

Impact of total quality management practices on financial performance of commercial banks in Nepal

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Abstract

The main objective of this study is to analyze the impact of TQM practices on the financial performance of commercial banks in Nepal. This study is based on primary as well as secondary data. Quantitative data are collected by survey method consisting of 6 likert scale questionnaires which focus on concern area of Kathmandu valley and analysis with SPSS package. Descriptive and inferential statistics tools have used to identify the relationship between management commitment, Employees involvement, Customer focus and process management with financial performance of commercial banks. In this study management commitment, employee's involvement, customer focus and process management are taken as independent variable and financial performance is taken as dependent variable. Correlation has shown that all the independent variable have significantly positive relationship with dependent variable. Among the independent variable, Employees involvement & customer focus highly positive effect on financial performance through regression analysis.

Keywords: Total quality management practices, financial performance, Nepalese commercial banks.

Introduction

Total quality management (TQM) theory has become more familiar since the 1980 where the banking industry offers services of varying qualities. When an entity is structure with a culture of offering qualities goods or services to its customers which satisfy their desired standard, then such an entity is observing total quantity. The practice demands quality in all dimensions of the company's undertakings with things done as desired from the onset and any wastage and spoilages being kept to the vary minimum during routine business (Stock & Mulki, 2009). For almost all organizations, rapid developments in the business environment such as globalization have made them to adopt a spirit of completion and innovation so as to be able to meet the equally changing customer needs and expectation. In order to compete effectively, it has become essential for business to constantly improve on the quality of their product and services by marketing, product differentiation and cost reduction (Change & Huang, 2005). Financial institution adopt these quality management practices in order to improve on their overall financial performance.. Therefore all commercial banks in Nepal have to remain relevant by examining customers' needs and meeting them continuously improving.

Research Questions.

- What is the relationship between total quality management and financial performance of

commercial banks in Nepal?

- What are the factors that influence adoption of TQM practices implementation?

Objectives of the study

This study is guided by the following specific objectives:

- To identify the relationship between total quality management and financial performance of commercial banks.
- To explore the factors that influence adoption of TQM practices in commercial banks.

Literature Review

Li, Zhao, & Lee (2001) have conducted a research about quality management initiatives in the banking industry in Hong Kong and on the basis of response from the respondents, they have come up with most three popular definitions of quality which are “Speed and promptness of Service” (69 percent), “high standard of service” (68 percent), and “relationship with customers” (61 percent). The response showed that 20 the Hong-Kong based banks are struggling for efficiency. The researcher also discussed that UK banks were adopting the definition as “providing service the customers want”. The research clearly indicated that banking industry is being operated in different aspects in different countries. Competitiveness and effectiveness of an organization is possible only when customers’ satisfaction is ensured by managing the business process through service quality approach. For the growth and development of service sector, quality in service sector is prime factor. The measurement of service factors will help service sectors identify the major factors contributed in the organizational performance so that the service sectors could manage accordingly in order to gain competitiveness and effectiveness in the business environment. Customers perceive the differences in the products and services offered by state owned banks (SOB), Joint venture banks (JVB) and private commercial banks (PCB) in context of Nepal. However, any new offerings are quickly matched by the competitors in the banking sector customers keep on looking for the FIs that meet their growing and changing expectations. In this context, FIs strive for offering the new products and services to the customers differently from their customers with greater service quality to bring in the customers loyalty.

Sureshchanda et al. (2001) in a research study in the banking sector of a developing economy identified that critical dimension of TQS can be broadly categorized under three groups as follows: 1. Dimensions of manufacturing used in service sector- Top management commitment, Human resource management, Design and management process, Information and analysis, Benchmarking, Continuous improvement, Customer focus, Employee satisfaction. 2. Those dimension that are seldom used in the literature both in manufacturing and service organization are Union intervention, Social responsibility 3. Finally those factors that are unique to the service sector are Services capes- the manmade physical environment and Service culture.

Khamlah and Lingaraj (2007) survey of managerial perceptions of the implementation of total quality management (TQM) in small service businesses in the US. The study addresses the employment of TQM, tools used, successes, failures, benefits, and problems encountered in small firms. Using a structured instrument, they surveyed 550 small businesses from various types of services in northeastern Indiana and obtained 306 usable responses. Whereas the majority of the respondents indicate top management commitment towards TQM, most have not instituted formal TQM programs or quality-enhancing activities. Training of employees in quality is not commensurate with top management commitment to TQM. Further, the majority of the firms do not reward or recognize employees who successfully apply TQM. There may have been ambiguity in the minds of respondents about the meaning of TQM. Mwaniki and Okibo (2014) evaluated the effects of total quality management on financial performance in the banking sector with a focus on the national bank of Kenya. The finding indicated a positive relationship between top management involvement, process and supplier relationship and financial performance. However, customer relationship,

negatively affected financial performance. The regression analysis showed a weak relationship among the variables with by the f-test an coefficient of determination. The research recommends that steps to improve top management involvement, process and supplier relationship to improve financial performance.

Conceptual Framework

The conceptual model has been employed by this study to clearly explain the impact of TQM practices on the financial performance of Nepalese commercial bank as bellows,

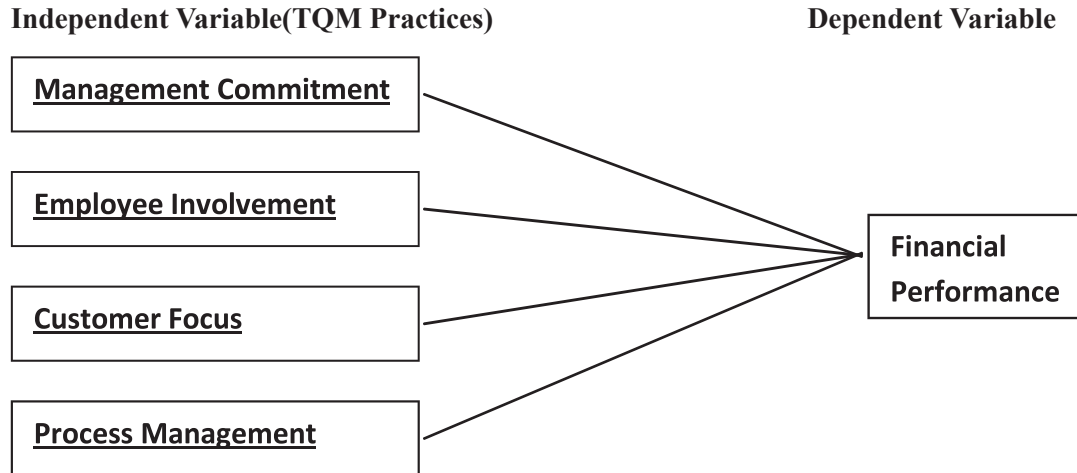


Figure 1: Conceptual framework

Methodology

Research Design

This research study adopts quantitative research method. Research design is a plan to achieve the answers of research questions through data analysis. Research design is set of work for researching particular problems. This design helps study for overall synchronization of identified components and data resulting in outcomes. Quantitative research design has been used for collection, measurement and analysis of data in this study.

This study used descriptive and inferential analysis on based of primary as well as secondary data. According to Mugenda and Mugenda, (2009), the purpose of descriptive research is to define and describe a subject by creating a problem profile, events or population by collecting data tabulating their frequencies or interaction. The study is aimed at collecting data from respondents on their opinions in relation to the effects of TQM on financial performance of commercial banks. The descriptive design has advantageous as it not only enables the researcher carry out fact provisions and identification but also enables the coming up with crucial principles of solutions and knowledge to the study problem. In correlational design, it is assumed that if there is change in independent variable then there has been the change in dependent variable and to see the relationship between variable. This research design is considered appropriate for this study as it helps to describe the relationship between the variables of the study.

Population and Sample of the Study

Christensen and Johnson (2014), argue that a population is the derived elements under investigation; inferences for a sample in any study are done from a population that has been earlier defined or selected. In this study population was all the registered commercial banks by the Nepal Rastra bank of Nepal. Currently, there are 27 registered commercial banks in Nepal. It is not possible to include all population are taken for study. The study adopted the three government commercial banks as sample for the study.

Data Collection

In this study data collection is taken as purpose gathering of information and relevant to subject matter of study form investigation. Data collection is process of gathering and measuring information on variables of interest in establishing system, which help in answering stated research questions. This study has been used primary as well as secondary data for collection of data for research. Research articles, literature review, case study, journal have been used as secondary source. Besides this data are collected through published sources, correspondent offices, website and others. This research has depended on primary data. Primary data has been collected through the use questionnaires designed based on the study objectives. The questionnaires also six likert scale type of questions in order to establish relationship between the variables.

Data Analysis Methods

Data analysis has involves extracting desired variables, searching and cleaning any errors and testing any underlying hypothesis. Analysis on collected data has been used of descriptive statistics which establish the relationship between the independent variables and the dependent variables, multiple regression analysis has been carried out to avoid co- linearity between the independent variables. Correlation analysis has been carried out and adjustments made to ensure the independent variables do not affect each other and hence the results. This study has been used the following regression equations:-

$$y = a + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + \beta_4x_4 + \epsilon$$

Where,

y = is the financial performance

a = is the constant (intercept)

$\beta_1.....\beta_4$ = regression co-efficient which measures unit changes included in y for each unit change in x variable.

X_1 = Management Commitment

X_2 = Employee Involvement

X_3 = Customer Focus

X_4 = Process Management

Er = Error Term

Data Presentation and Analysis

Table 1

Descriptive Analysis of independent and dependent variables

Variables	N	Minimum	Maximum	Mean	STDEV
Management commitment (MC)	170	3.20	5.80	4.968	0.5893
Employee involvement (EI)	170	3.67	5.67	4.228	0.4925
Customer focus (CF)	170	3.50	5.40	4.630	0.4985
Process management (PM)	170	2.67	5.67	4.318	0.7043
Financial performance (FP)	170	2.89	5.89	4.603	0.7239
Valid (N)	170				

Table No.1 expressed that respondents were agree with variable through mean. The highest mean value was 4.968 and lowest mean value was 4.228 of management commitment and employee involvement respectively. Thus, this table expressed that respondents were highly agree with management commitment while financial performance and less agreed with employee involvement while financial performance. It was cleaned that respondent shows maximum management commitment effect on financial performance rather than Employee involvements. Beside that mean value of customer focus and process management were 4.630 & 4.318 respectively.

Regarding standard deviation, process management variable was high standard deviation (0.7043)

and employee involvement variable was less standard deviation (0.4925). There is low variation in the standard deviation. So it is showed that data are not spread.

Inferential Statistics

The strength that exists between the variables was tested through conduction a correlation analysis test where the results established a great significance of each of the variables on the financial performance of the Banks.

Correlation Analysis

Pearson correlation coefficient was applied majorly to determine the level of strength of a linear association between the two variables as denoted by r. The coefficient of values ranges from + 1 to -1. A value of 0 implies that there is no association between the two variables, while values greater than 0 means that there is a positive association. A value that is less than 0 shows a negative association, simplifying the inverse relationship between variables.

Table 2

Correlation Analysis

	MC	EI	CF	PM	F
Pearson correlation	1				
MC Sig. (2-tailed)					
N	170				
Pearson correlation	0.30	1			
EI Sig. (2-tailed)	0.698				
N	170	170			
Pearson correlation	.277*	.527**	1		
CF Sig. (2-tailed)	.000	.000			
N	170	170	170		
Pearson correlation	.274**	.031	.235**	1	
PM Sig. (2-tailed)	.000	.687	.002		
N	170	170	170	170	
Pearson correlation	.123	.256**	.247**	.500**	1
F.P. Sig. (2-tailed)	0.110	.001	.001	.000	
N	170	170	170	170	170

** Correlation is significant at the 0.01 level (2-tailed)

Table 2 explained the result of correlation between independent variables and dependent variable. This table explained that financial performance is significantly and positively correlated with all independent variable (Management commitment, Employee involvement, customer focus and process management) at 1% level of significant. Here correlation co-efficient between management commitment, employee involvement, customer focus, process management and financial performance toward commercial banks have been found 0.123, 0.256, 0.247, 0.500 respectively. From the rules of Thumb about correlation co-efficient, 0.00 values determine no correlation whereas 1.00 values mean perfect correlation. From above table the co-efficient of correlation were 1, thus there were positive correlation co-efficient.

Thus, there are positive significantly relation between all independent's variables with dependent variables in this study.

Regression Analysis

Below is the outcome of regression analysis.

Table 3

Model Summary

Model	R	R Square	Adjusted R Square	Standard. Error of an Estimate
1	0.660a	0.436	0.422	0.55017

Predictors: (Constant), Management commitment, Employees involvement, Customer focus, and Process management

Dependent variable: Financial Performance of commercial banks.

Results in the summary Table 3 indicate that the coefficient of R square equals 0.436 that represents the Management commitment; Employees involvement Customer focus & Process management explain the variance financial performance of commercial banks. R of the model is 0.66. So, it indicates that the 66% of correlation co-efficient. R square indicates that the 43.6% variance is explained by these four variables and Remaining 56.4% are unexplained, which will be explained by other variables

Table 4

ANOVA Variance analysis

Model	Sum of the squares	Df	Mean Square	F	Sig.
Regression	38.621	4	9.655	31.899	.000a
Residual	49.943	165	0.303		
Total	88.564	169			

Predictors: (Constant), management commitment, employees involvement, customer focus, process management

Dependent variable: Financial performance of commercial banks

Table 4 shows the value financial performance is less than 0.05 ($p < 0.05$). Now that the value of the F statistic is the predictors variables management commitment, employees involvement, customer focus and process management determine the variations in the dependent variable which is a measure of commercial banks' performance. As a result, the model had fitted to explain the relationship between the independent variables and financial performance of commercial banks.

The regression output below provides the regression results, hence the coefficient and associated output:

Table 5

Associated output

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Standard Error	Beta	T	Sig.
Constant	3.444	0.542	0.103	6.357	0.000
MC	0.126	0.077	0.512	1.633	0.040
EI	0.753	0.108	0.475	6.978	0.000
C.F.	0.689	0.112	0.400	6.131	0.000
PM	0.412	0.064		6.386	0.000

a. Dependable variable: Financial performance.

b. Predictors :(constant), MC,EI,CF, and PM

From the above regression output table, the fitted multiple linear equation is modeled below:

$$Y = 3.444 + 0.126(\text{MC}) + 0.753(\text{EI}) + 0.689(\text{CF}) + 0.412 (\text{P.M.}) + er$$

The regression results in the table shows a positive relationship between commercial banks performs and the determinant; Management commitment, Employee involvement, Customer focuses and process management. The findings show that the change in one unit of Management commitment results into approximately 0.126 increase performance of commercial banks. The change in one unit of Employee involvement leads to 0.753 increase in performance of commercial banks. The change in one unit of customer focus leads to 0.689 unit increase in performance of commercial bank Moreover, the change in one unit of process management results in 0.412 increases in performance of commercial banks. The above statistics aid in determining the relative importance of each and every variable in the model.

Findings of Study

- There is significant positive relationship between management commitment and financial performance of commercial banks in Nepal. It is clearly that commitment of senior management to provide new policies for improved service to customers and the implementation of TQM practices encourage to other employees to work productivity.
- There is significant relation between employee involvement and financial performance of commercial banks in Nepal. It reveals that commercial Banks involve their employees in the process of TQM practice implementation.
- There is positive relationship between customer focus & financial performance of commercial banks in Nepal. The implementation of TQM practices focus on the customer needs since high quality services lead to customer satisfaction.
- There is positive relationship between process management and financial performance of commercial banks in Nepal. The result shows that process management is important areas that the implementation of TQM practices focuses on since changes in the critical processes lead to better service delivery in terms of efficiency and effectiveness.
- Majority of respondents were focus in improving the quality of the different areas in the organization is an effective way of improving quality of the output. Effective processes lead to better quality service, lower cost and therefore improved financial performance.

Conclusions

The study evaluates the impact of management commitment towards the implementation of TQM practices on the performance of commercial banks. The results show that there is a positive relationship between management commitment towards TQM practices implementation and the financial performance of commercial banks. The study therefore concludes that the commitment of senior management towards the process of identifying, adopting, and implementing practices to improve quality in their commercial banks results in a higher rate of success in the process. This in turn ensures that employees are able to provide high quality services to customers achieve customer satisfaction, gain customer loyalty and finally, influence performance of the overall commercial bank.

The study evaluates the impact of employee involvement in the implementation of TQM practices on the performance of commercial banks. The results show that there is a positive relationship between employee involvement in TQM practices implementation and the financial performance of commercial banks. The study therefore concludes that the since employees are the ones responsible for implementing the total quality management practices introduced by management, it is important to involve them through consultations and effective communications of the needed changes. This ensures that they are fully committed to the implementation process which in turn improves their productivity and that of the bank.

The study evaluates the impact of customer focus during the implementation of TQM practices on the

performance of commercial banks. The results show that there is a positive relationship between customer focus during TQM practices implementation and the financial performance of commercial banks. The study concludes that the introduction of TQM practices should be geared towards the satisfaction of customers since they are the recipients of service. It is also concluded that focusing on the needs and expectations of customers in terms of quality of service is important in ensuring their satisfaction, loyalty, and improved financial performance.

The study finally evaluates the impact of process management in the implementation of TQM practices on the performance of commercial banks. The results show that there is a positive relationship between process management in TQM practices implementation and the financial performance of commercial banks. The study therefore concludes that the focus in improving the quality of the various processes in the organization is an effective way of improving quality of the output. Efficient processes lead to better quality service, lower costs and therefore improved financial performance.

Implication

The result of the study can be implemented in the public sector should create more awareness of departmental procedures on how TQM program should be implemented. They should develop a clear policy on how TQM should be implemented by creating a platform to ensure that government ministries comply with the quality standards. The finding revealed that some of the challenges faced by banks during implementation of TQM were lack of sufficient training and lack of adequate finances. The study of the commercial banks should be redesigning and improving process management through modern technologies. There is a possibility that the researcher did not fully exhaust everything in this field due to unforeseen logistical issues leaving room for other researchers to expand on this study in future.

This study also recommended that further studies explore the other variables will be used in the relationship between the implementation of TQM practices and financial performance. It will be allowed for comparisons between the commercial banks, other service and manufacturing organizations used the TQM practices and performance. Other researcher should be used other methods to expand on this study in future.

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APPENDIX
Research Questionnaire

Dear respondent,

This questionnaire aims to collect information pertaining to the total quality management and Nepalese commercial banks financial performance. Please indicate the appropriate answer by use of ticks in the provided box, where appropriate fill spaces with your response.

section A: General Information

1. Name of Bank..... (Optional)
2. Please indicate your gender
 - Male ()
 - Female ()
3. What your level of education?
 - Master ()
 - Bachelor ()
 - +2 ()
 - S.L.C. ()
 - Other Kindly specify.....
4. Which category best describes your position in the Bank?
 - Top management staff ()
 - Middle level management staff ()
 - Subordinate Staff ()
5. How many years long have you been working in the banking sector?
 - Less than 5 years ()
 - 6 - 10 years ()
 - 11 -15 years ()
 - Over 15 years ()

Section B : Study Questions

Total quality management used by commercial Bank in Nepal.

Use the Key 1 - 6 for all sections as outlined in the questionnaire.

- Key 1= Strongly Disagree
 2= Disagree
 3=Somewhat Disagree
 4= Somewhat Agree
 5 = Agree
 6= Strongly Agree.

Management Commitment

Please indicate whether you agree with the Following statements about top management commitment as a TQM Practice Your bank.

		1.	2.	3.	4.	5.	6
6.	There has been delegation of duties as long as implementation of TQM practices.						
7.	Management is committed to the provision of information on TQM practice.						

8.	Management is committed to the training of employees on the implementation of TQM practices						
9.	Management has put up strategies to ensure efficient allocation of resources in relation to TQM practices						

10. To what extent do you believe that management commitment influence financial performance?
- Very large extent ()
- Moderately large extent ()
- To some large extent ()
- To some low extent ()
- Moderately low extent ()
- Very low extent ()

Employee Involvement.

Please indicate whether you agree with the following statements about employee involvement as a practice of TQM in your bank.

		1.	2.	3.	4.	5.	6.
11.	There has been employee involvement in term of quality decisions.						
12.	Employee involvement is being implemented through training and development.						
13.	All employees are recognized for their efforts and performance in relation to TQM practices.						
14.	There are performance measures based on the quality of services delivered.						

15. To what extent do you believe that employee involvement influences financial performance?
- Very large extent ()
- Moderately large extent ()
- To some large extent ()
- To some low extent ()
- Moderately low extent ()
- Very low extent ()

Customer Focus

Please indicate whether you agree with the following statements about customer focus as a practice of TQM in your bank.

		1.	2.	3.	4.	5.	6.
16.	My bank ensures that the implementation of TQM practices adopts a Customer focus.						
17.	Customer focused strategies are critical in the implementation of TQM practices.						
18.	My bank requests Customer to suggest ways of improving the quality of services delivered to them.						
19.	Incorporating Customer suggestions in the introduction of TQM practices ensures delivery of the proper services leading to customer satisfaction.						

20. To what extent do you believe that customer focused strategies in TQM practices implementation

influence financial performance?

- Very large extent ()
- Moderately large extent ()
- To some large extent ()
- To some low extent ()
- Moderately low extent ()
- Very low extent ()

Process Management

Please indicate whether you agree with the following statements about process management as a practice of TQM in your bank.

		1.	2.	3.	4.	5.	6.
21.	My bank ensures that the implementation of TQM practices involves redesigning process management.						
22.	Process management is one of the critical aspects for improving service delivery process of the implementation of TQM practices.						
23.	My bank has focused on process management in its efforts to implementation TQM Practices.						
24.	Incorporating Process management in the implementation of TQM practices ensures successful implementation.						

25. To what extent do you believe that involvement of process management during the implementation of TQM practices influence financial performance?

- Very large extent ()
- Moderately large extent ()
- To some large extent ()
- To some low extent ()
- Moderately low extent ()
- Very low extent ()

Financial Performance:

26. Please indicate the extent to which the following total quality management (TQM) practices influence financial performance where.

1. Is very low extent.
2. Is moderately low extent
3. Is some large extent.
4. Is some low extent
5. Is moderately large extent and
6. Is very large extent.

	1.	2.	3.	4.	5.	6.
Process management						
Customer focus						
Management Commitment						
Employee Involvement						

Thank you for your time and Contribution.