The ultimate result of this investigation was, the active participation of employees (at level of bank) is necessary for improving customer services.

Safeena et al (2010) determines the consumer’s perspective on internet banking adoption. Finding shows that perceived usefulness, perceived ease of use, consumer awareness and perceived risk are the important determinants of online banking adoption and have strong and positive effect on customers to accept online banking system.

Uppal, R. K (2011) threw light on growth of information technology in various banks. The objective of this research is to analyze the extent of technological developments in various bank groups. Findings shows as compared to new private sector banks and foreign banks, in public sector banks very less IT has taken place. The maximum technology is taking place in new generation private sector banks and foreign.

Ms.Vrushali , et at., (2015) Thus, this study has analysed the overall usage of E-banking services by the customers from public and private sector banks in India. Gender, Age, Education and Occupation are the important demographic factors which have used to measure the customers using e-banking services. E-Banking will be successful for banks only when they have commitment to e-Banking along with a deeper understanding of customer needs.

**OBJECTIVES OF THE STUDY**

The main objectives of the present study are as under:

1. To study the perceptions of customers towards E- Banking.
2. To examine the customer’s satisfaction level on E-Banking Services.
3. To evaluate the performance of E-Banking through empirical evidence.
4. To offer the suggestions in light customer’s perception for an effective E-Banking system.

**RESEARCH HYPOTHESES**

In this research study the researchers have set five null hypotheses. The following hypotheses were formulated and test, depending upon the necessity tables were used. The hypotheses have been set and tested.

Sl.No	RESEARCH HYPOTHESES		
1.	Null	Age-wise	There is no significant difference between <b>age</b> of the customer and <b>the satisfaction level of e-banking services.</b>
	Alternative		There is significant difference between age of the customer and the satisfaction level of e-banking services.
2.	Null	Occupation-wise	There is no significant difference between <b>occupation</b> of the customer and <b>the satisfaction level of e-banking services.</b>
	Alternative		There is significant difference between occupation of the customer and the satisfaction level of e-banking services.

**RESEARCH METHODOLOGY**

In the light of above objectives mentioned, a close study has carried out on customers of Indian Nationalized Banks in Bidar and Kalburagi Districts. The population is restricted to account holders in National Banks. The universe for data collection is restricted to the Bidar and Kalburagi Districts. The study is mainly based on the primary data.

**1) SELECTION OF STUDY AREA**

The universe of the present study is Bidar and Kalburagi districts. This districts is greater influence of other districts. Industries connection and transport as and around Bidar and Kalburagi districts have a considerable earring on the people of Bidar and Kalburagi districts, are also the various engineering colleges, Medical institution, Universities. Bidar and Kalburagi districts various voluntary and government agencies have implemented several development programme in the districts and in Bidar and Kalburagi districts under such circumstance the awareness of E-Banks and there are many banks in the Bidar and Kalburagi districts.

**2) SOURCES OF DATA**

The present study has conducted with the help of both primary and secondary sources of data.

**a) PRIMARY DATA:**

The study is mainly based on the primary data. The primary data have collected through questionnaires consisting both open and close ended questions. Before the actual collection of data, the questionnaires were pre-tested through a pilot study. Necessary modifications have made in the questionnaires on the basis of testing.

**b) FIELD WORK:**

The field investigation was undertaken during the period of June 2017 to September 2017. The personal interview method was adopted. The researcher has received the required co-operation of bank customers in Kalburagi and Bidar districts.

**c) SAMPLE:**

The samples of 400 customers were selected on purposive sampling method. The following Table No. 1.1 shows the selected respondents.

**Table. 1**  
**Number of Selected Respondents**

Sl.No	Particulars	Frequency
1	SBI Bank	100
2	Syndicate Bank	100
3	Canara Bank	100
4	Vijay Bank	100
<b>Total</b>		<b>400</b>

#### d) TOOLS FOR ANALYSIS

In the present study statistical tools like averages and percentages, were used wherever necessary. Further data are classified and presented in simple and lucid styles by using tables and graphs. The researchers used percentage, one-way ANOVA test as the techniques to interpret the data and test hypotheses. In analyzing the data charts, graphs and tables have been used to make the study more effective.

#### e) SECONDARY DATA

The secondary data were collected and classified, bank publications. Monthly journals of the Banking, Annual Reports of Banks. RBI bulletins viz., Indian Journal of Banking.

#### THE STUDY – EMPIRICAL STUDY AGE STRUCTURE OF RESPONDENTS -

The distribution of respondents' chosen for the age structure of E-Banking customers in the present study and presented in the Table No.2.

**Table-2 Age Structure of Respondents'**

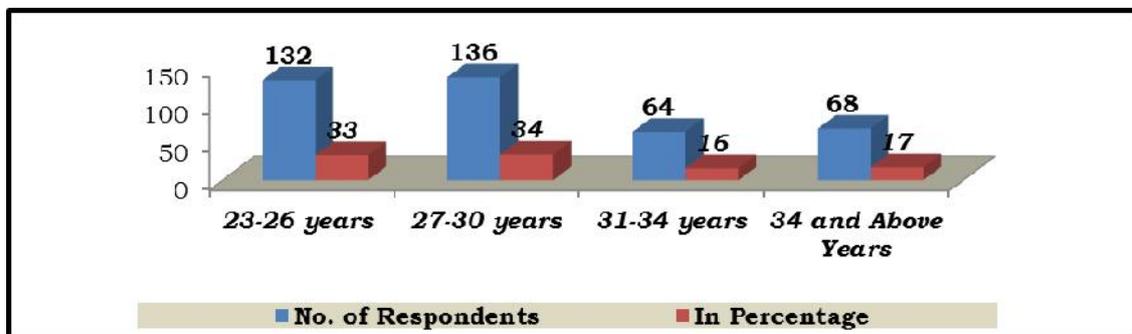
Age groups	No. of Respondents	In Percentage
23-26 years	132	33
27-30 years	136	34
31-34 years	64	16
34 and Above Years	68	17.
<b>Total</b>	<b>400</b>	<b>100</b>

Source: Field survey

The Table highlights age wise distribution of respondents in all the E-Banks of the present study area. It is clear from the above table that highest 34 percent respondents were belonging to age category of 27-30 years constituting, whereas number of respondents (33%) were following in the age category of 23 - 26 years. It is followed

by 17% in the age category of 34 and Above Years years and 16% in the age category of 31-34 years and Above Years. It is astonishing to note that measure position of the respondents fall in the adult category of 34 percent in age category of 27-30years and as shown in Graph

**Graph-1 Age Structure of Respondents'**



#### GENDER WISE DISTRIBUTION OF RESPONDENTS

The present study selected 400 E-Banking customers on simple random sampling basis. Selected sample comprises 200 male and 200 female respondents of different Banks in Kalburgi

and Bidar District. These respondents were interviewed as well as observed. The gender wise distribution of respondents and interviewed in the below Table No. 3.

**Table-3. Gender wise distribution of respondents**

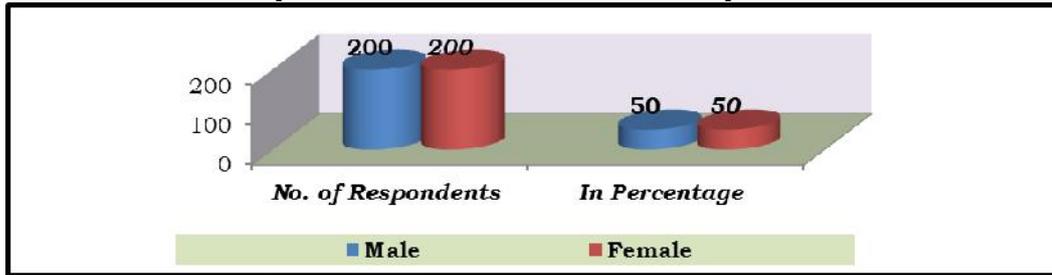
Particulars	No. of Respondents	In Percentage
Male	200	50
Female	200	50
<b>Total</b>	<b>400</b>	<b>100.00</b>

Source: field survey.

The above table reveals that gender wise distribution of respondents chosen for the present study. It is clear from the above table that 50% of respondents were belonging to male gender and 50% were belonging to female

gender. Thus, it can be inferred that male No. of respondents were equal to female respondents and as shown in Graph

**Graph-No.2. Gender wise distribution of respondents**



**OCCUPATION OF RESPONDENTS**

The distribution of respondents according to occupations detailed presented in the following table

**Table. 4. Occupation of Respondents**

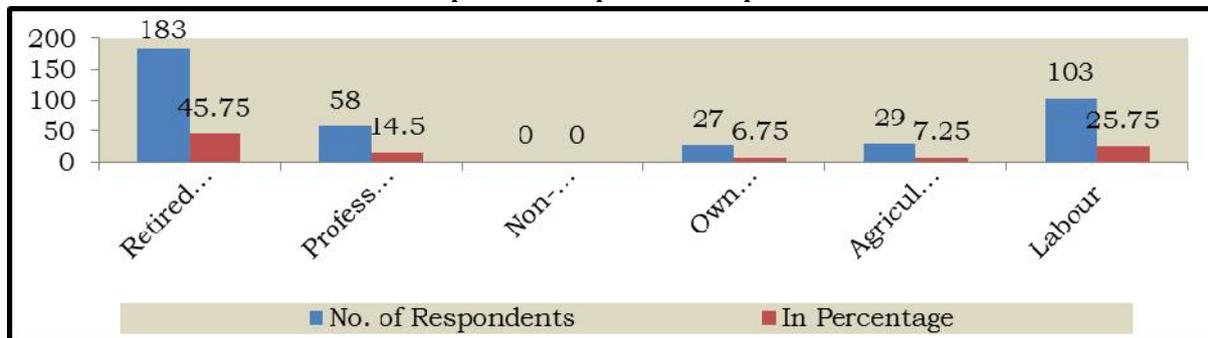
Particulars	No. of Respondents	In Percentage
Retired/ In Service	183	45.75
Professional	58	14.5
Non-Professional	00	00
Own Business/Entrepreneurship	27	6.75
Agriculture	29	7.25
Labour	103	25.75
<b>Total</b>	<b>400</b>	<b>100</b>

Sources: field survey

The above Table Shows that, clearly differing viewpoints about source of family earning from the respondents Survey of the investigation revealed that 400 respondents 45.75 % have depended on Retired / in Service whereas 25.75 percent respondents said that Labour followed

by 14.5 percent respondents said that our professional, 6.75 percent respondents said Own Business/Entrepreneurship and lastly 7.25 percent respondents said agriculture and it is observed that most of the respondents depends on Retired / in Service and Presented Graph

**Graph No.3 Occupation of Respondents**



**TYPE OF BANK ACCOUNT DO YOU HOLD**

Banks provides different types of savings account serving a different purpose and need. Bank customer should be careful when he is opening an account with the bank. These accounts

differ when it comes to maintaining minimum balance and services available and the responses to summaries are presented in the table

**Table-5 Type of bank account do you hold**

Particulars	Respondents	Percentage
Saving	380	95
Current account	18	4.5
Fixed deposit	02	0.5
Recurring deposit	00	00
<b>Total</b>	<b>400</b>	<b>100.00</b>

Source: field survey.

From the above t reveals an interesting fact that, from over field survey is that type of bank account do you hold and vice versa.95% respondents said saving account followed by 4.5 percent respondents have current account

and remaining 0.5 percent respondents have fixed deposit and it is observed that most of the respondents have saving bank deposit and also presented in the Graph

Graph No.4 Type of bank account do you hold

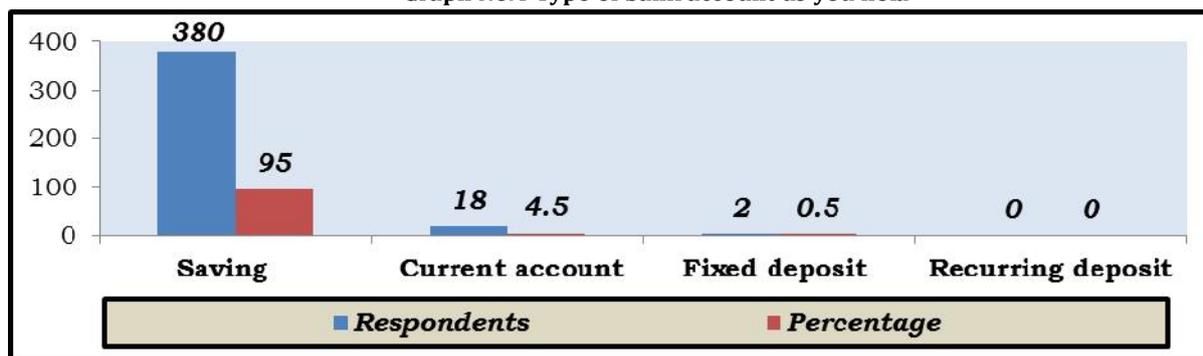


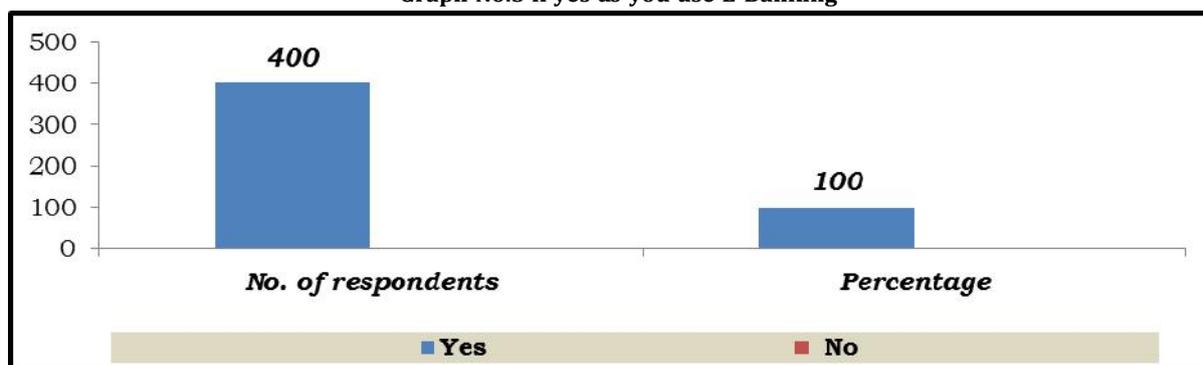
Table-6. if yes do you use E-Banking

Particulars	No. of respondents	Percentage
Yes	400	100
No	00	00
<b>Total</b>	<b>400</b>	<b>100</b>

Source: Field survey

The Table reveals the respondents do you use E-Banking, electronic technology 100 percent respondents said use E-Banking means providing banking services to customer at his home, office travelling with the use of Banking and presented following graph.

Graph No.5 if yes do you use E-Banking



### RESEARCH HYPOTHESES RESULTS – One-Way ANOVA

The researchers have set null hypotheses. The following hypotheses were formulated and test, depending upon the necessity tables were used. The researchers used statistical tools like One-Way Anova and Chi-Square Test at 5% level of Significance as the technique to interpret the data and test hypotheses and make the research study more effective.

Sl.No	RESEARCH HYPOTHESIS	
1.	Null	There is no significant difference between <b>age</b> of the customer and <b>the satisfaction level of e-banking services</b> .
	Alternative	There is significant difference between age of the customer and the satisfaction level of e-banking services.

Table No - 7

Comparison of satisfaction level of e-banking services and age of the respondents

Particulars	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
23 - 26 years	132	1.00	.000	.000	1.00	1.00	1	1
27 - 30 years	136	1.00	.000	.000	1.00	1.00	1	1
31 - 34 years	64	1.00	.000	.000	1.00	1.00	1	1
34 and above years	68	1.16	.371	.045	1.07	1.25	1	2
<b>Total</b>	<b>400</b>	<b>1.03</b>	<b>.164</b>	<b>.008</b>	<b>1.01</b>	<b>1.04</b>	<b>1</b>	<b>2</b>

Source: Source: Primary Data using SPSS v.20

Note: 1. N - Null Hypothesis/ R-Rejected/df - Degree of Freedom/H<sub>0</sub> -Null Hypothesis/H<sub>a</sub> - Alternative Hypothesis.

ANOVA					
Particulars	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.477	3	.492	21.143	.000
Within Groups	9.221	397	.023		
<b>Total</b>	<b>10.698</b>	<b>400</b>			

Analysis of variance is so called because it compares the variance (variables in scores) between the different groups with the variability within each of the groups. An F ratio is calculated which represents the variance between the groups divided by the variance within the groups. This table gives both between groups and within groups sums of square, degrees of freedom and F ratio. The mean, standard deviation and standard errors of samples are given in above output

table under the head Descriptives. The results of ANOVA are given in above table. The significance of variance, i.e., P-value, given under the head Sig. is 0.000. Since, the significance value 0.000 is less than 0.05. So, the null hypothesis has been rejected. Therefore, the null hypothesis is rejected and alternative hypothesis is accepted. There is significant difference between age of the customer and the satisfaction level of e-banking services.

Sl.No	RESEARCH HYPOTHESIS		
2.	Null	Occupation-wise	There is no significant difference between <b>occupation</b> of the customer and <b>the satisfaction level of e-banking services.</b>
	Alternative		There is significant difference between occupation of the customer and the satisfaction level of e-banking services.

**Table No -8**

Comparison of satisfaction level of e-banking services and profession of the respondents								
Particulars	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Retired	183	1.00	.000	.000	1.00	1.00	1	1
Professional	58	1.00	.000	.000	1.00	1.00	1	1
Own business/Entrepreneurship	27	1.00	.000	.000	1.00	1.00	1	1
Agriculture	29	1.00	.000	.000	1.00	1.00	1	1
Labour	103	1.11	.310	.031	1.05	1.17	1	2
<b>Total</b>	<b>400</b>	<b>1.03</b>	<b>.164</b>	<b>.008</b>	<b>1.01</b>	<b>1.04</b>	<b>1</b>	<b>2</b>

Source: Primary Data using SPSS v.20

Note: 1. N – Null Hypothesis/ R-Rejected/df – Degree of Freedom/H<sub>0</sub> – Null Hypothesis/H<sub>a</sub> – Alternative Hypothesis.

ANOVA					
Particulars	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.872	4	.218	8.767	.000
Within Groups	9.825	396	.025		
<b>Total</b>	<b>10.697</b>	<b>400</b>			

The mean, standard deviation and standard errors of samples are given in output 1 under the head Descriptives. The results of ANOVA are given in output 2. The significance of variance, i.e., p-value, given under the head Sig. is 0.000. Since, the significance value 0.000 is less than 0.05, it can be witnessed from the above statistical table that F value is 8.767 for 4 degree of freedom and asymptotic significance is 0.000, it indicates that the null hypothesis has been rejected and alternative hypothesis is accepted. There is significant difference between occupation of the customer and the satisfaction level of e-banking services.

## FINDINGS

The major research findings of the study are as under -

1. It is clear from the above table that highest 34 percent respondents were belonging to age category of 27–30 years constituting, whereas number of respondents (33%) were following in the age category of 23 - 26 years. It is followed by 17% in the age category of 34 and Above Years years and 16% in the age category of 31-34 years and Above Years.

2. It is clear from the above table that 50% of respondents were belonging to male gender and 50% were belonging to female gender. Thus, it can be inferred that male No. of respondents were equal to female respondents.
3. Clearly differing viewpoints about source of family earning from the respondents Survey of the investigation revealed that 400 respondents 45.75 % have depended on Retired / in Service whereas 25.75 percent respondents said that Labour followed by 14.5 percent respondents said that our professional, 6.75 percent respondents said Own Business/Entrepreneurship and lastly 7.25 percent respondents said agriculture and it is observed that most of the respondents depends on Retired / in Service.
4. Reveals an interesting fact that, from over field survey is that type of bank account do you hold and vice versa.95% respondents said saving account followed by 4.5 percent respondents have current account and remaining 0.5 percent respondents have fixed deposit and it is observed that most of the respondents have saving bank deposit.

5. This table gives both between groups and within groups sums of square, degrees of freedom and F ratio. The mean, standard deviation and standard errors of samples are given in above output table under the head Descriptives. The results of ANOVA are given in above table. The significance of variance, i.e., P-value, given under the head Sig. is 0.000. Since, the significance value 0.000 is less than 0.05. So, the null hypothesis has been rejected. Therefore, the null hypothesis is rejected and alternative hypothesis is accepted.
6. The results of ANOVA are given in output 2. The significance of variance, i.e., p-value, given under the head Sig. is 0.000. Since, the significance value 0.000 is less than 0.05, it can be witnessed from the above statistical table that F value is 8.767 for 4 degree of freedom and asymptotic significance is 0.000, it indicates that the null hypothesis has been rejected and alternative hypothesis is accepted. There is significant difference between occupation of the customer and the satisfaction level of e-banking services.

### SUGGESTIONS

1. Banks are advised to improve on their E-Banking products relentlessly. Upgrade their channels (such as ATM, MPOS, and POS) and enhance their software application (such as online application, e-mobile application) should be made where necessary so as to improve the quality of service delivered by them continuously.
2. The management of India banks should put in more resources in staff training and development. This will help with quality and timely service delivery. They should also introduce other products that could enhance their customer satisfaction.
3. In order to eliminate challenges that customers face in the usage of E-Banking products, banks are advised to ensure stable power supply, ensure 24/7 network service availability, improve more on the security of customers' transactions and personal data and create a platform whereby customers and bank management can interface to discuss on the (new) challenges that the former is facing and chart a new course of action so as to stimulate and ensure customers' satisfaction
4. Bank group should focus on developing the banking services for customers in the corporate customer segment. Besides traditional services, one of the fastest growing markets these days which is related to online transactions is e-commerce. Large and medium-sized banks can enlarge the size and the value transacting through Internet banking by linking with e-commerce businesses, become the intermediary to bridge the gap between firms.

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