

The Moderating Effect of IT Capability on the Relationship between BPR Factors and Performance of Pakistani Banks

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Abstract

Financial institutions work in a highly competitive market. There is always a pressure for improving the processes and IT up gradation, but there is a lack of research on this particular area. This paper focuses on investigating the impact of business process reengineering (BPR) on the performance of banks, while keeping the IT as moderator. BPR plays a vital role in improving the processes, thus affecting the overall performance of organization. Yet, the implementation of BPR requires a lot of risk. Thus, the success rate of BPR depends on how well it has been carried out. Data was collected through self-administered questionnaire from 50 commercial banks. The response rate was 95%. Data was analyzed through multiple regressions on SPSS. The results indicated that IT acted as a moderator between BPR factors and performance of Pakistani banks. This study has strong implications for managers & practitioners seeking to implement BPR in organizations.

Keywords: Business process reengineering, IT knowledge and capacity, Performance, Pakistani banks.

1. Introduction

The world has now become a global village. It has become more competitive place now. Firms are facing competition beyond local to global scenario. Globalization has increased the constant need of improvement for firms to make their products/services acceptable in the world market. The processes are made more and more efficient to cut cost and increase revenues. The Business Process Reengineering has emerged as an important domain in the late 20th century. This term was first coined by Hammer in 1990.

BPR is important for all types of firms. It has found implications in both financial and non-financial sectors. The banking sector is an important backbone of Pakistan's economy. The number of banks in Pakistan is increasing day by day. They are classified as public banks, private banks, microfinance banks, Islamic banks, foreign banks. Due to the increasing number of banks, the competition is at its peak in the financial sector. That time has gone when people come to bank out of their own need to save money. Nowadays, banks offer different types of offers to attract their customers and to increase their customer base.

1.1 Background

What exactly the BPR is and what it constitutes had been a debatable topic since introduction of BPR. The authors mentioned in a study that from the late 1980s to 1998, there was a lot of confusion regarding what exactly BPR is. In the beginning era of BPR, the authors pointed out that about sixty to eighty percent of reengineering projects have met failure (Holland & Kumar, 1995). Similarly, different authors came up with different definition of BPR (O'Neill & Sohal, 1999).

The aggressive competition among firms, increasingly changing customers' demands and requirements, technological advancements and globalization has necessitated the importance of process reengineering. These factors have led the financial service providers to go back one step and check their processes critically, that are they efficient enough or not.

BPR enables the firms to check processes and ask, why this is the way it is. It is the fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in critical contemporary measures of performance such as cost, quality, service and speed (Hammer & Champy, 1993). Customer focus became a key factor in determining the success of an organization (Idris, 2011).

The entire technological, human, and organizational dimensions may be changed in BPR. Information Technology plays a major role in Business Process Reengineering as it provides office automation; it allows the business to be conducted in different locations, provides flexibility in manufacturing, permits quicker delivery to customers and supports rapid and paperless transactions. In general it allows an efficient and effective change in the manner in which work is performed.

1.2 Problem Statement:

Business process reengineering is an important yet a very time consuming activity involving a lot of failure risk. It has no guarantee of success due to which the top management does not focus a lot on the BPR implementation. Business markets are facing extensive competition. In order to stand out in the market, it is important to keep an eye on the business processes and make necessary changes. Similarly, technology changes rapidly. There are also mixed results found about the role of IT and BPR in determining overall performance of firms. Thus, it is



important to figure out that how reengineering affects the productivity of Pakistani banks and what role does IT plays in this relationship. There is a lack of research on this particular area in Pakistani context. Thus, the implications of these studies in Pakistan are a matter of concern of this study.

1.3 Research Question

This research study is seeking to find out answers of the following research question:

Does the BPR factors and organizational performance of Banks significantly associated with each other? Is IT capability acts as a moderator in the relationship between BPR factors and organizational performance of banks?

1.4 Research objectives

This research study aims to attain the following objectives:

- To understand the importance of BPR in banks.
- > To figure out the role of IT in the relationship between BPR and performance of Pakistani banks.

1.5 Significance of the study

The business process reengineering is the least studied domain in Pakistan. There is less familiarity with this term. Industries focus more on continuous improvement or TQM. So, the main focus of this study is to make firms aware of the importance of BPR. BPR focuses on radical transformation of processes or organizational structure and /or culture. Management fears to implement BPR because of factors like fear of unknown or failure, lack of commitment from top management, high cost etc. Taking into consideration the above factors, the relationship of BPR factors with the organizational performance is to be studied, while keeping the IT capability as a moderator. IT capability as a moderator may act as either accelerator or inhibitor in the relationship. IT along with BPR factors may prove to be more safe and successful for organizational performance of Pakistani banks as compared to implementing BPR alone.

2. Literature Review

This section refers to the relevant literature on relationship between BPR factors, IT capability and firms' performance. It will describe the view point of earlier researchers and also their important contributions in this perspective. The theoretical framework and Operationalization of variables will also be presented in the end of this section.

2.1 Literature Review of Variables

2.1.1 BPR Factors

In order to achieve the dramatic organizational improvements, the market players need to redesign their processes. This is also necessary to survive in the current dynamic and turbulent business environment (Motwani et al., 1998). Business process re-engineering is the recent and significant discipline in the management sciences. There is, however, some confusion as to how, if at all, BPR should be implemented with other approaches such as total quality management (TQM) and benchmarking (Zairi & Sinclair, 1995).

Grey and Mitev (1995) explained BPR with respect to the incongruity involved by the usage of BPR with the notions of empowerment, commitment and technology. The authors also gave assumptions which challenged the extreme eagerness of BPR proponents. The authors Boudreau & Robey (1996) described in their studies two difficulties that affect the BPR evaluation: how to define BPR in a true sense and how to find whether it was applied properly or not.

In 2004, Attaran examined in a study that firms seeking to practice BPR should be first able to apply IT infrastructure and operations potential in the organization. The author summarized the roles of information technology in starting and maintaining business process reengineering in case of several firms who succeeded in IT application to BPR (Attaran, 2004).

A study conducted by Ringim and co authors (2011) concluded that ample financial resources and BPR factors like commitment by managers were positively related to the performance of organization as a whole. The dimensions for sufficient financial resources included cost management, customer service quality and organization and competence of organizational processes. The managers' commitment was also statistically significant to customer service quality and operations efficiency. However, some dimensions of BPR factors such as change management, BPR strategy arrangement and customer focus found to be insignificant to the performance of financial organizations.

2.1.2 Information Technology Capability

Technological advancements in the banking sector have transformed how people manage their finances (Olatokun & Olalekan, 2012). The relationship between firms' performances and the investments in IT has remained the subject of interest in recent years. However, all these research studies were conducted in United States. There has been little work done on this topic elsewhere, so there was lesser generalizability of the



findings of these researches.

Chen and Tsou in 1995 had conducted an empirical survey. Out of total 124 questionnaires, it was found that usage of IT was directly related to service innovation practices that help in becoming the competitive edge for firms. Along with management consent for change, IT is also the very crucial factor to implement BPR.

The IT assets improve the performance and growth potential of the firms. This is a debatable aspect as the experimented and observed results regarding IT contribution towards performance has been doubtful. The most of the findings have been based on firms' financial performance i.e. accounting based. This has led to ignore other important dimensions such as intangible aspects and strategic management (Bharadwaj et al., 1998).

The ultimate goal of every business is to improve the performance and earn profitability. This is why; a lot of companies are investing heavily in developing IT infrastructure. But this strategy proved to be fruitful for only some companies, but not in all cases. In 2011, Dewett & Jones conducted a study and developed the concept of IT competency. The data collected from 271 manufacturing firms suggested that in order to determine the outcomes of information technology, organizational learning played an important role in mediating the effects of IT competency on performance of organization. According to the previous studies, the IT infrastructure was found to be positively related to customer service management. However, there are mixed results for information technology capability acting as a moderator (Ringim, 2012).

2.1.3 Organizational Performance

The performance of an organization is important to be evaluated both from the managers and investors point of view. The managers should know how the organization has performed over a period of time to make necessary improvements and changes in the processes. The investors and general public is also required to know about the firms' position in the market for making investment decisions. Organizational performance reveals an organization's basic know-how and understanding related to customer needs and expectations (Slater & Narver, 2000).

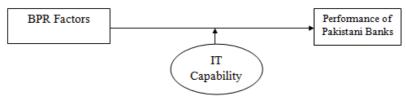
BPR radically transforms the core processes of organizations, thus leads to improve performance. There were some basic contradictions associated with BPR's application to organizations like the irony of IT's role as an enabler of BPR, the issue of making employees empowered and the paradox of commitment of employees. The authors recommended organizational learning theory and theory of organizational politics as a solution to resolve the issues linked with business process reengineering (Boudreau & Robey, 1996).

A case study based on Chase Manhattan Bank provided recommendations exclusively for carrying out BPR in banks. It included phases like energize, focus, invent and launch. Such activities helped in introducing new products and services, thus leading to better performance and increased revenue (Shin & Jemella, 2002).

The authors identified the major issues for successful implementation of BPR, thus leading to poor performance of firms i.e. changing attitudes and norms, making sure that there is flow of information and coping with resistance to change from higher management. There had been an insignificant association found between the IT application and BPR process cycle time reduction in a study (Terziovski et al., 2003).

According to a study carried out by Altinkemer and co authors found out that ROA decreased considerably during the starting year of project. Later on, the performance indicators improved showing that business process reengineering has positive impact on the overall productivity and performance of the firms (Altinkemer et al., 2011). Another study based on North American financial firms revealed that such projects incorporating customer focus and cost reduction were proved successful (Drew, 1994).

2.2 Theoretical Framework:



2.2.1 BPR Factors

BPR factors are operationalized by change management, BPR strategy alignment, customer focus, management commitment, IT investment, and adequate financial resources.

2.2.2 Information Technology

The IT capability is operationalized as IT knowledge, IT operations and IT objects.

2.2.3 Performance of Banks

Both types of financial (profit, sales growth) and non financial performance indicators (customer satisfaction, service quality etc) of organization would be used.

2.3 Hypotheses

H1: The BPR factors are related to organizational performance of Pakistani banks.



- ► H2: The I.T capability (IT knowledge and IT operations) attributes are related to organizational performance of Pak banks.
- H3: The Information Technology (I.T) capability (IT knowledge and IT operations) moderates the relationship between BPR factors and organizational performance of banks in Pakistan.

3. Research Methodology

3.1 Research Design

This study was based upon the cross sectional design in which the data is collected one time for analysis. Focus of this study is to find out the effect of Business Process Reengineering on the Performance of Pakistani Banks and to find out the moderating effect of IT in this relationship. This study used qualitative data.

3.2 Population

The Population of this study is the banking sector of Pakistan. Data has been taken from the top management of the 30 major banks in Pakistan. These Banks captures the largest market share of financial market of Pakistan. The names of banks are included in appendix one.

3.3 Sampling Technique

The sampling technique used in this research is convenient sampling. This technique has been chosen while keeping in view the convenience of the researchers'.

3.4 Sampling Size

Total 105 questionnaires were distributed personally to the top management in the main branches of the 30 leading banks in Pakistan.

3.5 Research Instrument

This study used structured questionnaire with close ended question for analysis. The five point type Likert scale was used to measure the responses from 1 (Strongly Disagree) to 5 (Strongly Agree). In this study a 39 item questionnaire adopted from the study of Kabiru et al (2011) to measure "The Moderating effect of IT Capability on the relationship between BPR Factors and Performance of Pakistani Banks." Besides these 9 demographic questions was included in questionnaire.

4. Data Analysis and Interpretation

The data collected from the questionnaires has been analyzed by using the SPSS software and various tests were applied on the data for analysis. These tests include Descriptive test for demographic questions, reliability test for variables and regression analysis for checking the hypothesis of theoretical frame work.

The demographic analysis included the frequency tests which were conducted to describe the sample in terms of demography. These tests included frequency and percent of the respondents. The responses were presented in table 1.

Which of the following process does your bank reengineer?								
	Frequency	Percent	Valid Percent					
Branch operations	35	20.2	20.2					
Electronic banking services(ATM,POS)	69	39.9	39.9					

This shows that most of the banks in Pakistan are adopting BPR practices via electronic banking services.

The measures used for variables were tested to check the reliability. Reliability can be measured by various tests however internal consistent reliability is widely used in many studies. The internal consistency reliability is measured by the Cronbach's coefficient alpha test. According to Sekaran the acceptable range of coefficient of Cronbach's is 0.70, however the values above 0.80 are very good. The value less than 0.60 were considered as poorest. The value of Cronbach's coefficient alpha for BPR factors in this study is 0.79 which is considered as very good. The value of Cronbach's alpha for Organizational performance is 0.71 which lies within the acceptable range. The value of Cronbach's alpha for IT capability is 0.74 which lies within the acceptable range. Since the result of the reliability was more than 0.70, none of the items was dropped from this pilot study.



Table 1: Summary of the Reliability Analysis

	Variables	No of items	Cronbach's alpha	
1	BPR Factors	17	0.79	
2	IT Capability	10	0.703	
3	Organizational Performance	10	0.71	

4.1 Hypothesis Testing:

H1: The BPR factors are related to organizational performance of Pakistani banks.

The hypotheses were tested by running the regression analysis in the SPSS software. First regression was run between BPR factors and Organizational performance.

[R square: 0.516 F Stats: 109.58]

Coefficients^a

	Unstandardized Co	pefficients	Standardized Coefficients		
Model	В	Std. Error	Beta	t	Sig.
(Constant)	1.669	.260		6.430	.000
BPR	.618	.059	.718	10.481	.000

a. Dependent Variable: OP

Independent Variable: BPR

R square of the model indicates that 51% variation in the organizational performance is explained by the change in BPR factors and this model is significant with the F value of 109.58.

H2: The I.T capability attributes are related to organizational performance of Pakistani banks. The result of second hypothesis is depicted in table 3.

[R square: 0.790 F Stats: 338.86]

Co efficients^a

	Unstand	ardized Coefficients	Standardized Coefficients		
Model	В	Std. Error	Beta	t	Sig.
1 (Constant)	.635	.191		3.331	.001
IT	.859	.044	.889	19.712	.000

a. Dependent Variable: OP

b. Independent Variable: IT

R square of the model indicates that the 79% variation in the dependent variable is due to the change in the independent variable and this model is significant with the F stats of 338.86. This results also suggest that by investing in the IT there is a significant improvement in the performance of the Pakistani bank.

MODERATED REGRESSION

The analysis of moderating effect of IT on the relationship between BPR factors and Organizational performance was done by a moderator regression. It is suggested by many authors. The moderator effect is tested by running a three step regression. In the first step Organizational performance is entered along with the BPR factors change management, IT innovation and use of IT. In the next step the effect of IT is tested on Organizational performance and the third step BPRIT is entered as an independent variable to check the moderating effect of IT on relationship between BPR factors and organizational performance. The result of the moderated regression is reported in the table 2.

[R square: 0.885 F Stats: 215.38]

Model Summary

						Change Statistics					
Model	R	R Square	Adjusted R Square		R Change	Square	F Change	dfl	df2	Sig. F Change	Durbin- Watson
1	.718ª	.516	.511	.24851		.516	109.858	1	103	.000	
2	.885 ^b	.783	.779	.16718		.267	125.582	1	102	.000	1.334

a. Predictors: (Constant), BPR

b. Predictors: (Constant), BPR, BPRIT

c. Dependent Variable: OP

The result of moderated regression indicates that there is a significant change in R square of the model by



entering the BPRIT as an independent variable in the model. The combined effect of both BPR and IT accelerates the positive effect on the performance of Pakistani banks. The result confirms that IT plays a role of moderator in the relationship between BPR and Organizational performance.

Coefficients^a

Unstandardized Coefficients			Standardized Coefficients		
Model	В	Std. Error	Beta	t	Sig.
1 (Constant)	2.642	.120		21.980	.000
BPRIT	.090	.006	.822	14.632	.000

- a. Dependent Variable: OP
- b. Independent Variable :BPR IT

There is also a significant positive change in the standardized coefficient of the model.

4.2 Discussion

The Descriptive Statistics of the strings variable were included in the appendix. Results indicated that the banks in Pakistan have been implementing business process reengineering on various operational processes. Results shows that almost 68% banks has been implementing electronic banking services such operational transactions of cash/ cheques received and payment through ATM, POS, cards transaction and others; 27% of the banks studied have restructured and improved their operational processes. These banks focused on the automation rather than reengineering.

The restructuring is also done in the local and internal operational processes by little innovations and value added services to the various processes such as cheque clearing and settlement, interbank transfers, remittances for payment of bills, fund transfers both local and international payment through Money Gram, Western Union Money transfer, Wire transfer through SWIFT and opening of letter of credit. Banks in Pakistan were continuously involved in the innovation in these processes due to market competitors.

The Re engineering in the Pakistani bank is mostly done by the use of electronic banking channels in operational services. These Channels includes ATM cards, Point of sale and I-Net Banking Services. The e banking share is considerably increased by the use of more ATMs by bank, the implementation of bulk salary payments by many institutions, an increased usage of debit cards and increased public knowledge. POS transactions increased in both volume and value terms. The development was due to the increase in the number of banks offering the service, as well as the growing public confidence in e-payments. The e-banking segment has witnessed tremendous growth in all payment channels (Internet, mobile banking, ATM and telephone banking) currently in use as is evident in the number of ATMs. The usage and acceptance of these channels of payment will continue to increase across the country. The e-banking platforms have delivered increased profitability, improved customer loyalty, enhanced capacity of existing products and improved visibility to the banks.

This study found that IT capability moderates the relationship between BPR factors and organizational performance of Pakistani banks. This finding reveals that banks with strong IT capability and innovation would result in higher performance of banks. This finding indicates that management commitment has both a direct and significant effect on the overall performance of banks. These findings are in accordance with the previous research of Said et al. (2009), in which the authors argued that having strong IT capability would help the organizations to perform services with greater speed, more accuracy and more convenient ways for customers and this would ultimately have a positive effect on the performance of organization.

4.3 Limitations and Recommendations

This study provides confirmation that IT capability plays a significant role in moderating the relationship between BPR factors and organizational performance. The limitation of the study includes the biasness in the data caused by the self perception of the respondents. Secondly due to time constraints sample size is small. The third limitation of this study is that it uses qualitative data for the measure of organizational performance as well. Future results would add more knowledge to the literature by increasing the sample size and use of quantitative data for measuring organizational performance.

References

Altinkemer, K., Ozcelik, Y., & Ozdemir, Z. D. (2011). Productivity and performance effects of business process reengineering: A firm-level analysis. *Journal of Management Information Systems*, 27(4), 129-162.

Attaran, M. (2004). Exploring the relationship between information technology and business process reengineering. *Information & Management*, 41(5), 585-596.

Bharadwaj, A., Bharadwaj, S., & Konsynski, B. (1998). Information technology effect on firm performance as a



- measured by Tobin's Q. Management Science, 45(7), 1008-1024.
- Boudreau, M. C., & Robey, D. (1996). Coping with contradictions in business process re-engineering. *Information Technology & People*, 9(4), 40-57.
- Chen, J. S., & Tsou, H. T. (2007). Information technology adoption for service innovation practices and competitive advantage: the case of financial firms. *Information Research*, 12(3), 20.
- Dewett, T., & Jones, G. (2001). The role of information technology in the organization: a review, model and assessment. *Journal of Management*, 27, 313-346.
- Drew, S. (1994). BPR in financial services: factors for success. Long Range Planning, 27(5), 25-41.
- Grey, C., & Mitev, N. (1995). Re-engineering organizations: a critical appraisal, Personnel Review, 24 (1), 6 18.
- Hammer, M. (1990). Reengineering work: don't automate, obliterate. Harvard business review, 68(4), 104-112.
- Hammer, M., & Champy, J. (1993). Reengineering the corporation: A manifesto for business revolution. *Business Horizons*, 36(5), 90-91.
- Holland, D., & Kumar, S. (1995). Getting past the obstacles to successful reengineering. *Business Horizons*, 38(3), 79-85.
- Motwani, J., Kumar, A., Jiang, J., & Youssef, M. (1998). Business process reengineering: A theoretical framework and an integrated model, *International Journal of Operations & Production Management*, 18(9/10), 964 977.
- Idris, F. (2011). Total quality management (TQM) and sustainable company performances: Examining the relationship in Malaysian firms. International Journal of Business and Society, 12(1), 31-52.
- Olatokun, W. M & Olalekan, O. J. (2012). Influence of Individual, Organizational and System Factors on Attitude of Online Banking Users. Proceedings of Informing Science & IT Education Conference (InSITE).
- O'Neill, P., & Sohal, A. S. (1999). Business Process Reengineering A review of recent literature. *Technovation*, 19(9), 571-581.
- Ringim, K. J., Razalli, M. R., & Hasnan, N. (2011). The moderating effect of IT Capability on the relationship between Business Process Reengineering factors and Organizational Performance of Banks. *Journal of Internet Banking & Commerce*, 17(2).
- Ringim, K. J. (2012). Effect of Business Process Reengineering Factors and IT capability on Organizational Performance. (Doctoral dissertation, University Utara Malaysia).
- Shin, N., & Jemella, D. F. (2002). Business process reengineering and performance improvement: The case of Chase Manhattan Bank. *Business Process Management Journal*, 8(4), 351-363.
- Slater, S. F., & Narver, J. C. (2000). The positive effect of a market orientation on business profitability: a balanced replication. *Journal of business research*, 48(1), 69-73.
- Tam, K. Y. (1998). The Impact of Information Technology Investments on Firm Performance and Evaluation: Evidence from Newly Industrialized Economies, 9(1), 85-98.
- Terziovski, M., Fitzpatrick, P., & O'Neill, P. (2003). Successful predictors of business process reengineering (BPR) in financial services. *International Journal of Production Economics*, 84(1), 35-50.
- Zairi, M., & Sinclair, D. (1995). Business process re-engineering and process management: A survey of current practice and future trends in integrated management, *Business Process Re-engineering & Management Journal*, 1(1), 8-30.



ANNEXURE A SURVEY ON PERCEPTION OF BUSINESS PROCESS RE-ENGINEERING AND ORGANIZATIONAL PERFORMANCE

Dear Sir/Madam,

TO WHOM IT MAY CONCERN

I am a postgraduate student of Army Public College of Management Sciences, and currently conducting a survey on manager's perception of business process reengineering and its effect on organizational performance of Pakistani banks. It is part of the requirements for the award of Degree to conduct academic research in his field of study.

Kindly, help me by completing this questionnaire as accurately as possible. Please note that your responses will be treated with utmost confidentiality and would be used purely for academic purposes. We highly appreciate your co-operations.

Thanking you in anticipation of your response.

Yours sincerely,

Maria Khalid Satti MS Finance Student mariakhalidsatti@yahoo.com

General Guidelines for the Survey

In most of the questions you are required to circle the options that best represent your opinion. In some instances, you are required to tick $[\sqrt{\ }]$ or write your answers in the space provided.

There are no rights or wrong answers. Hence, we would appreciate your honest and complete response to help us understand your views.

We would like to re-assure you that the information you give will be treated confidentially.

The questionnaire is divided into 4 sections. You are kindly requested to answer the questions in all the sections.

Kindly tick $[\ \ \ \]$ your response to all the statement in each of the sections.

Section 1: Organization profile and background information: {Choose your responses}



Section One: Organization Profile and Background Information

Direction:

Please Kindly, tick [$\sqrt{\ }$] in the appropriates answer

Please Kindly, tick [$\sqrt{\ }$] in the appropriates answer	1
Gender	
M=Male	F= Female
	as a result of implementing Business Process Reengineering?
Y=Yes	N=No
Which of the following processes do you restructured in you	
A=Branch operations' (CSO and Teller)	D=International Operations (L/C, FX, etc.)
B=Electronic banking service (ATM, POS)	E=Domestic Operations (Clearing , fund transfer)
C=Loaning processes and credit analysis	F=Other support services (FINCON, AUDIT and Legal)
	e most objective of business process reengineering program?
A=Increasing revenues	B=Reducing operating cost
C=Improving the quality of customer service	D=Proactive approach to prepare the organization
E=Reactive approach to competitive pressure	
Reasons for not implementing Business Process Reenginee	
	A=Our bank have not taken decision on BPR implementation yet
B=Our bank has implemented other method of	C=Other reasons – BPR implementation in progress
performance improvement	
Which category best describe your organization	
A=Commercial Bank	B= Mortgage Finance
C=Microfinance Bank	
Which of the following describe your job title?	
A= General Manager	C=Head of Department
B= Manager Operation	
What is the size of your organization's branches?	
A=1-99 number of branches with ATM Machines	
B= 100 – 299 number of branches with ATM Machines	
C= 300 – 499 number of branches with ATM Machines	
D=500 – 999 number of branches with ATM Machines	
E=1000 – 1499 number of branches with ATM Machines	
F=1500 – 2000 number of branches with ATM Machines	
Number of employees in your organization	
A=500 – 1000 employees	B=1001-2,000 employees
C=2001 – 3000 employees	D=More than 3,000 employees
	, 1

Section Two: Business Process Reengineering Practices

Direction:

The following describe statements about the factors of bank's Business Process Re-engineering. Please indicate the extent to which you agree or disagree with the statements based on the scale provided.

Strongly agree	agree	Don't Know	Disagree		gly ee			
1	2	3	4					
Statements								
1.The employees' motivation to hard work through effective reward system has a crucial role in facilitating the effort								
for implementation of business process reengineering.								5
2. The organization trains and educates employees in the newly introduced operational processes.								5
The organization has effective con	nmunication system of	updating employees on reengine	eering implementation.	1	2	3	4	5
4. The employee accepts positive cha	anges easily for organiz	zational goal achievement.		1	2	3	4	5
5. The organization has aligned the BPR strategy with corporate policy.						3	4	5
6. The organization BPR project is clear to all staff.						3	4	5
7. The organization's reengineering effort is towards key business process.						3	4	5
8. The organization establishes performance improvement goal for processes key performance indicators (KPI).						3	4	5
9. The top management normally initiates business process reengineering in the organization.							4	5
10. The top management encourages	changes to maintain c	ompetitive advantage of the orga	nization.	1	2	3	4	5
11. The top management considers	business process reen	gineering (BPR) as method to	improve operational process	1	2	3	1	5
performance in the organization.				1	4	3	+	
12. The key personnel in the organization				1	2	3	4	5
13. The top management considers by	ousiness process re-eng	gineering (BPR) approach to im	prove competitiveness of the	1	2	3	1	5
organization.				1	4	3	4	
The organization BPR projects re	esult from analysis of c	sustomers.		1	2	3	4	5
15. The organization builds an effective I.T infrastructure.							4	5
16. The organization would be able t				1	2	3	4	5
17. The organization has sufficien	t budget for a purch	ase of an updated hardware a	nd software for operational	1	2.	3	4	5
processes.				Ĺ	_		•	l



Section Three: IT Capability Attributes

Direction:

The following statements assess the performance of Information technology capability in banks. You are required to rate your organization on I.T Capability (in terms of I.T Knowledge and I.T Operations). Please indicate your extent on perceived performance to the statements based on the scale provided.

Strongly agree	Agree	Don't Know	Disagree		Strongly Disagree				
1	2	3	4		5				
The organization of the control	operations staffs are kr	owledgeable on I.T o	ps.	1	2	3	4	5	
2. The organization :	staffs of I.T departmen	t are qualified for the	job.	1	2	3	4	5	
	I.T networking enginee			1	2	3	4	5	
4. The organization has an excellent of computer expertise as consultants.					2	3	4	5	
5. The organization	I.T staffs are proactive	in e-banking innovati	ion.	1	2	3	4	5	
6. The organization	operations are link to b	ranches through WAl	N.	1	2	3	4	5	
7. The organization of	computer link system of	lown time is minimal.		1	2	3	4	5	
8. The organization has computerized all its banking operational service.					2	3	4	5	
9. The organization I.T operations monitor customer activities.					2	3	4	5	
10. The organization	I.T policy is in line w	ith regulatory guidelii	nes.	1	2	3	4	5	

Section Four: Organization Performance

Section 3: The following statements assess the Non-Financial & Financial Performance of banks. You are required to rate your organization in the last three years. Please indicate your extent on perceived performance to the statements based on the scale provided.

Increase Significantly	Increase	Don't Know	Slightly Decrease	•	Decrease				
1	2	3	4		5				
1. The level of our custome	er satisfaction witl	our services		1	2	3	4	5	
2. The customer service de	livery in branches			1	2	3	4	5	
3. The customer relationsh	ip management in	our branches		1	2	3	4	5	
4. The brand name of our organization in the business environment					2	3	4	5	
5. The market share in reta	ail, consumer corp	orate banking service	es	1	2	3	4	5	
6 The market share in publ	ic sector business			1	2	3	4	5	
7. The fee based income or	n transaction servi	ces		1	2	3	4	5	
8. The volume of current a	8. The volume of current and saving account customers					3	4	5	
9. The financial performance targets achievement by branches					2	3	4	5	
10. The level of operating cost					2	3	4	5	

Thank you for your participation and your time in answering the survey. All response will be treated with the utmost confidence and no single set of responses will be readily identifiable.

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