



Total Quality Management and Competitiveness of Money Deposit Banks in Port Harcourt, Rivers State, Nigeria

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ABSTRACT

The purpose of this study was to investigate the relationship between total quality management (TQM) and competitiveness. This study also examined the mediating effect of information technology on the relationship between TQM and competitiveness. The motivation for this study was driven by the inconsistent findings in the literature concerning the above relationships. To achieve this purpose, the study integrated the effect of TQM on competitiveness. Copies of Questionnaire were distributed to 254 bank officers in Port Harcourt, Rivers State and 157 indicating 62% response and 38% non response that were ready and usable for further analysis with the use of the Statistical Package for Social Sciences (SPSS) software. Cronbach Alpha Coefficient was used to test the consistency of the items on the research instrument. Spearman correlation coefficient was used to test the strength and direction of the relationship between two variables. The hypotheses concerning TQM dimensions (service design and continuous improvement) with measures of competitiveness (organizational excellence, and organizational performance) are statistically significant. Conclusion was also made based on the findings and the study recommended among others that banks are encourage to employ more staff i.e. cashiers to solve the problem of long queue in the banking hall. We are in cashless economy; banks should endeavour to make cash available in ATMs at all times.

Keywords: Total Quality Management, Competitiveness, Service Design, Continuous Improvement

INTRODUCTION

Measurement of performance is very important for effective management in any organization (Demirbag, Tekinus, and Zaim, 2006). Deming (1986) argued that improvement of any process cannot be done without measuring its outcomes. Therefore, the organizational performance improvement needs some measurements to determine the extent of effectiveness of organizational resources on business performance (Gadenne and Sharma, 2002; Madu, Kuei, and Winokur, 1996). Kanji and Sa (2007) pointed out that the first condition to enhance performance and achieve organizational excellence is to develop and implement a performance measurement system.

In today's changing business environment, organizations require to evaluate their external and internal environment for opportunities and challenges in order to remain competitive and sustain their growth (Ramlall, 2002). In such environment, organizations in order for them to grow and survive have to seek excellence by leading the innovation. In addition, organizations either in private or public sector are seeking to improve their performance and achieve competitive advantage over competitors, however how this performance can be enhanced and what strategies that should be implemented towards that, is still the issue that needs to be further investigated.

Performance of public and private sectors is different according to their goals and core businesses. While private sector intends to achieve profit through satisfying their customers; public sector intends to achieve

quality, customer satisfaction, and good performance. The main goal of any public organization is to satisfy the needs of its society within available budget and ability (Dewhurst, Martinez-Lorente, & Dale, 1999). However, public organizations have different intangible goals and objectives in nature than those of the private organizations. These inconclusive findings regarding the effect of TQM on performance is due to the ability of a TQM strategy to enhance the organizational strategic positioning through excellence and innovation (Prajogo & Sohal, 2004). In addition, there are many critical successful factors (CSFs) that may affect results of the this relationship such as reported by many writers, leadership, organizational culture, service design, top management support, continuous improvement, benchmarking, team building and problem solving, employee empowerment, employee involvement, employee training, use of information technology, and supplier quality and relationships.

Unless TQM is able to enhance the organizational competitive advantage, the consequences may not be in favour of organizational overall objectives (McAdam, Armstrong & Kelly, 1998; Vora, 2002). As a result, TQM as a management philosophy is expected to have a significant effect on organizational excellence and subsequently on organizational performance and stakeholder value (Mele & Colurcio, 2006).

Another issue related to the TQM-performance relationship is that most TQM studies focused on organizations in developed countries (Demirbaget *et al.*, 2006; Rahman, 2001; Sila, 2007) and there is still a lack of TQM studies and their benefits in the developing countries context. Notably, there are few studies that address the implication of TQM on performance in developing and small countries such as the Middle East (Pinho, 2008), geographical regions (Sila & Ebrahimpour, 2002), and public sector context in developing countries. The current business environment has been generally influenced by liberalization, globalization, and fast-paced technological advancements. Therefore, there has been a rigid competition among all countries to attract Foreign Direct Investment (FDI) inflows. For this purpose, countries tried to establish a stable and safe business environment with advanced infrastructure. There are many procedures and incentives such as encouraging entry policies, tax exemption, and promoting a safe business environment to attract FDI inflows

The purpose of the study is to examine the influence of Total quality Management on competitiveness in the banking sector in Port Harcourt, Rivers state Nigeria. Specifically, the study:

1. To examine the relationship between TQM practices and Competitiveness of Nigerian banks operating in Port Harcourt, Rivers State, Nigeria.

Research Questions

1. What is the relationship between TQM practices and Competitiveness of Nigerian Banks in Port Harcourt, Rivers State, Nigeria?

Hypotheses

Based on the thorough review of the relevant literature, the hypotheses of the study were developed in line with the research question and objective. Thus, the following hypotheses are stated.

Ho₁: There is no significant relationship between service design and organizational excellence.

Ho₂: There is no significant relationship between service design and organizational performance.

Ho₃: There is no significant relationship between continuous improvement and organizational excellence.

Ho₄: There is no significant relationship between continuous improvement and organizational performance.

Conceptual and Empirical Review

Total Quality Management (TQM) in today's changing business environment has become a main change that requires a transition in the organization's processes, culture, beliefs, and strategic priorities among others. There are numerous researches in literature about TQM and its role in developing and enhancing performance and competitive advantage of the organization. The past research about TQM such as Ehigie and McAndrew (2005), Talib, Rahman, and Qureshi, (2013) changed the business philosophy worldwide (James, 2008). In addition, TQM represents a holistic approach in organizations management and focus

on organizational goals through quality improvement, meeting customer needs, productivity, and competitiveness.

Total Quality Management (TQM) is considered as a management philosophy that has gained attention by many researchers (Ehigie & McAndrew, 2005). TQM philosophy emphasizes the role of external and internal customers and suppliers, and employees' involvement in pursuit of continuing improvement.

There are a lot of researches in literature that show the importance of TQM strategy in service organizations (Yasin, Kunt, & Zimmerer, 2004); manufacturing organizations (Arawati, 2005; Sohal & Terziovski, 2000); small and medium sized organizations (Demirbag *et al.*, 2006); and in public service organizations (Nor Hazilah, 2004). Moreover, quality management has developed in many phases from quality by inspections, statistical quality control, and quality assurance to the current concept of total quality management (Prybutok & Ramasesh, 2005).

In today's global competition, TQM strategy has achieved increasing interest among practitioners as one of the main medium and tools for creating a sustainable competitive advantage.

In the present study, TQM is being considered in explaining bank's competitive advantage owing to its ability in influencing performance and excellence, and as suggested by a myriad of studies. For example, Kumar, Kumar, Grosbois, and Choisine (2009) noted that the success of TQM in improving organization's performance is as a result of its intangible and behavioural characteristics. Basically, intangible resources can be considered more important than tangible resources to the organization's effectiveness and success (Al-Swidi & Mahmood, 2011). Many of the goals and objectives of public organizations, many of the resources they use, and many of the outputs they generate are intangible. They also argued that good management of intangible assets ensures the achievement of goals and objectives.

Some authors such as Dowe, Samson, and Ford (1999), Munizu, (2013) suggested that TQM practices can varied from country to country (Jabnoun & Sedrani, 2005). In addition, there are numerous authors who suggested the need for deeper investigations of the relationship between TQM and organizational performance to bridge TQM and organizational theory relationship (Hackman & Wageman, 1995; Terziovski & Samson, 2000). In addition, many organizations still implement and adopt TQM in the increase change globally (Ehigie & McAndrew, 2005).

Service Design

Service design is the important TQM factor that related to customer. By designing the service well, the customers' satisfaction increases and result positive reputation among them about the organization, and at the end enhance organizational performance (Lakhe & Mohanty, 1995). In other words, good service design results ultimately better service and in turn reflect on improvement of the organizational processes and lead to achieve the optimum competitive advantages. In the literature, many researchers found a positive relationship between service design and organizational performance and excellence (Anderson *et al.*, 1994).

Continuous Improvement

Continuous improvement is the main aim and philosophy behind TQM implementation beside customers' satisfaction. It refers to desire for continuing improving all aspect in the organization and searching for never ending improvement to have better methods for improving all processes including inputs and outputs. By improving organizational processes, organizations will be able to generate innovation, improve internal and external processes, meet customers' expectations, and create precious value to all stakeholders. TQM literature indicated the positive relationship between continuous improvement and organizational performance and excellence in the organization (Anderson *et al.*, 1994), and long-term competitive advantages (Yusuf *et al.*, 2007).

Competitiveness

In today's changing and competitive business environment, it has been widely emphasized that measuring organizational performance is very important to evaluate the success of organizational strategy direction (Neely, 1999). Moreover, it is impossible to improve a business entity without measuring its current situation.

However, although there has been an extensive research work conducted in the literature regarding organizational performance, there is no universal agreement among scholars on how organizational performance should be defined (Ford & Schellenberg, 1982). Responding to the need to explain the term, Antony and Bhattacharyya (2010) defined the organizational performance as the measure that is used to evaluate and assess the success of an organization to create and deliver the value to its external as well as internal customers.

Organizational performance and organizational excellence are the most important indicators for organizations' competitiveness, goal achievement, success, development, and advancement. Therefore, organizations tend to achieve them in their short, medium and long term objectives. The relationship between organizational excellence and performance are interrelated where one of them leads to the other, i.e. organizational excellence of the organization will be followed by organizational performance. According to European foundation for quality management (EFQM), guideline (1999), organizations that have performance of 60 percent or above are considered as excellence organizations. In addition, existing models on excellence consider excellence as an outstanding performance level.

2.6.1 Organizational Excellence

The word excellence refers always to the highest rank of evaluation. Dahlgaard-Park (2009) mentioned that it is not easy to know when you can attain excellence if you don't know what excellence is. It is more related with "business" or "organizational" excellence, however, they are driving to the same meaning with the distinction that organizational excellence is more used in public sector organizations and business excellence used more to organizations of private sector (McAdam, 2000).

Dahlgaard (2003) pointed out that whether business excellence can confirm and lead to competitive advantage is still not finalized and there is a debate among researchers, and the underpinning theory of this view is still little. Nowadays, many organizations are looking for excellence, but unfortunately many of them missed to attain this goal because they don't have a deep understanding of what excellence means (Dahlgaard, 2003).

In today's rapid changing business environment, organizations either in the private or public sectors is seeking to improve their performance and achieve competitive advantage among competitors. Therefore, the present study focuses not only on organizational performance but also on organizational excellence.

Studies about organizational performance are abundant in literature, but how excellence can lead to performance has been greatly neglected. According to Antony and Bahattacharyya (2010) the concept of organizational excellence in academic research is originated from Peter and Waterman (1982). Excellence is a complex term more than performance, and the organizational excellence can be measured based on the relationship between different indicators of performance (Antony and Bahattacharyya, 2010). They also proved that organizational excellence can be calculated depending on the relationships between the different variables of performance, therefore organizations aspiring for excellence cannot attain it by adding a single level of performance variable. In addition, they concluded that the organizational excellence helps managers to differentiate the level of success in organizations in a better way more than organizational performance.

In relation to management and organizational excellence, the word excellence is used in quality management to upgrade the organizational management level to the excellence level that will provide excellent results such as the delight of customers Chin, (1998).

Service Design and Organizational Excellence

Through designing the services offered by the organizations to meet the customers' satisfaction and creating value for money, patronage increases and result positively among them about the organization, which enhances organizational excellence leading to organizational performance (Lakhe & Mohanty, 1995). Good service design results better service and improved organizational processes to achieve the optimum competitive advantages. In the literature, many researchers found a positive relationship between service design and organizational excellence.

Continuous Improvement and Organizational Excellence

The main aim and philosophy behind TQM implementation beside customers' satisfactions is continuous improvement. According to the literature, the desire for Continuous improvement in all aspect in the organization is to have better methods for improving all processes including inputs and outputs (Burli, Kotturshettar, & Dalmia, 2012). By improving organizational processes, organizations will be able to generate innovation, which will promote internal and external processes to meet customers' expectations, and creating value to all stakeholders' investment. TQM literature indicated the positive relationship between continuous improvement and organizational excellence in the organization (Anderson *et al.*, 1994; Christos *et al.*, 2010), and long-term competitive advantages (Yusuf *et al.*, 2007).

METHODOLOGY

This study is correlational in nature due to the main purpose, which is to provide a reliable and valid framework for the interaction between Total Quality Management (TQM), and competitiveness (Organizational Performance and Organizational Excellence) of Banks in Nigeria. Accordingly, to achieve the objectives of this research, a quantitative survey questionnaire research approach was conducted through self-administered questionnaire to measure the relationships between variables under investigation.

The population for the study are 750 staff of money deposit banks operating in Port Harcourt, Rivers State, Nigeria. There are 25 consolidated money deposit banks in Nigeria and all these banks have branches in Port Harcourt, Rivers State. Therefore, the population of the study are staff of 12 money deposit banks operating in Port Harcourt, Rivers state, Nigeria chosen randomly out of the twenty five banks.

Random sampling was employed to select the banks that questionnaire were administered. Subsequently, it was also used to pick the individual respondents from the randomly selected banks. According to Creswell (2003), each individual in the population in the selecting of a random sample has an equal probability of being selected. Therefore, each element in the list of population has the same chance of being chosen (Sekaran, 2005). McAdam, (2000) pointed out that the sample size should be sufficient for the researcher and large enough with approximate the characteristics of the population satisfactory to provide a credible result.

In another point of view, McAdam, (2000) reported that the sample should be around 30% of the population size should be acceptable and adequate. Additionally, the sample size larger than 30 and less than 500 are appropriate, and the sample size should be several times (10 times or more) as large as the number of variables used in the study (Sekaran, 2000). The subject of this study will be selected by using Excel to generate a random subject of the sample (Sekaran, 2005). Krejcie & Morgan (1970) method of sample determination was used to generate the 254 sample size of respondents for the survey. The proportionate random sampling technique was used to determine the sample in each bank.

Unit of Analysis

A unit of analysis is who or what that is being studied in a research. In the social science research, a unit of analysis is an individual, an organization, a social interaction or a group of individual/organization. This study aims to examine the hypothesized relationships on the strategic business unit level. Therefore the unit of analysis of this study is the employees in the selected commercial banks in Nigeria that have operational offices in Rivers State. Munizu, (2013) pointed out that establishing new management initiatives provide advantages for the wide organizational level and to all management tools. Most of previous studies related to TQM and firm performance were conducted at the organizational level. Therefore this study seeks to contribute to the insufficient knowledge of TQM and its relationship with firm competitiveness at the staff level. This is done so as to see how TQM practices as operationalized in these banks are able to make the banks competitive amidst other organizational and global banking challenges.

Furthermore, the sample for this study is planned to be 254 respondents from Nigerian Banks operating in Rivers State, Nigeria. The respondents were selected from Junior Banking Officers to Deputy Managers.

These are persons charged with the responsibility of implementing strategies and programs within their units. They are also key player as creators, monitors, and updaters of the performance measures (Kumar, *et al.*, 2009). Therefore, they have more knowledge about the activities than other employees and managers. In other words, implementing, practicing, evaluation, and following up practices and programs such as TQM are their daily job. Their position as a link between managers and employees enable them to have more knowledge about what is going on in their units. In brief, the middle level managers have the sufficient qualifications and experiences and aware of practices such as TQM in their respective organization (Talib, 2013). To this end, they are in a position to answer all the questions of the questionnaire. A total of 254 questionnaires were distributed. The expected response rate was high since the questionnaires were officially channelled through the HR department in of the banks. A reliability index of 0.93 was established.

RESULTS

Bivariate Hypotheses Testing

In this section the results for the tests on the bivariate hypotheses is presented. The tests examined the relative association between the three dimensions of the predictor variable: total quality management (service design and continuous improvement) and the two measures of the criterion variable: Competitiveness (organizational excellence and organizational performance). A confidence interval as applicable for a study of this nature (organizational behavioral) is set at 95% implying a level of significance at 0.05; thus a criterion of $P > 0.05$ for acceptance of null hypothetical assumptions and a $P < 0.05$ for the rejection of null hypothetical assumptions.

Table 1: Tests of hypotheses of the study

		SD	CI	BM	Excellence	Performance
Service Design	Correlation Coefficient	1.000	.347**	.330**	.794**	.762**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	157	157	157	157	157
Continuous Improvement	Correlation Coefficient	.347**	1.000	.652**	.595**	.746**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	157	157	157	157	157
Benchmarking	Correlation Coefficient	.330**	.652**	1.000	.593**	.558**
	Sig. (2-tailed)	.000	.000	.000	.000	.000
	N	157	157	157	157	157
Organizational Excellence	Correlation Coefficient	.794**	.595**	.593**	1.000	.839**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	157	157	157	157	157
Organizational Performance	Correlation Coefficient	.762**	.746**	.558**	.839**	1.000
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	157	157	157	157	157

The results on the bivariate analysis reveal significant associations between the dimensions of total quality management and Competitiveness. Data shows that all three dimensions of total quality management (service design, continuous improvement and benchmarking) significantly impact on the excellence and performance levels of the organization. Specifically, the results illustrate as follows:

Significance of relationship between service design and Competitiveness:

Data (table 1) supports evidence of a significant relationship between service design and the Competitiveness where significance between service design and organizational excellence is at $P = 0.000$ with a correlation coefficient of 0.794; service design and organizational performance is at $P = 0.000$ with a correlation coefficient of 0.762. Thus the null hypotheses are therefore rejected in both instances based on insufficient evidence to prove otherwise.

Significance of relationship between continuous improvement and Competitiveness:

Data (table 1) supports evidence of a significant relationship between continuous improvement and the Competitiveness where significance between continuous improvement and organizational excellence is at

P = 0.000 with a correlation coefficient of 0.595; continuous improvement and organizational performance is at P = 0.000 with a correlation coefficient of 0.746. Thus the null hypotheses are therefore rejected in both instances based on insufficient evidence to prove otherwise.

Table 2: Summary of results of the tested Hypotheses

Variables	Correlation Coefficient r	Decision
SD and OE	0.794**	Ho₁ Rejected
SD and OP	0.762**	Ho₂ Rejected
CI and OE	0.595**	Ho₃ Rejected
CI and OP	0.746**	Ho₄ Rejected

DISCUSSION OF FINDINGS

Total Quality Management (TQM) and Competitiveness

In order to achieve the first objective of this study regarding the effect of TQM on Competitiveness, the relationship between TQM and Competitiveness were examined. As illustrated in the previous chapter, the relationship between TQM, as a composite construct, and Competitiveness was found to be significant at the significance level of 0.05, therefore, rejecting the null hypothesis. This finding is consistent with the findings of the existing studies (Anderson *et al.*, 1995; Arumugam, Ooi, & Fong, 2008; Demirbaget *al.*, 2006; Escrig-Tena, 2004; Irfan, Ijaz, Kee, & Awan, 2012; Kumar *et al.*, 2009; Molina-Azorinet *al.*, 2009; Munizu, 2013; Salajegheh & Pourrashidi, 2013; Shenaway *et al.*, 2007; Tabe, Rezaeekelidbari, & Chegini, 2013; Talibet *al.*, 2013; Wang *et al.*, 2012; Zehiret *al.*, 2012). The finding suggested that TQM practice is critical for the Nigerian banking sector to attain its objectives and achieve the intended performance. Without doubt, the banking sector with an effective and efficient as TQM implementation would be able to reduce customers 'and society complains, increase their satisfaction, produce good delivery system, and increase performance.

The result supported the significant impact of TQM on competitiveness which is widely reported in the literature of quality management. The importance of TQM as a management philosophy and a pre-requisite for any organization to survive, develops, and delights its customers (Khamalah & Lingaraj, 2007; Kumar *et al.*, 2009). Furthermore, successful implementation of TQM can help the Nigerian banking sector to improve the services and avoid many defects in their daily work. For example, by successful TQM initiatives lead to reduce repetitive work, improve offered services, increase employees and customer's satisfaction, design planned objectives, and enhance the entire organizational performance. Therefore, TQM successful initiatives can maintain and minimize the rate of errors (Al-Mansour, 2007).

Since the contribution degree of each TQM critical factor varies (Llorens Montes & VerduJover, 2004), this study conducted further examination of the importance of each TQM factor. The comprehensive understanding of each factor of TQM can help Nigerian banks for a better utilization of the available resources. Therefore, towards a successful implementation of TQM, more attention should be paid and more investment should be allocated for highly contributing TQM factors when compared with less contributing factors. Previous studies reported mixed results regarding the relationships between TQM dimensions and organizational performance (Rahman & Bullock, 2005).

Service Design (SD) and Competitiveness

The finding of this study showed that service design has significant effect on organizational excellence and organizational performance. These findings are consistent with other studies (Lakhe & Mohanty,

1995; Talibet *et al.*, 2013). Lakhe and Mohanty (1995) argued that good service design would improve the organizational performance.

The significant effect of service design on competitiveness (organizational excellence and organizational performance) in the Nigerian banking sector could be explained by the fact that customer's voice is critical. The impact of customers on organizational service design is effective (AL-Zamany *et al.*, 2002). For the sake of further improving the design of the sector, the banking stakeholders and regulators should look again at their policies and reengineer them if needed, and in turn linked to capabilities of their employees to enhance the quality of their service.

Continuous Improvement (CI) and Competitiveness

Continuous improvement is considered one of the most important factors that search for never-ending improvement in output excellence and performance (Talibet *et al.*, 2013). Based on the results illustrated in the previous chapter, continuous improvement was found to be significant with competitiveness (organizational excellence and organizational performance). This result is in tandem with previous studies (Yusuf *et al.*, 2007; Benavent *et al.*, 2005; Christos *et al.*, 2010; Gatchalian, 1997; Lakshman, 2006; Powell, 1995; Talib *et al.*, 2013).

The finding shows that continuous improvement practices are given attention and implemented effectively in the Nigerian banking sector. They do pay attention to how they can improve such service through implementing the continuous improvement. The continuous improvement should not only concern on some practices but cover all management practices (Benavent *et al.*, 2005). However, for better and improved results, the Nigerian Banking sector should continuously be sensitive to the needs of their customers. For more successful implementation of TQM practices, managers and employees in the sector should plan and implement comprehensive continuous improvement programs that involve all members in the organization. The TQM practices in the sector should involve all the processes and functions integrated to meet customer needs and achieve the desired continuous improvement (Ganiyu, Uche, & Elizabeth, 2012). Therefore, training, employee involvement, and encouragement are the best practices to enhance the continuous improvement to cover all management practices (Benavent, Ros, & Moreno-Luzon, 2005).

CONCLUSION

In conclusion, the competitiveness of banks and their eventual performance will remain one of the main issues related to the development of the country. Therefore, the enhancement of the overall organizational performance of this sector has been the attention of all managers and decision makers in developing countries like Nigeria. In the literature, it has been widely acknowledged that the important role of TQM as the most effective strategies that can assist organizations to enhance their performance and achieve competitive advantages over competitors cannot be over-emphasized.

The results in this study of falsifying the null hypotheses on the relationship between TQM and competitiveness confirmed their importance and significant effect on the organizational excellence and performance.

RECOMMENDATIONS

The followings are the recommendations for Money Deposit banks for implementation and for further research work on TQM and Competitiveness in the banking sector.

- i. One of the problems of the banking sector is that of solving the long queue in the banking hall. Banks are therefore encouraged to employ more staff (cashiers) in order to solve the problem of long queue in the banking hall.
- ii. The Banking sector should implement and monitor TQM practices and processes, with full computerization of all the processes to ease lack of patronage. This will enhance effective and efficient TQM implementation that will reduce customers and society complaints, increase their satisfaction, produce good service delivery and increase performance.

- iii. Money Deposit banks should re-design the various services they are presently delivering, So as to match up with the present trend in the economy. We are in a cashless economy, so banks are advised to make cash available in ATMs and reduce the report of ATM failure, no money in the bank when customers need money for business.
- iv. Banks should make their applications reachable to all their customers and train their employees on various modern equipment to acquire the skills and know-how on these technologies. Mostly in areas of computerising the whole system with information technology on how to use modern internet facilities and even encourage innovation from employees.

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