Information Management and Business Review (ISSN 2220-3796)
Vol. 15, No. 4, pp. 1-15, December 2023

Total Quality Management and Organizational Performance: A Study of Commercial Banks in Bamako, Mali

Mbalalufu Mukenga[1] & *Olawumi Dele Awolusi[2]
[1]School of Post Graduate Studies, College of Economics and Management, Kampala International University, Kampala, Uganda
[2]Department of Accounting and Finance, College of Economics and Management, Kampala International University, Kampala, Uganda
mbalalufu.mukenga@kiu.ac.ug, awolusi.olawumi@kiu.ac.ug*

Abstract: The purpose of the study was to examine the effect of total quality management on organizational performance among selected banks in Bamako, Mali. This study adopted a cross-sectional survey design. The target population was 160 respondents and the sample size was 114 respondents. The study questionnaire was the main instrument of data collection. Frequency and percentage distribution were used to determine the profile of the respondents. Mean and Standard deviations were used as descriptive statistics for the independent (total quality management constructs) and dependent variables (organizational performance). Linear and multiple regression analyses were used to determine the effect. The study found a significant effect of total quality management on organizational performance (R^2=0.832, $p<0.01$). Specifically, the study found a significant effect of all the measures of total quality management on organizational performance. Lastly, the study found that there was a positive significant correlation between total quality management and organizational performance among banks in Bamako, Mali. The study concluded that the promotion of total quality management principles is relevant in enhancing organizational performance in the Malian Banking Industry. The study recommended that: the management of the banks should enhance human resource focus to increase reliability and timely delivery of the products/services. Moreover, effective human resources focus during the process of total quality management thus enhancing banks' performance. The management of banks should focus on the improvement of market target blend and customer care. The banks should also focus on the provision of quality services to the customer and promoting their brand.

Keywords: *Total quality management; organizational performance; multiple regression analysis; banks; Mali.*

1. Introduction

The origin of total quality management is linked to the industrial sector of Japan many years ago (Awolusi, 2021; Adam, 2017). From those years the concept of total quality management has evolved and developed and has since in most organizational settings which include schools, motorway maintenance, hotel management, churches and banking institutions. Currently, Total Quality Management has become very useful when conducting the e-business sector and it perceives quality management entirely from the point of view of the customer (Juan-Luis et al., 2023; Jurado & García-Estrada, 2021). The goal of total quality management is to do the right things when you are doing them for the first time and subsequently, it becomes a practice. This is important in the organization because it saves time which time is needed to correct poor work and failed product and service implementations (such as warranty repairs) (Adam, 2017). The theory of total quality management became popular during the 1980s when the banking industry put more effort into providing services depending on the qualities that customers look for in a service or product (Juan-Luis et al., 2023; Jurado & García-Estrada, 2021).

The practice of total quality management has since been demanding quality in all dimensions of the organization's activities with things done as desired from the onset and any wastage and spoilages being kept to the very minimum during routine business (Adeoti, 2018). Across all organizations globally, major developments within a global or International environment have been made to embrace a spirit of completion and innovation with the prime goal of meeting the ever-changing customer demands and aspirations. Organizational snow days are no longer dependent on their current business forms in an exceedingly competitive marketplace (Agus and Hassan, 2015). There is an urgent need to embrace and adopt current means of operation management that improve their performance gradually to continue existing successfully over the years (Allan, 2017; Argote, 2018; Beamon, 2018). For organizations to be able to compete favorably they must essentially and continuously improve their businesses especially the quality of the goods and

services, this may be through improvising better marketing strategies, product differentiation and cost reduction of the business (Allan, 2017; Argote, 2018). In the contemporary world, total quality management still stands out as one of the best and known types of operations management, this has made it gain global attention from all organizational settings ranging from industry to industry and academics over the years.

Banking institutions have been crucial in exhibiting model performance by improving their results despite the high level of competition for a piece of the market. Total quality management has been introduced in major markets, organizations and sectors due to the stiff competition that organizations face (Ahire & Dreyfus, 2016). As a result, all organizations have had to adopt and implement total quality management to achieve their organizational goals and objectives which has been achieved through the improvement of their business success strategies, differentiating their products and gaining a competitive advantage over other firms in the market (Herzallah et al., 2014; Pérez and Gutiérrez, 2019). Organizations implement TQM to gain a competitive advantage in terms of productivity and customer satisfaction. Organizations implement these practices to ensure the benefits of improved operational performance (Beamon, 2018), and financial performance (O'Neill et al., 2019). Commercial banks achieved the goal of being very steady, deposits and shareholders' assets were able to increase by 36.35% and 38.9% respectively (Central Bank of Mali, 2018). Many management styles have been adopted by most organizations and companies in a bid to achieve the set goals and be able to amicably set their organizational goals. The performance of banks and their interest margins are identified as the key indicators of efficiency or inefficiency for most banking systems, this is because they are the link between the interest rate on savings and loans (Beamon, 2018).

The banking sector has steadily remained branded with persistent operational incompetence and reduced customer services. As a way of addressing the difficulties of incompetence in performance, companies are quickly adopting total quality management to make them effective in meeting the demands of their customers (Allan, 2017). Even though quality management practices have been accepted by many companies as capable of converting the quality culture and producing considerable financial results for large-size companies, some worries have been raised on the validity of quality management practices to generate real economic gains and or improve organizational performance of the banking industry. The selected commercial banks like Bank of Africa, Ecobank and United Bank for Africa have continuously emphasized the adoption of total quality management as a strategy for improving their performance in such a way they have adopted employee involvement, employee commitment and customer service management as a way of promoting their performance (Annual Mali commercial bank Report, 2021). However, despite the adaptation of total quality management the selected banks have continuously experienced organizational performance problems as evidenced by low profitability, failure to achieve sustainable competitive advantage and inadequate customer service (Annual Mali Commercial Bank Report, 2021). Hence the need to conduct this study to investigate the impact of total quality management and organizational performance among selected banks in Mali. Consequently, the purpose of the present study was to investigate the effect of Total Quality Management practices on the Organizational Performance of commercial banks in Bamako, Mali.

However, the specific objectives are as follows: (1.) to establish the effect of human resource focuses on organizational performance of commercial banks in Bamako, Mali; (2.) to examine the effect of strategic planning on organizational performance of Commercial Banks in Bamako, Mali; (3) to establish the effect of process management on organizational performance of commercial banks in Bamako, Mali; and (4.) to examine the effect of customer and market focus on organizational performance of Commercial Banks in Bamako, Mali. This study was conducted in Bamako the southwestern part of Mali where all banks are located. The commercial banks include Ecobank Bamako Mali, Bank of Africa Bamako Mali and United Bank of Africa Bamako Mali. Total quality management was measured using customer service management, employee commitment and employee involvement. Organizational performance was measured using productivity, efficiency and effectiveness. Organizational performance is the dependent variable and the independent variable is total quality management. It is hoped that the findings of this study will help the selected commercial banks to understand the importance of total quality management to cope with the dynamic competitive banking industry. Furthermore, managers will benefit from the findings of this study since it will highlight the best total quality management practices that are more effective in achieving organizational performance goals. Similarly, the results of this study will help employees to understand the total quality management practices

such as employee commitment, employee involvement and customer service management as key in the banking industry.

2. Review of Related Literature

This study was guided by three theories: knowledge–based theory (Allan, 2017; Argote, 2018; Beamon, 2018), System approach theory (Kaynak, 2017; Makgati & Awolusi, 2019) and Daming theory of total quality. The study used the Knowledge-based theory by Kaynak (2017)**.** The theory states that "Knowledge is considered the most critical firm resource". According to the proposers of knowledge-based theory, it is argued that knowledge is the most distinct resource in a business and makes it very hard for it to be duplicated. The knowledge and competencies in a firm are considered to be what a firm can use in creating a competitive advantage over others henceforth setting it apart from the rest thus providing a niche that is far above the others. An organization's knowledge is always demonstrated within its organizational culture and identities, policy documents, systems and practices of the employees (Allan, 2017; Argote, 2018; Beamon, 2018). The knowledge and competencies in a firm are considered to be what a firm can use in creating a competitive advantage over others henceforth setting it apart from the rest thus providing a niche that is far above the others. An organization's knowledge is always demonstrated within its organizational culture and identities, policy documents, systems and practices of the employees. Markets and technologies usually represent two aspects of the knowledge that an organization or firm should have.

They display countless performance opportunities since they pave the way and research and development to flourish within the firm, whereas on the other end induce the organizational capacity given the prevailing market conditions (Masters, 1996; Merino-Díaz, 2018; Mohrman & Tenkasi, 2016). In light of this, an organization will be in a very strategic position to determine the best methods of action to be taken to be able to compete favorably and generate several opportunities (Allan, 2017; Argote, 2018; Beamon, 2018). Most organizations look at this act with effectiveness in the contemporary economy, they need to become knowledge-based firms. But few understand what that means, and how to make the changes necessary to achieve it. Perhaps the most common mistake firms make is considering that the higher the knowledge content of their products and services, the closer they are to being true knowledge-based organizations. Deming's Theory of Total Quality Management (Kaynak, 2017; Makgati & Awolusi, 2019) states that if a company is to focus on the costs, the problem is that cost rises while quality deteriorates. The theory is based on fourteen management points, a profound knowledge system and the She Wart Cycle. He is well-known for his ratio which states that Quality is equivalent to the "outcome of work efforts over total costs". For example, when an organization focuses on costs, challenges will manifest where costs will rise as levels of quality shall be dwindling.

Deming's profound knowledge system consists of: "Understanding how the firms' processes work, Understanding the variations that do occur and why they do, and understanding what can be known and human nature understanding". Specifically, Deming's Theory of Total Quality Management (Masters, 1996; Merino-Díaz, 2018; Mohrman & Tenkasi, 2016) states that if a company is to focus on the costs, the problem is that cost rises while quality deteriorates. The theory is based on fourteen management points, a profound knowledge system, and the Shewart Cycle. He is well-known for his ratio which states that Quality is equivalent to the "outcome of work efforts over total costs". For example, when an organization focuses on costs, challenges will manifest where costs will rise as levels of quality shall be dwindling. Deming's profound knowledge system consists of: "Understanding how the firms' processes work, Understanding the variations that do occur and why they do, and understanding what can be known and human nature understanding". Deming's Theory of Total Quality Management is based on fourteen management points, a profound knowledge system, and the Shewart Cycle. "He's famous for his ratio that states that Quality equals the outcome of work efforts over total costs. If a company focuses on costs, a challenge will arise where costs will rise as levels of quality will deteriorate. Deming's profound knowledge system consists of Understanding how the firms' processes work.
Understanding the variations that do occur and why they do, and understanding what can be known and human nature understanding". Deming's theory of total quality management points are: "Creation of a purpose of constancy, new philosophy adoption, halting the dependency on mass inspections, never award business courtesy of price, ensure there is a production system that is continuous and improvement of service, enhanced performance courtesy of the job training, infusing quality in leadership, dismantle fear aspects from the firm,

do away with departmental barriers, eliminate work goals that are based on quantity achieved, eliminate the use of quotas and standards, encourage pride in craftsmanship, facilitate the training and education process of everyone in the firm and ensure that firm's top management structure facilitates the other points". The systems theory is a group of connected parts working together towards a given goal, Barnard as cited by Masters (1996). Accordingly, the theory states that companies are seen as systems that achieve quality by adopting the works of individuals to be able to achieve the common goal of an organization through efficient operational performance. Management for most organizations sees the human, physical and informational aspects of his/her job as linked in a combined total. The job expected of management is to make sure that all sub-systems in the organization as a business are synchronized internally to enable the organization to achieve its objectives through operational performance. This approach theory appreciates the usefulness of the environment of an organization towards its sustainability. This study therefore shall be based on three theories since they relate with the study variables. Details and explanations of the study theories are in chapter two.

This approach theory appreciates the usefulness of the environment of an organization towards its sustainability. According to the theory it is up to the organizational management to select a management approach for the firm to be able to have an effective and competent organization performing in compliance with acceptable standards. Therefore, it is significant to note that there is not a single management approach that can be able to provide all explanations and professionals need to use approaches collectively Boddy and Paton (2018). Organization's Management approaches may be productive or unproductive depending upon their application and appropriateness to given circumstances. "This theory of total quality management has recognized many total quality management systems practices such as total quality management systems practices which have been documented and empirically analyzed in measurement studies and in studies that have investigated the relationship between total quality management and organizational performance. The theory therefore contends that TQM practices are the pivotal pillars in ensuring the organizational performance of any business entity". Conceptually speaking, Total quality management refers to a technique whereby management and its employees get involved in persistent improvement in the production of goods and services. This involves combining both management and quality tools with the prime focus of improving businesses and decreasing their losses resulting from wasteful practices (Brah, 2018). Total quality management is an explanation of the culture, attitude and involvement of employees in providing clientele with products and services that satisfy their human needs.

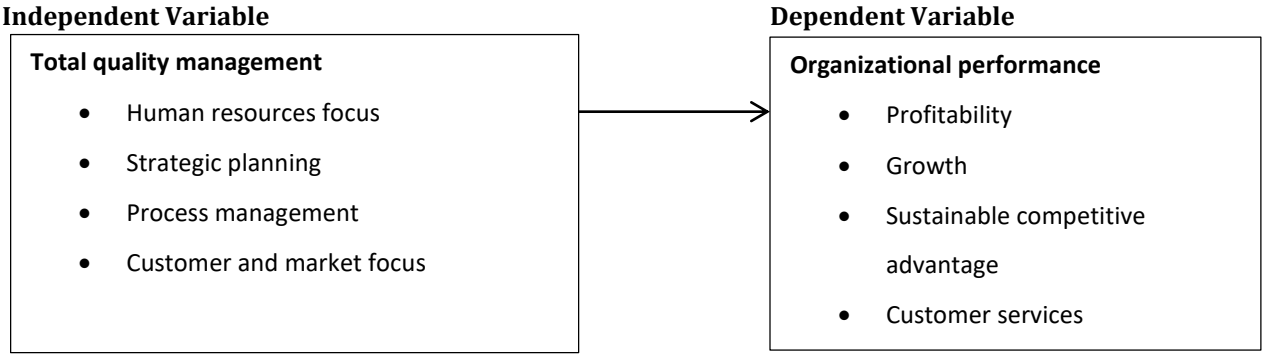
This culture needs quality in all dimensions of the organization's operations, with processes being complete and correct the first time and faults and waste eradicated from operations (Easton, 2018). Total quality management philosophy starts from the top, from the board of directors to the line employees of an organization. Total quality management is an ideology which majorly committed to satisfying the needs of its clients. Total quality management necessitates companies to be able to develop an operational process that focuses on its clients but at the same time invests in resources that position clients and meet their profitability expectations. This means that changing the corporate culture of an organization should be client-centered. "Total quality management needs effective change in an organization's culture which is improved by the commitment of an organization's management strategy for nonstop development, open communication and cooperation through the company; broad employee interest, participation and contribution in the process of quality management. Leaders in a Total quality management system look at the firm as a system; support employee development; establish a multipoint communication among the employees, managers, and customers; and use information efficiently and effectively". Furthermore, leaders inspire employee contribution in policymaking and empowerment of company employees. Total quality management requires actual knowledge management to guarantee that employees get appropriate dependable, reliable, precise, and essential data and information as they need to do their jobs efficiently and professionally in an organization (Powell, 2018).

Total quality management is concerned with constant improvement in all the processes of design and operation, this is from planning up to the decision-making to the execution of work by the front-line staff. The emphasis on nonstop improvement leads to the creation of a tough team whose association is determined by their work on the thorough knowledge of the procedure, and their capability to improve action. Total quality management also suggests reducing and organizing of supplier base which helps in facilitating manager-supplier relationships, development of tactical coalitions with suppliers, and working with suppliers to meet

the needs of the clients or customers (Hendricks, 2017). Organizational Performance refers to the state of yielding gain financially by an organization. It refers to the ability of an organization, institution or company to yield some profit whether accounting or economic. In banks, organizational performance is measured by its profitability. This is the principal goal of any business undertaking whereby without it, a business cannot be in a position to function properly in the long run.

Profitability itself is measured by income and expenses, income here is referred to as the money made from the activities of the business for example interest income for banks and expenses refer to the costs incurred or consumed by the activities of the business for example interest paid on deposits by banks. An increase in the profitability of an organization is considered to be one of the key and paramount responsibilities of most business managers. That explains why most managers are always looking for means to improve their businesses and consequently increase profitability and henceforth the implementation of policies for example the use of strategies such as Total quality management with the ultimate goal to increase profitability and reduce which come as a result of loan defaults by their clients. Studies regarding determinants of profitability of banks have concentrated on both returns on bank assets and equity and net interest rate margins earned. Bank performance and bank interest margins can be looked at as the main indicators of the competence or inefficiency of the banking system, as they drive a wedge between the interest rate received by savers on their deposits and the interest paid by borrowers on their loans (Allan, 2017; Argote, 2018; Beamon, 2018). The conceptual framework is depicted in Figure 1.

Figure 1: Conceptual Framework Showing the Effect of Total Quality Management and Organizational Performance



Source: adapted from Armstrong and Baron (2004) and modified by the researcher (2021).

The independent variable was total quality management. It was measured using human resources focus, strategic planning, process management and customer and market focus. The dependent variable was organizational performance which was measured using profitability, growth, and sustainability competitive advantage and customer services.

Total Quality Management and Organizational Performance: In a rapidly changing competitive environment, human resources are one important source of competitive advantage. Human resource systems can contribute to sustained competitive advantage by facilitating the development of competencies that are firm-specific. Several companies are dependent on their employees to gain an advantage in the competitive market. Therefore, they are strongly related to the efficiency of their human resources and their human resources management (Beamon, 2018). Human resource management (HRM) includes tasks like HR preparation, human resources management, strategic recruiting, employee training, growth compensation management, efficiency, worker relations, health care, employee satisfaction as well as provision of employee services. It includes policies and practices set to improve organizational efficiency, engagement of employees and work quality (Argote, 2018; Beamon, 2018). Strategic planning (SP) is one of the more popular management approaches in contemporary organizations, and it is consistently ranked among the five most popular managerial approaches worldwide Nair (2016).

According to Nair (2016), strategic planning is a tool for finding the best future for your organization and the best path to reach that destination. As per Powell (2018), market advancement involves the improvement of the market target blend and how the necessities in this market are fulfilled with an end goal of upgrading market potential and growing better approaches for serving or working in the objective business sectors. Market pioneers rush to take note of the exceptional practices of clients, for example, their purchasing patterns and will build up their inclinations. To fulfill such inclinations, the firm will at that point need to portion these clients and separate items to fulfill these clients as intently as could be expected. A firm having its workers engaged with the TQM execution measure empowers it to effectively meet the TQM objectives. It shouldn't be simply including them; however, the firm necessities to enable them as they are welcomed over to the dynamic table and the outcome of this is a firm profiting by consistently improving its cycles and frameworks. Employees ordinarily have some crude thoughts and developments that if utilized by a firm will affect progress and disappointment. By including Employees sensitive, their profitability also improves because of their newly discovered inspiration to turn out tenaciously for the firm (Masters, 1996; Merino-Díaz, 2018; Mohrman & Tenkasi, 2016). Workers who engage in the organizational total quality management processes as a group emphatically influence the firm quality drive; this is as indicated by Merino-Díaz (2018) and Mohrman and Tenkasi (2016). However, a firm is required to have formal frameworks of spurring, checking and praising their labor force association in the absolute quality administration measures. If this isn't done, the level and profundity of investment will decay, bringing about a perplexed labor force.

The company's administration needs to build up a climate that is urging workers to engage in the association's quality exercises. Such a climate ought to target building up an inspirational perspective among the representatives, there ought to likewise be correspondence on what objectives should be accomplished and the objectives ought to fundamentally address both association and individual requirements, there ought to likewise be work execution assessment, the association ought to likewise make work fascinating and testing lastly there is a need to perceive top execution and praise it (Mohrman & Tenkasi, 2016). The selection and implementation of the right business strategy will be largely determined by HR competencies that play an important role in the organization's operational activities, planning and implementing the organization's business strategies that have been determined (Masters, 1996; Merino-Díaz, 2018; Mohrman & Tenkasi, 2016). The Role of Mediating and Moderating Factors on the Influence of Behavioral Incivility on Counterproductive Work Behavior. Top Management in organizations keeps up the authority duty regarding the complete quality administration frameworks, with the contribution of every single hierarchical staff. This obligation incorporates; guaranteeing the accessibility of assets to all staff to guarantee improved help conveyance is accomplished for the acknowledgment of the association's vision and mission. Building up and inspecting the quality arrangement and quality goals quarterly to guarantee consistency to the quality principles (Terziovski et al., 2018).

Specifically, Terziovski et al. (2018) underscore the significance of top administration responsibility in projects as it assumes different parts in the firm, for example, impacting mentalities, empowering client support, making a positive setting for change, supervising the improvement of the undertaking, overseeing political struggles, and guaranteeing the accessibility of assets. Thus, the requirement for full responsibility of top administration ought to be perceived, imparted, executed and kept up at all levels in the organization. The significance of total quality management should start to be underscored at the top, where the genuine obligation to execution should be shown through a vision system that includes the association's controlling way of thinking, guiding principles and convictions, reason and mission (Terziovski et al., 2018). The greatness of an effective task relies upon the degree of top administration submitted. The three fundamental features of top administration support which are vital in total quality management and undertaking acknowledgment include: showing interest by taking part in group gatherings, eagerness to invest energy with individuals and tune in to input just as willing to help settle issues; giving essential assets, including preparing and other critical assets and Providing authority by assisting with interpreting plan right into it, ordinary audit of task projects and official dispatching of venture pioneers and task group. The way that top administration is required to set the general bearings of the undertaking by officially shaping a leader directing the advisory group to parcel, audit and screen the task progress (Masters, 1996). Consistent Improvement and Performance can include numerous objectives creating items with zero deformities or accomplishing 100% consumer loyalty (Sadikoglu & Zehir, 2018; Saraph, Benson & Schroeder, 2012; Sharma, 2017; Taveira, James, Karsh & Sainfort, 2012).

Yet persistent improvement has similar essential standards regardless of the set objectives (Merino-Díaz, 2018). These standards include the association of the organization at all levels, discovering reserve funds by improving existing cycles, not by putting away more cash, gathering information on organization activities and evaluating that information, which turns into the pattern against which enhancements will be estimated for constant improvement (Merino-Díaz, 2018). Constant improvement regularly includes making a group that incorporates agents from all spaces of the organization. The group initially invests energy in finding out about their organization and different organizations (benchmarking is basic during this stage). The fundamental quantitative international information is made (Mohrman & Tenkasi, 2016). The group at that point proposes answers for the board and starts to carry out those arrangements. At the point when that is accomplished, follow-up instruments should be set up that look for extra enhancements as time passes by. The group may change individuals with the progression of time, yet ideally becomes a setup and acknowledged piece of the organization even as its timetable changes. On the off chance that the plans are executed as arranged the group will accomplish improved quality because of its underlying endeavors (Mukonga & Awolusi, 2019). This can draw in more workers into this idea which thusly prompts proceed with looking for additional upgrades and subsequently consistent enhancements for organizational performance (Mukonga & Awolusi, 2019; Sadikoglu & Temur, 2015).

There are numerous articles, studies, and studies that portray the parts of value in improving organizational performance. It's very clear that manufacturing and administration enterprises business exhibitions are affected by total quality management (Sadikoglu & Zehir, 2018) tracked down a positive relationship between TQM execution and hierarchical execution and five of TQM standards, client center, ceaseless improvement, top administration responsibility, employee inclusion, and item development have an altogether beneficial outcome on item quality, suggesting the utilization of remuneration and acknowledgment for including workers in TQM endeavors. Sharma (2017) uncovered that the execution of TQM positively affects both operational and hierarchical execution. The outcomes show that client center, nonstop improvement, top administration responsibility, worker inclusion, and item advancement are fundamentally and emphatically identified with item quality. Terziovski, (2018), tracked that distinctive TQM rehearses altogether influence diverse performance results and the fundamental deterrents were the absence of representative contribution, mindfulness and responsibility of the workers, improper firm construction, and absence of the assets. Sadikoglu and Zehir (2018) demonstrated that the Jordanian private emergency clinics apply absolute quality administration rehearses at a serious level.

The most noteworthy focal point of private medical clinics inside complete quality administration rehearses is on client direction, provider the executives, high help from top administration to the quality endeavors, and a worry from the objective clinics in support of representatives in quality administration exercises. However, different researchers have reviewed the literature on total quality management and organizational performance in government institutions, schools, hospitals, banks, public sector but none has conducted a study relating the variables among selected banks in Bamako Mali. Most of the scholars studied the variables in a Western setting which calls for a study in the Mali context. Studies have shown that most of the total quality management and organizational performance has been carried out using Diaspora samples (Saraph, Benson & Schroeder, 2012) and emerging economies in Japan, China and South Korea (Saraph, Benson & Schroeder, 2012). However, very few studies have used samples from sub-Saharan Africa and Mali in particular, thus challenging the generalizability of these studies to a non-Western context. Consequent upon the above-reviewed literature, the present study, therefore, hypothesized the following:

Ho_1: There is no significant effect of human resource focus on organizational performance of commercial banks in Bamako, Mali;

Ho_2: There is no significant effect between strategic planning on organizational performance of Commercial Banks in Mali;

Ho_3: There is no significant effect of process management on organizational performance of commercial banks in Bamako, Mali;

Ho_4: There is no significant effect between customer and market focus on organizational performance of Commercial Banks in Mali.

3. Methodology

This study adopted a cross-sectional survey design. Sharma (2017) states that a cross-sectional study is a study that is conducted once and reveals a snapshot of one point in time. The cross-sectional design is often called the social survey design and is closely connected with a questionnaire. A quantitative approach to data collection and analysis was used. This study population included all the 160 employees from the selected banks in Mali. Namely: the Bank of Africa, Eco Bank and United Bank of Africa. The same population was used as the target population. The respondents included the managers and the support staff. The sample size for this study was calculated using the Slovene formula (Eze & Awolusi, 2018; Onikoyi, Awolusi, & Boyede, 2014). Consequently, a sample size of 114 respondents was contrived. This study used purposive sampling to select the managers because it is useful in identifying uniquely qualified respondents to provide needed information (Mukonga & Awolusi, 2019). The selection was based on expert knowledge of the particular problem of the research. On the other hand, a simple random sampling technique was used to collect data from the respondents. This was achieved by the researcher writing the names of the support staff on different pieces of paper. The papers were then put in a bowl and shaken to randomize them. The researcher then randomly selected the names of the respondents from the pieces of paper until he was satisfied with the number of respondents that she needed.

This sampling technique was preferred because it gives equal opportunity for each participant to be included in the study without bias. The study employed a questionnaire survey as a data collection method. The questionnaire survey was objective targeting both the managerial and support staff to respond to questions regarding total quality management and organizational performance (Awolusi, 2021; Adam, 2017). The data collection tool that was employed in this method was a closed and self-administered questionnaire. The questionnaire was preferred because it is easy to administer (Taveira, James, Karsh & Sainfort, 2012). The questionnaire was used as the main research instrument for this study. A questionnaire is easier to administer, less costly, and ensures greater depth of response (Sharma, 2017; Taveira, James, Karsh & Sainfort, 2012). This study employed close-ended questionnaires, where questions are presented, and the responses are found and the respondent is expected to choose the answer from the options given to him/her. Furthermore, the questionnaire was subdivided into three sections; namely: Section A which showed the profile of the respondents, Section B was used to get descriptive data from total quality management practices and Section C was used to collect data regarding organizational performance. The questionnaires were designed using a five-point Likert scale, where 1=strongly disagree; 2=disagree; not sure; 4=agree; and 5=strongly agree.

The five Likert scale was preferred by the researcher because it captures all the ideas, views and opinions of the respondents. Validity is the extent to which a measuring instrument on an application performs the function for which it is designed (Allan, 2017). Face and content validity have been defined by Adam (2017) as follows: Face validity is the idea that a test should appear superficially to test what it is supposed to test, and Content validity is the notion that a test should sample the range of behavior represented by the theoretical concept being tested. Furthermore, the Content Validity Index (CVI) was computed and a value of 0.90 was ascertained for the instrument to be valid. According to Adam (2017), CVI which is equal to or greater than 0.70 was considered valid. Reliability is the tendency toward consistency found in repeated measurements (Argote, 2018). The reliability of the instrument was ascertained using the internal consistency method. Having validated the questionnaire, pilot testing was carried out on the instrument using 15 employees from the other banks in Mali. The employees were given to respond to the questions in the questionnaire over one week. The derived measures of reliabilities for all the constructs are depicted in Table 1.

Table 1: Cronbach's Alpha Reliability Coefficients

Cronbach's Coefficient Alpha		
Variable(s)	**Number of items**	**Alpha**
Human resource focus	7	0.728
Strategic planning	3	0.601
Process management	6	0.642
Customer and management focus	5	0.622

Organizational performance	16	0.781
Overall	**37**	**0.814**

Lastly, the statistical package for social scientists SPSS was used to process and analyze all quantitative data. Data analysis was based on the objectives of the study. Specifically, the study utilized multiple regression analysis to ascertain the influence of total quality management on organizational performance. The derived equation to determine the effect of total quality management on organizational performance was represented as:

$Y = a + bx$……(1)

The equations for the objectives of the study are indicated below:

DV = f (IVs)……(2)

Y = a + bx

Where

a = Constant

b = parameter

x = independent variables

IV is composed of total quality management Y: Dependent variable: organizational performance here;a_1, a_4 $a_5$$a_6$ are parameters for the variable specifically,

$TQM_i = \alpha_0 + b_1(HRF) + \varepsilon_i$…… **(3)**

$TQM_i = \alpha_0 + b_1SM + \varepsilon_i$…… **(4)**

$TQM_i = \alpha_0 + b_1PM\ \varepsilon_i$……**(5)**

$TQM_i = \alpha_0 + b_1CS + \varepsilon_i$…… **(6)**

Multiple regression analysis was used to determine the effect of employee total quality management on organizational performance (Awolusi, 2021; Awolusi, 2012). As a predictive analysis, multiple linear regression is used to explain the effect between the dependent variable and the independent variables. Where; the dependent variable; is a=intercept; b=slope; x= independent variable, TQM= total quality management which is measured in human resource focus =HRF, process management =PM, Strategic management =SM and customer focus CF and OP is organizational performance. The null hypothesis was tested using the level of significance ($p \leq 0.01$); the decision rule was that: if the p-value is less or equal ($p \leq 0.01$), it would be considered significant; otherwise, the null hypothesis would be rejected.

4. Results and Discussion of Findings

After the data entry stage, the data was captured using the SPSS software and then analyzed concerning the research objectives. The analysis was presented using descriptive analysis, regression analysis and correlations.

Results: Descriptive statistics were used to show the demographic characteristics. These were followed by the t-tests. The majority of respondents were female with a dominance of (64.0) compared to their counterparts, the male with (36.0%). Therefore, this implied that the majority were females although the banks consider gender balance important. Similarly, the majority of the respondents were between the age of 20 -30 years with 46.5 %, 31-40 with 32.5 and 41-50 years with 21.1%. This implies that the majority of the respondents in selected banks in Bamako Mali were young people with a high commitment to serving in the bank. In addition, the majority of the respondents hold a master's degree educational qualification level of 55.3, while those with a degree constituted about 43.9% of total respondents and 0.8% with a diploma. This implies that the majority of the respondents had attained a master's level and also many had attained a degree level. This implies the selected banks in Bamako Mali consider education important and the majority of its employees are educated to a higher level. The majority of the respondents had also worked for 2-4 years with 52.6%, 5-7 years with 31.6 % and 8-10 years with 15.8 %. This implies that the majority of the employees in the selected banks in Bamako Mali have gained adequate working experience in the banks. Lastly, the majority of the respondents were operational staff with 85.1% and managers with 14.9%.

This implies that the majority of the employees in selected banks are operational staff who handle day-to-day activities like customer care and other service deliveries. Based on the descriptive analysis, total quality management in all aspects was moderate with a grand (mean = 3.41). Human resource focus with (an average mean=3.19), Strategic planning with (an average mean= 3.34), process management with average (mean=3.53) and customer service with (average mean = 3.61). This implies that total quality management among selected banks in Bamako Mali was moderate and it needs improvement to enhance organizational performance. The dependent variable in this study (organizational performance) was categorized into profitability, growth dimension, and sustainable competitive and customer service. This variable was measured using quantitative questions with response rates ranging from (1) Strongly Agree; (2) Agree; (3) not sure (4) Disagree; and (5) Strongly Disagree. Responses were analyzed and described using means. The descriptive findings implied that total organizational performance in all aspects rated high with a grand (mean = 3.71). For profitability with (average mean=3.72), growth dimension with average (mean =3.09). Sustainable competitive with (average mean= 3.93) and customer service with (mean=4.06). This implies that organizational performance among selected banks in Bamako Mali is high despite total quality management being moderate in banks.

Table 2: Multiple Linear Regression Analysis for Total Quality Management on Organizational Performance

Variables regressed	**Adjusted r^2**	**F-value**	**R**	**Sig.**		**Interpretation**	**Decision on H_o**
Total quality management Vs. Organizational performance	.832	88.4	.912	.000		Significant effect	Rejected
	Unstandardized Coefficients B	Std. Error	Standardized coefficients Beta	t-value	Sig-value	Interpretation	Decision on Ho
(Constant)	34.454	1.124		28.885	.000	Significant effect	Rejected
Human resource focus	.563	.130	.392	4.156	.000	Significant	Accepted
Strategic planning	.834	.478	.762	3.83	.000	Significant	Accepted
Process management	.156	.283	.059	.552	.582	Insignificant	Accepted
Customer and market focus	.925	.336	.472	2.752	.007	Significant	Accepted

a. Predictors: (Constant), human resource focus, strategic management, process management and customer service

Results in Table: 2 above revealed that quality management has a significant effect on organizational performance at (Adjusted R Squared =.832). This implies that the null hypothesis is accepted. All the regression model's results were significant as noted from the contrived level of significance (Sig. <.01). The findings indicate that human resource focus, strategic planning process management and customer service focus had had significant effect on organizational performance in the Malian Banking industry.

Discussion of Findings: The findings indicated that human resource focus significantly affects organizational performance among selected banks in Bamako Mali. Human resource focus scored a grand (mean = 2.89). This implies that human resource focus has a moderate effect on organizational performance Collins (2018). Concur with the findings that human resource focus influences organizational performance. He adds that human

resource focus includes tasks like HR preparation, human resources management, strategic recruiting, employee training, growth compensation management, efficiency, worker relations, health care, and employee satisfaction as well as provision of employee services which all enhance organizational performance. It includes policies and practices set to improve organizational efficiency, engagement of employees and work quality (Allan, 2017; Argote, 2018; Beamon, 2018). Specifically, Beamon (2018) also concurs with the findings that Human resource focus is the strategic approach to the effective and efficient management of people in a company or organization such that they help their organization gain a competitive advantage thus achieving organizational performance.

Allan (2017) and Argote (2018) also concur with the findings that human resource focus is designed to maximize employee performance in service of an employer's strategic objectives resource management is primarily concerned with the management of people within organizations, focusing on policies and systems. HR departments are responsible for overseeing employee benefits design, employee recruitment, training and development, performance appraisal, and reward management, such as managing pay and employee benefits systems. HR also concerns itself with organizational change and industrial relations, or the balancing of organizational practices with requirements arising from collective bargaining and governmental laws. Argote (2018) and Beamon (2018) also concur with the findings that human resource focus greatly influences organizational performance. The overall purpose of human resources focus is to ensure that the organization can achieve success through people. HR professionals manage the human capital of an organization and focus on implementing policies and processes. They can specialize in finding, recruiting, selecting, training, and developing employees, as well as maintaining employee relations or benefits. Moreover, our findings also indicated that strategic planning significantly affects organizational performance among selected banks in Bamako Mali. Leadership scored a grand (mean = 3.34). This implies that strategic planning has a moderate effect on organizational performance.

Blas & Limbambala (2017) concur with the findings that the interest in strategy planning grew out of the realization that a firm needed a well-defined scope and growth direction not just extrapolations of past performances which were being used to project into the future. Forza & Filippini (2018) made an observation of firms‟ recognition of the need to do strategic thinking and planning. (Blas & Limbambala, 2017) also concur with the findings Of Douglas and Judge (2017) Others point out significant difficulties inherent in investigating the relationship between strategic planning and performance, which include the fact that firm performance in the present is a function of past and not current, planning practices (Blas & Limbambala, 2017; Forza & Filippini, 2018) and that hard-to-obtain longitudinal data would be required to control for time lag effects and to show that causal relationships do exist‟ (Douglas & Judge, 2017; Forza & Filippini, 2018). Strategic planning is one of the more popular management approaches in contemporary organizations, and it is consistently ranked among the five most popular managerial approaches worldwide that enhance organizational performance (Wolf and Floyd 2017). According to Beamon (2018), strategic planning is a tool for finding the best future for your organization and the best path to reach that destination and achievement of organizational performance. In addition, our findings also indicated that process management significantly affects organizational performance among selected banks in Bamako Mali.

Process management scored a grand (mean = 3.53). This implies that process management had a high effect on organizational performance. According to Argote (2018) and Beamon (2018) concur with the finding that process management is an organizational approach that focuses on the processes, and is used in the analysis, design, and organizational development of business processes, to improve organizational performance and increase organizational efficiency. Beamon (2018) also concurs with the findings that process management greatly affects organizational performance and he identified a range of benefits that may expected from adopting process management, such as improving organizational performance, communications within organizations, identifying inputs, identifying outputs, and business activities, understanding the flow of activities within the organization, until product or service arrive to the customer, improving the decisions related to performance processes follow-up, and improving the individual management. Argote (2018) also concurs with the findings that process management has a major effect on organizational performance and integration between the organizational systems and its human resources, where organizations aim to maximize the efficient use of their resources and achieve their strategic objectives and organizational performance.

Lastly, the findings also indicated that customer and market focus had a significant effect on organizational performance among selected banks in Bamako Mali. Customer and market focus scored a grand (mean = 3.61).

This implies that customer and market focus had a high effect on organizational performance. (Mitchell, 2013) concur with the findings that customer and market focus has a great influence on organizational performance. He also contends that market advancement involves the improvement of the market target blend and how the necessities in this market are fulfilled with an end goal of upgrading market potential and growing better approaches for serving or working in the objective business sectors. Beamon (2018) and Argote (2018) also concur with the findings that market pioneers rush to take note of the exceptional practices of clients, for example, their purchasing patterns and will build up their inclinations to achieve organizational performance. To fulfill such inclinations, the firm will at that point need to portion these clients and separate items to fulfill these clients as intently as could be expected. Altogether, for a business to procure attributes that give it an edge over its rivals, research on practices and mentalities that infer nonstop better execution thus better support the, (Beamon, 2018). Beamon (2018) concurs with the findings that subsequently established that converting market knowledge into practice in the planning and decision-making process will follow automatically. Similarly, cross-functional coordination is defined as the organized utilization of company resources in an operationally competent manner rather than being competent in the market (Allan, 2017; Argote, 2018; Beamon, 2018; Bergquist, Fredriksson & Svensson, 2019).

5. Conclusions, Recommendations and Implications

Conclusions: The purpose of the study was to examine the effect of total quality management on organizational performance among selected banks in Bamako, Mali. This study adopted a cross-sectional survey design. The target population was 160 respondents and the sample size was 114 respondents. The study questionnaire was the main instrument of data collection. Frequency and percentage distribution were used to determine the profile of the respondents. Mean and Standard deviations were used as descriptive statistics for the independent (total quality management constructs) and dependent variables (organizational performance). Linear and multiple regression analyses were used to determine the effect. Consequently, the following conclusions were contrived: There is a significant effect of human resource focus on organizational performance in the Malian banking industry. This is because human resource focus has a significant effect on enhancing organizational performance. The findings indicate that the null hypothesis was rejected. The study also concluded on the significant effect of strategic planning on organizational performance in the Malian Banking Industry. The study also concluded on the significant effect of process management on organizational performance in the Malian Banking Industry. Lastly, the present study concluded on the significant effect of customer and market focus on organizational performance in the Malian Banking Industry.

Recommendations: The management of the selected banks should carry out regular training to enhance organizational performance and customer results. Furthermore, the management of the banks should also treat employees as a valuable resource to increase their loyalty to the firm, motivate them and make them proud of their jobs, improve their work-related performances, decrease absenteeism, and reduce intentions to quit. The management of the banks should educate employees on total quality management to increase the quality, reliability, and timely delivery of the products/services. With effective training, employees know the industry and the structure of the bank better. Effective training on quality also increases employees' skills to work effectively and efficiently. Furthermore, it will improve employees' loyalty to the firm, their motivation, and work-related performances. Employees should be given training on delivering high-quality and reliable products and/or services to reduce customer complaints. The management of the banks should come up with a clear vision, mission, and values of the banks. With effective strategic quality planning efforts employees should be taken as an input in developing the vision, mission, strategies, and objectives. This facilitates acceptance and support of strategic quality plans by the employees. Successful strategic quality planning efforts also take into account the possible side effects of the plan on the environment before the organizational performance. The management of the selected banks should focus on serving the external customers. They first should know the customers' expectations and requirements and then should offer the products/services, accordingly. With the aid of successful customer focus efforts, production can be arranged concerning the customers' needs, expectations, and complaints.

The management should also focus on producing high-quality and reliable products/services on time with increased efficiency and productivity. When customer expectations are met, their satisfaction will be increased, and the firm's sales and market share will increase. The management of the banks should include four elements: strategic alignment, IT, employees' involvement and process improvement to achieve organizational performance. The management should focus on the processes, and use them in the analysis, design, and organizational development of business processes, to improve organizational performance. Lastly, the management of the selected banks should focus on the improvement of market target blend and customer care. The banks should also focus on the provision of quality services to the customer and promoting their brand. The management of the selected banks should ensure effective communication throughout the TQM Process to ensure patience and understanding of the organizational and cultural changes, commitment and support from the top management throughout the TQM process are also essential. TQM implementation must also be constantly reviewed to align with plans and budgets, while effective process review and controls to conform to set standards are also essential. Quality improvement measurement systems and IT infrastructures must be installed to generate quality data, information sharing and evaluation, and most significantly, TQM strategies must be constantly aligned with the marketing strategies of the banks to achieve successful TQM implementation.

Implications and Contributions to Knowledge: This study found that all aspects of total quality management including human resource focus, leadership, strategic management, process management, information and analysis and customer market focus are instrumental in the attainment of organizational performance in the Malian Banking Industry. This study is expected to provide specific direction to companies contemplating a TQM program (Awolusi, 2013). Hence, the study is expected to be beneficial to banks in Mali by, enabling better strategic and tactical judgments about TQM implementations. It will help selected banks understand TQM as a business philosophy, its key components and its benefits. It will also explore imperatives for successful implementation. It will serve as a veritable source of information for decision-makers who need to commit resources to such a venture, project team members and Consultants who seek to avoid implementation pitfalls, as well as, professionals who work in this and other related fields (Awolusi, 2013).

Another contribution of this study is the measurement of business performance, which was not limited to or focused on financial metrics, but encompasses diverse business indicators and perspectives, like profitability, growth, customer services and sustainable competitive advantage. Allan (2017) and Argote (2018) specifically identified this gap in the literature. This is on the premise that many researchers often use objective measures such as turnover and profit as a form of measuring enterprise/firm business performance. Lastly, this study offers a theoretical model that can be considered a step forward in developing an integrated model for investigating the relationship between TQM and organizational performance (Awolusi, 2012b). Finally, this research adds to the body of knowledge by providing new data and empirical insights into the relationship between TQM and organizational performance. However, further comparative research may be conducted on the relationship between total quality management and organizational performance within the manufacturing industries in Mali to understudy any probable similarities and differences between manufacturing and service-related firms in Mali.

Acknowledgment: This paper is an extract from a Master in Business Administration thesis at Kampala International University, Kampala, Uganda. Prof. Olawumi .D. Awolusi was the supervisor of the study

References

Adam, E. E., Flores, B. E. & Macias, A. (2017) Quality Improvement Practices and the Effect on Manufacturing Firm Performance: Evidence from Mexico and the USA, *International Journal of Production Research*, 39(1), 43-63.

Adeoti, M. (2018). Links between Organizational Learning and Total Quality: a critical review, *Journal of European Industrial Training*, 22(2), 47-56.

Agus, A. & Hassan. (2015). Exploring the relationship between the length of Total Quality Management Adoption and financial performance. An empirical study in Malaysia, *Production and inventory management journal*, 28(2), 47-76.

Ahire, S. L. & Dreyfus, P. (2017). The impact of design management and process management on quality: an empirical examination, *Journal of Operations Management*, 18(1), 549-575.

Allan, T. (2017). Exploring the relationship between the length of total quality management adoption and financial performance: an empirical study in Malaysia*, International Journal of Management,* 2(1), 323-33.

Argote, L. (2018). Organizational Learning: Creating, Retaining, and Transferring Knowledge. New York: Springer. Gonzalez.

Awolusi, O. D. (2013). The effects of total quality management on customer service management in the Nigerian banking industry: an empirical analysis, *International Journal of Management and Network Economics,* 3(1), 57–77

Awolusi, O. D. (2021). Economic Growth and Socioeconomic Sustainability in BRICS Countries: A Vector Error Correction Modeling Approach, *Journal of Economics and Behavioral Studies,* 13(3), 1-23

Awolusi, O. D. (2012). The effects of mergers and acquisitions on business Performance in the Nigerian banking industry: an empirical analysis, *International Journal of Business Performance Management*, 13(3/4), 366–385.

Awolusi, O. D. (2012b). Effectiveness of Total Quality Management on Business Performance in Nigerian Manufacturing Firms: an empirical analysis, *International Journal of Enterprise Network Management,* 5(3), 254–271.

Beamon, T. (2018). Performance measurement in humanitarian relief chains, *International Journal of Public Sector Management*, 22(2), 1-25.

Bergquist, B., Fredriksson, M. & Svensson, M. (2019). TQM: terrific quality marvel or tragic quality malpractice? *The TQM Magazine*, 17(4), 309-321.

Blas, T. & Limbambala, H. (2017). Comparing three signals of Service Quality, *A journal of Services Marketing,* 23(1), 23-34.

Boddy, G. & Paton, T. (2018). The use of quality management techniques and tools: an examination of some key issues, *International Journal of Technology Management*, 16(1), 305-325.

Brah, A. S., Tee, L. S. & Rao, M. B. (2019). Relationship between total quality management and performance of Singapore companies, International journal of quality and reliability, 22(2), 47-56.

Brah, S. (2018). Relationship between TQM and performance of Singapore companies, *International Journal of Quality and Reliability Management*, 19(4), 356–379.

Douglas, T. & Judge, W. Q. (2017). Total quality management implementation and competitive advantage: the role of structural control and exploration, *Academy of Management Journal*, 44(1), 158–169.

Easton. (2018). The effects of total quality management on corporate performance: an empirical investigation, *Journal of Business*, 71(2), 253–307.

Eze, T. O. & Awolusi, O. D. (2018). Effect of Critical Factors on Expatriate Assignment Performance in the Nigerian Oil and Gas Sector, *Global Journal of Interdisciplinary Social Sciences,* 7(2), 6-19.

Forza, C. & Filippini, R. (2018). TQM impact on quality conformance and customer satisfaction: a causal model, *International Journal of Production Economics*, 55(1), 1–20.

Fredendall, T. & Douglas, J. (2018). The evolving theory of quality management: the role of Six Sigma, *Journal of Operations Management*, 26(5), 630–650.

Hendricks, R. (2017). Quality awards and the market value of the firm: an empirical investigation, *Management Science*, 42(3), 415–436.

Juan-Luis, R. S., Mercedes Raquel, G. R. & Moure Olga, M. (2023). Strategic Management of IT Practices in Tourism for Operation and Service Enhancement. *Administrative Sciences*, 13(1), 2.

Kaynak, J. & Hartley, L. (2017). A replication and extension of quality management into the supply chain, *Journal of Operations Management*, 26(4), 468–489.

Kaynak, H. (2017). The relationship between total quality management practices and their effects on firm performance, *Journal of Operations Management*, 21(4), 405–435.

Makgati, M. O. & Awolusi, O. D. (2019). The Influence of Information Communication Technology (ICT) Integration on Teaching and Learning in South African Schools, *Journal of Education and Vocational Research*, 10(2), 47–64.

Masters R. J. (1996). Overcoming the barriers to TQMs success, (2017), *Quality Progress*, 29(5), 53–55.

Merino-Díaz de Cerio, T. (2018). Quality management practices and operational performance: empirical evidence for Spanish industry, *International Journal of Production Research*, 41(12), 2763–2786.

Mohrman, R. V. & Tenkasi, E. (2016). Total quality management: practice and outcomes in the largest US firms, *Employee Relations*, 17(3), 26–41.

Mukonga, L. M. & Awolusi, O. D. (2019). Strategic Leadership in Post-Conflict States: A Study of the Democratic Republic of Congo (DRC), *Journal of Social and Development Sciences*, 10(4), 36–51.

Nair, M. (2016). Meta-analysis of the relationship between quality management practices and firm performance-implications for quality management theory development," *Journal of Operations Management*, 24(6), 948–975.

Onikoyi, I. A., Awolusi, O. D. & Boyede, M. A. (2014). Effect of Absenteeism on Corporate Performance: a case study of Cadbury Nigeria plc, Ikeja, Lagos State, Nigeria, *British Journal of Marketing Studies,* 3(2), 58–71.

Powell, R. (2018). Total quality management as competitive advantage: a review and empirical study, *Strategic Management Journal*, 16(1), 15–37.

Sadikoglu. & Temur, T. (2015). The relationship between ISO 17025 quality management system accreditation and laboratory performance, in *Quality Management and Practices, K. S. Ng, Ed., chapter,* 13, 221–230, In Tech, Croatia, Rijeka

Sadikoglu, E. & Zehir, C. (2018). Investigating the effects of innovation and employee performance on the relationship between total quality management practices and firm performance: an empirical study of Turkish firms, *International Journal of Production Economics*, 127(1), 13–26

Saraph, P. G. Benson J. V. & Schroeder, R. G. (2012). An instrument for measuring the critical factors of quality management, *Decision Sciences*, 20(1), 810–829.

Sharma, T. (2017). Quality management dimensions, contextual factors, and performance: an empirical investigation, *Total Quality Management and Business Excellence*, 17(9), 1231–1244.

Taveira, D. C. A., James, B. T., Karsh. & Sainfort, F. (2012). Quality management and the work environment: an empirical investigation in a public sector organization, *Applied Ergonomics*, 34(4), 281–291.

Terziovski. (2018). The business value of quality management systems certification evidence from Australia and New Zealand, *Journal of Operations Management*, 15(1), 1–18.