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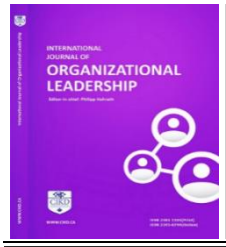

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Leadership Styles and Total Quality Management (TQM) Implementation: Competitor Orientation and Inter-Functional Coordination as Mediators

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ABSTRACT

This paper examines the mediating role of competitor orientation and inter-functional coordination between leadership styles and Total Quality Management (TQM) implementation. The empirical data for this study were drawn from a survey of 203 leaders from manufacturing and service firms in Addis Ababa and its surrounding cities to examine the reliability and validity of the independent constructs; mediating constructs (i.e., competitor orientation and inter-functional coordination); and implementation of TQM. The data were analyzed using Structural Equation Modeling (SEM) to examine the mediating role of competitor orientation and inter-functional coordination between leadership styles and the implementation of TQM. The result of this study revealed that servant and transactional leadership did have a positive and direct effect on the implementation of TQM, while the relationships were further positively mediated by inter-functional coordination for the servant leadership-TQM relationship and negatively mediated by competitor orientation for the transactional leadership-TQM relationship. On the other hand, transformational leadership had only a positive and indirect effect on implementing TQM through competitor orientation and inter-functional coordination. Our sample companies came from different industries (both manufacturing and service sectors). Hence, future studies could consider samples from manufacturing and service sectors independently to control and reduce the bias resulting from industry differences. The results can be beneficial for the current organizational leaders to achieve appropriate leadership styles and understand the mediating role of competitor orientation and inter-functional coordination between leadership styles and the implementation of TQM.

In the current global economy, manufacturing and service firms in developing countries face serious competition from domestic and international markets (Acar et al., 2013; Samat et al., 2006). The same is true for Ethiopian manufacturing and service firms (Daniel & Fasika, 2003). The Ethiopian economy grew at a rate between 8 percent and 11 percent per year for more than a decade (ADA & First Consult PLC, 2017). This put the country in the fifth position among the top mounting economies in the world. The service sector remained the dominant sector with a 47 percent contribution to GDP, while the share of the industry grew slightly from 15 to 16 percent (ADA and First Consult PLC, 2017). However, the total goods and service exported do not exceed 10 percent of GDP, significantly below the 24 percent expected from Ethiopia at its level of development (World Bank, 2018). Moreover, many Ethiopian firms are being affected by a lack of quality and efficiency and, thereby poor market competitiveness (Kahsay et al., 2007).

The implication of quality is a major concern for several organizations both manufacturing and service. The necessity for quality management in Ethiopia has been documented since 1972, establishing the Ethiopian standard institute. In recent years, numerous efforts have been made to encourage quality systems in the country (Daniel & Fasika, 2003). Among every quality initiative, increasingly, these organizations have been paying attention to Total Quality Management (TQM).

The victory in implementing TQM has revealed a direct positive impact on the achievement of manufacturing and service firms in both developed and developing countries. TQM is used both in manufacturing and service firms (Fotopoulos & Psomas, 2009; Jabnoun & Sedrani, 2005; Samat et al., 2006; Samson & Terziovski, 1999; Talavera, 2004; Wang et al., 2012); as a method for improving performance and competitiveness. TQM is a management system that includes a set of practices for managing an organization (e.g., Pradhan, 2017; Samson & Terziovski, 1999; Zhang et al., 2000). Almost all organizations across the globe are influenced by the successful implementation of TQM.

Due to the significance of TQM to Ethiopian firms, it is crucial to study and evaluate its implementation in Ethiopian firms' context, including the investigation of factors relating to it. The implementation of TQM is challenging. There are many obstacles to achieving TQM implementation success (Lakhe & Mohanty, 1994; Rad, 2006; Stevenson, 1999). For instance, changes in some organizational cultures are usually introduced while implementing TQM (Gallear & Ghobadian, 2004; Pereira-Moliner et al., 2016; Rad, 2006). Empirical research on TQM leadership offers scholars a rich and fertile field for investigation as it is still in its growing stage (Barbosa et al., 2017; Kumar & Sharma, 2018).

This study is intended to investigate the implementation of TQM and fill research gaps by highlighting some managerial practices or organizational factors that may be used to strategically improve the implementation of TQM. Some previous empirical studies have emphasized the role of leadership styles and organizational culture in influencing the implementation of TQM. However, few studies have investigated the role of leadership styles in implementing TQM through the mediating effect of different cultural variables such as competitor orientation and inter-functional coordination. This led a researcher to ponder this study as a central focus and formulated and tested the research hypothesis for this study.

Literature Review

Total Quality Management (TQM)

Numerous definitions of TQM have been presented over the years as each generation attempts to understand what TQM is and what it means to them. Improving every piece of the organization's actions and behaviors, improving quality, productivity, and services with a focus on meeting customers' requirements at present and in the future is the thinking of TQM. For instance, according to Stevenson (1999), TQM refers to "an organization-wide effort to achieve quality" (p.101) while Dale (2003) defined it as "TQM is the mutual co-operation of everyone in an organization and associated business processes to produce products and services which meet and hopefully exceed the needs and expectations of customers" (p.26). This suggests that TQM controls the manufacturing process while sustaining the well-being of the human element of the organization to label quality as the most priority. Practitioners and researchers try to demonstrate that a broad range of components make up TQM. These components are the focal and noteworthy achievement factors to promise the triumphant execution of TQM; nevertheless, there is no accord yet concerning the exact number and type of components (Fotopoulos & Psomas, 2009; Powell, 1995; Samson & Terziovski, 1999; Thamizhmanii & Hasan, 2010).

Leadership styles

There are numerous definitions of leadership in the academic literature, but House and Aditya (1997) present a well-known and plain definition. According to them, a leadership style refers to "how leaders express specific behavior"(p. 451). They also speculate that the success, approval, and suitability of leadership styles become the function of the analogy with the culture in which the leader functions. Leadership style is a process to persuade organizational members to grasp goals and track procedures and rules by monitoring and controlling the manners of their followers. Leadership is conceptualized and studied as a process, collective role, and mental model throughout the organization rather than the characteristics of a person (Yukl, 1999). The research model of this study includes three leadership styles; transformational, transactional, and servant leadership.

Transformational Leadership is principally concerned with articulating the plan for change, providing support, convincing rationale for the change, building a guiding coalition, and increasing a sense of urgency (Kotter, 1995). *Servant Leadership* is mostly concerned with employee participation, solidarity, valuing unity, and human resource development. The servant leadership framework is an amalgamation of seven characteristics (Liden et al., 2015) including forming relationships, behaving ethically, signifying conceptual skills, putting first, empowering, helping followers grow and succeed, and creating value for others external to the organization. *Transactional Leadership* is largely associated with conversing with the team members to develop detailed and plain goals and establishing that workers acquire what is guaranteed for the purpose accomplished as per the accord, trade rewards for employees' effort, and are alert to their endeavor instantly (Bryant, 2003). Conceptually, transactional leadership has been illustrated by two distinct components. These are 1) Contingent reward, and 2) Management by exception (Bass & Avolio, 1993; Judge & Piccolo, 2004).

Competitor Orientation and Inter-functional Coordination

A competitor orientation appears along with an organization's greater perception of what characteristics of the market are working (Kohli & Jaworski, 1990; Jaworski et al., 2002). It assists in the acquisition, the ease of transfer, and the development of competitor information and knowledge relating to competitors' manners, technological progress, and business opportunities internally (Adidam et al., 2012; Cavallo et al., 2021). Competitor orientation engrosses assembling information on competitors' activities, offerings, and market potentials. Competitor-oriented organizations are eager to discover strengths and weaknesses by openly balancing themselves against foremost competitors, and generating the greatest customer value higher than other competitors (Ozsashin et al., 2013; Zhang et al., 2007). It is commonly agreed and more likely to achieve superior in terms of employee job fulfillment, esprit de corps, and customer contentment, as well as an organizational dedication for competitor-oriented organizations (Adidam et al., 2012; Kohli & Jaworski, 1990; Olavarrieta & Friedmann, 1999; Ozsashin et al., 2013).

The improvement in sharing information, communication, and synchronization amongst the diverse functions was believed to occur via strong inter-functional coordination in all organizations (Tyler & Gnyawali, 2002). The synchronized behaviors and activities of diverse organizational units are decisive in today's passionate market competition (Li et al., 2021). Inter-functional coordination is decisive and effective in reacting to market acumen (Simiyu & Bonuke, 2018). It also advances the synchronized use of business resources and customer-related activities (Zhou et al., 2009). This thinking enlightens the potential of the functional units to embrace a diverse view and work on incoherent positions and mental models by putting away functional interests for the better. Alternatively, inter-departmental divergence might occur from the incongruence of goals and responses, and these unrelated organizational goals and lack of alliance amongst business functions generate dysfunctions (Harris & Ogbonna, 2001; Kohli & Jaworski, 1990).

Theoretical and Hypothesis Development

Leadership Styles and TQM

Transformational leadership is an elemental enabler behind an effectual execution of other TQM dimensions by presenting behaviors closer to TQM leadership, such as crafting a vision and endorsing a change (Kotter, 1995; Rougan, 2015). They launch quality goals and strategies, institute a learning environment, inspire, communicate, and authorize employees for a triumphant execution of TQM (Kumar & Sharma, 2018). They craft customer focus values by enhancing organizational members' consciousness on how to fulfill customer needs and elucidate task requirements to lessen role doubts (Liaw et al., 2010). In this logic, transformational leaders might be the least prerequisite to adopting, implementing, and sustaining TQM (Kumar & Sharma, 2018).

Servant leadership values solidity, employee involvement, collaboration, and human resource development as essential to the TQM approach (Dierendonck, 2011; Spears, 2005). For instance, empowering leadership as one constituent of servant leadership assists TQM-related information sharing in a team (Srivastava et al., 2017). It influences customer orientation by enhancing job outcomes of employees, crafting an authentic focus and culture of customer service (Muller & Smith, 2018); encourage customer orientation through a personal model of

service in a supportive, thoughtful, and helpful manner (Kumar, 2018; Maden et al., 2014). Largely, TQM and servant leadership share numerous attributes. For instance; reverence, attachment, a culture of openness, information sharing, reducing fear, facilitating creativity, and innovation (Coetzer et al., 2017; Dierendonck, 2011; Eva et al., 2019; Gallear & Ghobadian, 2004; Ghobadian et al., 2007; Kumar, 2018; Reinke, 2004).

Transactional leadership might be futile for the execution of TQM due to a lack of flexibility and compliance to change contingent upon changes in internal and external environmental factors (Khan, 2017). Besides, transactional leadership advances self-interest instead of group interest and presents a bigger interest in directions, standard operating procedures, and controls. In such an administration setting, employees have inadequate discretion, watched, controlled, and driven (e.g., Nikezić et al., 2012), contradicting the execution prerequisites of TQM (Cândido & Santos, 2011; Ghobadian et al., 2007). This anticipated theoretical tie between transactional leadership and TQM was empirically substantiated. For example, the minority of researchers found a positive relationship between transactional leadership and TQM (Chan et al., 2016) while the findings of the majority of the earlier studies have designated that transactional leadership has a negative consequence on the execution of TQM (Alharbi & Yusoff, 2012; Chan & Ng, 2012). Thus, it is, therefore, sensible to put forward the following hypothesis:

Hypothesis 1**:** Transformational leadership has a significant positive and direct influence on the implementation of TQM.
Hypothesis 2: Servant leadership has a significant positive and direct influence on the implementation of TQM.
Hypothesis 3**:** Transactional leadership has a significant negative and direct influence on the implementation of TQM.

Leadership Styles, Competitor Orientation and Inter-functional Coordination

Transformational leadership is indispensable in crafting a culture of competitor orientation and inter-functional coordination (Menguc et al., 2007). It cultivates a culture of competitor orientation amongst employees by discussing strategies of competitors and increasing a shared understanding of the possible source of competitive threats (Ozsashin et al., 2013). Competitor orientation presents top executives with a logical way to assemble and analyze public information about rivals and use it to make better decisions (Adidam et al., 2012; Cavallo et al., 2021; Jaworski et al., 2002; Peyrot et al., 2002). Inter-functional coordination, as one constituent of market-oriented culture, helps to augment the communication amongst employees as no single person can achieve organizational objectives without the support of others, where transformational leadership is believed to be very decisive (Gheysari et al., 2012).

Servant-led organizations are characterized by a mission, value focus, creativity, novelty, receptiveness, flexibility, dedication to both internal and external services, reverence for employees, and diversity (Hamilton, 2008, as cited in Melchar & Bosco, 2010), and take care of customers, and their needs (Pless, 2017). The systems that integrate diverse functions assist inter-functional coordination, customer, and competitor orientations (Harris, 2000). There was evidence that employees who view their managers as servant leaders exhibit higher levels of

dedication to customer orientation, competitor orientation, and inter-functional coordination (Jaramillo et al., 2009). Servant leadership with empowering behavior motivates employees to become more inventive (Zhang et al., 2010) and positively influences employees' malleability and self-efficacy (Ahearne et al., 2005).

Conversely, transactional leadership tends to encourage institutionalized practices and obstruct the improvement of market-oriented culture and its dimensions(Bass & Avolio, 1993). Leadership style geared towards expectation specification, procedure setting, and task allocation impede all facets of market-oriented culture dimensions (Harris & Ogbonna, 2001; Kassim & Sulaiman, 2011) when the objective is responding to shifting customer needs and market trends (Jansen et al., 2009). Thus, it is, therefore, sensible to put forward the following hypothesis:

Hypothesis 4**:** Transformational leadership has a significant positive influence on competitor orientation and inter-functional coordination.
Hypothesis 5**:** Servant leadership has a significant positive influence on competitor orientation and inter-functional coordination.
Hypothesis 6**:** Transactional leadership has a significant negative influence on competitor orientation and inter-functional coordination.

Competitor Orientation, Inter-functional Coordination, and TQM

Crafting superior customer value requires understanding the setting of the accessible and prospective competitors in addition to just focusing on customers' present and anticipated requirements (Ozsashin et al., 2013). Market orientation covers the ability to build information profiles that help a company identify competitors' strengths, weaknesses, strategies, objectives, market positioning, and likely reaction patterns. Using these profiles, a company begins to look at its strengths and weaknesses versus competitors' strengths and weaknesses (Jaworski et al., 2002; Peyrot et al., 2002). Moreover, according to Kasper (2005) "having many competitors is important to have a better relative quality than others by doing its utmost, and knowing exactly what customers want" (p.19). The benchmarking scale undertaken on customer overhaul practices, human resource practices, technological facilities, comparative cost positions, and quality procedures of competitors' defines a firm's competitive orientation (Powell, 1995; Samson & Terziovski, 1999). Being highly competitor-oriented is indispensable for executing TQM because competitors are a benchmark against which prices, costs, and performance can be evaluated (Erdil & Erbıyık, 2019).

Cross-functional coordination stresses collaboration amongst internal units and functions, such as operations, finance, research, and development (R&D), human resources, and marketing departments (Carr et al., 2008). An inter-functional scheme advances information reliability and permits employees to easily access truthful, real-time information (Carr et al., 2008; Li et al., 2021). It can fruitfully lessen redundant work and engender a more cohesive internal atmosphere through enhanced synergy and aligned goals amongst internal departments (Li et al., 2021). The support and collaboration, participative decision-making, and cross-functional teams were identified as CSF for the successful execution of TQM (Rougan, 2015; Tomy et al., 2018). Generally, departmental interaction needs to be in place for TQM to operate successfully (Pereira-Moliner et al., 2016).

On the contrary, Mann and Kehoe (1995) organizations encouraging specialty and function-orientation might have obscurity in fruitfully executing TQM. On the other hand, past research confirms that the synchronization of operations with marketing, purchasing, and engineering can enlarge organizational success (Carr et al., 2008). In addition, meager internal communication (Lakhe & Mohanty, 1994), organizational disintegration, and disagreement consistently resulted from a lack of functional synchronization (Daft, 2010). Thus, it is, therefore, reasonable to put forward the following hypothesis:

Hypothesis 7: Competitor orientation and inter-functional coordination will have a significant positive influence on the implementation of TQM.

The Mediating Role of Competitor Orientation and Inter-functional Coordination

Very few studies empirically supported the relationship between leadership styles (e.g., supportive, participative, instrumental, democratic, laissez-faire, and transformational leadership), competitor orientation, and inter-functional coordination (Harris & Ogbonna, 2001; Kassim & Sulaiman, 2011). Literature also advocates that leaders can directly and indirectly influence TQM implementation (e.g., Barbosa et al., 2017). Several empirical studies have also highlighted the role of a supportive culture in facilitating the effective implementation of change programs (e.g., Rad, 2006). Most researchers also implied the relationship between leadership style-culture and change implementation (Levene & Higgs, 2018). However, too little studies (e.g., Alomiri, 2015) supported the relationship between leadership-supportive cultural capabilities and the implementation of change program. So far from Ethiopian context very limited empirical studies have been conducted focusing on TQM practices and its effect on organizational performance with no emphasis on the role of leadership in TQM implementation together with moderators and mediators (Birhanu & Daniel, 2014; Daniel & Fasika, 2003). We found no published studies that have included leadership styles, competitor orientation, and inter-functional coordination and TQM relationships into one integrated theoretical model in organizational contexts. Given the important effects of leadership styles, competitor orientation, inter-functional coordination, and TQM on organizational performance and eventually organizational survival in the strongly competitive global economy, this literature gap has an important practical implication for scholars and managers.

Narver et al. (1998) contend that competitor orientation and inter-functional coordination are not achievable, lacking an appropriate leadership style. Supportive-related leadership is characterized by being more approachable, sustaining a friendly environment, consultative to employees, and non-directive role elucidation generates an appropriate atmosphere in which competitor orientation and inter-functional coordination are developed, fruitfully executed, and sustained (Harris & Ogbonna, 2001; Kassim & Sulaiman, 2011). In probing the mediator factor connected to how transformational and servant leadership might influence the execution of TQM, we predict that the link between both transformational and servant leadership with the implementation of TQM could be positively mediated by supportive culture (e.g., a culture of competitor orientation and inter-functional coordination) as the implementation of TQM requires a supportive culture to generate success (e.g., Rad, 2006). It is, therefore, reasonable

to put forward that a culture of competitor orientation and inter-functional coordination mediates the effect of transformational and servant leadership on the implementation of TQM.

On the contrary**,** with transactional leadership, employees have inadequate discretion, watched, controlled, and driven (e.g., Nikezić et al., 2012), contradicting the prerequisites for the fruitful implementation of TQM (Cândido & Santos, 2011; Ghobadian et al., 2007). It is also substantiated in the literature that crafting a reward for short-term goals might restrain experimentation, diversity of opinion, and creative debate (Jansen et al., 2009) underlying TQM. In addition, intricate rules, processes with low flexibility, and bureaucracy are characteristics of transactional leadership (Bass & Avolio, 1993). Under such leadership, unbending rules, focusing on steadiness, avoiding risk-taking amongst organizational members as well as uncertainties associated with any change obstructs the development of a new and supportive culture for the fruitful implementation of TQM. Thus, it is, therefore, reasonable to put forward the following hypothesis:

Hypothesis 8: There is a significant positive effect of transformational leadership on the implementation of TQM through competitor orientation and inter-functional coordination.
Hypothesis 9: There is a significant positive effect of servant leadership on the implementation of TQM through competitor orientation and inter-functional coordination.
Hypothesis 10: There is a significant negative effect of transactional leadership on the implementation of TQM through competitor orientation and inter-functional coordination.

Method

Sample

The hypotheses were tested through surveys of leaders in manufacturing and service firms in Addis Ababa and its surrounding cities within a 100km radius. We obtained the entire population of the 173 firms that participated in EQA and those certified from an Ethiopian conformity assessment enterprise. A simple random sampling technique was used to select a sample of 121 using a statistical formula of Glenn (2012) and selected three managers per firm purposively with a total of 363 sample respondents. The leaders were drawn from top management, middle, and supervisors responsible for various functions including reform, marketing, and quality. A total of 312 questionnaires were distributed to 104 organizations. The researcher personally delivered the questionnaire to organizations. It was decided that the researcher would not be present when sample respondents completed the questionnaires. They were asked to answer them at their convenience, and the researcher followed up by phone. By doing this, the researcher attempts to avoid putting pressure on respondents, which might have led to distorted responses to questions. Responses were received from 203 leaders. Thus, the response rate was 65.06 percent. Data analysis was done using SEM with SPSS AMOS 23 to test hypotheses. In addition, the mediation tests were analyzed through the bootstrapping method of AMOS 23 with Bootstrap ML and Monte Carlo (95% bootstrap CIs).

Measures

*Transformational Leadership***:** Transformational leadership was measured with the help of items from (Avolio et al., 1999) for the three dimensions of transformational leadership (i.e., individual consideration, charisma, and intellectual stimulation). For instance, there are twelve

items for charisma with sample items including "Articulate a compelling vision of the future" (Avolio et al., 1999, p. 450); four items for intellectual stimulation with sample items included "Suggest new ways of looking at how to complete assignments"(Avolio et al., 1999, p. 450). The CFA for The first-order factors plus one second-order factor of transformational leadership construct fits the data well (Chi-square (χ^2) = 376.10 with df = 166, p = .000, RMSEA = .07, CFI = .92, TLI = .91 and ChSq/df = 2.26).

Transactional Leadership: We measured transactional leadership with the help of items from (Avolio et al., 1999) for the two dimensions of transactional leadership (i.e., management by exception active (MBEA) and contingent rewards). There are four items for contingent rewards (Avolio et al., 1999) and four items for management by exception active (Avolio et al., 1999). We excluded management by exception passive (MBEP) as it is strongly associated with laissez-faire leadership but not with management by exception active and contingent rewards (Avolio et al., 1999).

Servant Leadership: To measure servant leadership, 14 items scale of Ehrhart (2004) cited and used by Mayer et al. (2008) was adapted. Ehrhart (2004) recognized seven servant leadership behaviors, such as behaving ethically, helping to grow and succeed, having conceptual skills, forming relationships, empowering and putting subordinates first. Slight adjustments were made to fit the context of the present study.

*Competitor orientation and inter-functional coordination***:** In order to measure perceived dimensions of market-oriented culture, the scale developed by Thongsri and Chang (2019); Narver and Slater (1990) and used by some researchers (Asikhia, 2011; Niculescu et al., 2013; Harris & Ogbonna, 2001; Ho et al., 2018; Ozsashin et al., 2013; Subramanian & Yauger, 1998) was adapted. For this particular study, we took only the two market-oriented culture dimensions (i.e., competitor orientation and inter-functional coordination) as both TQM and market-oriented culture robustly share in common customer concerns marked as customer focus or customer orientation. The CFA for the first-order factors for market-oriented culture dimensions such as competitor orientation and inter-functional coordination constructs fits the data well (Chi-square (χ^2) = 49.17 with df = 34, p = .04, RMSEA = .04, CFI = .98, TLI = .97 and ChSq/df = 1.44).

Total Quality Management (TQM): Respondents were asked about the execution of TQM at an organizational level. We adopted the scale of Samson and Terziovski (1999) to measure the implementation of a firm's TQM in the area of people management, process management, information and analysis, strategic planning, and customer focus. For example, there are six items for strategic planning with sample items including "Our organization operations are aligned with the central business mission" (Samson & Terziovski, 1999, p. 406); seven items for people management with sample items including "Quality is the responsibility of every employee's" (Samson & Terziovski, 1999, p. 406). The CFA for The first-order factors plus one second-order factor of the TQM construct fits the data well (Chi-square (χ^2) = 519.25 with df = 319, p = .000, RMSEA = .05, CFI = .94, TLI = .94 and ChSq/df = 1.62).

Control Variables: We statistically controlled the impacts of two variables on our model. First, we included industry type. Controlling for industry type is critical for TQM study. As the companies in our sample had come from multiple industries, this variable has been revealed to affect the extent to which companies stress TQM. As TQM firstly appeared and was broadly spread in the manufacturing industry, this industry may have an improved TQM adoption and

pleasure than a service industry chiefly on the hard facets while it is identical for the soft facets of TQM (Powell, 1995). Second, to elucidate the early adopters' benefit, the time of TQM adoption is integrated as the second control variable. TQM practices are allied to time since adoption or use. The companies need to assume TQM from long-term perspectives to generate bottom-line results. A company that kept its TQM program over an extended time had more time to get enhanced payback from it (Cândido & Santos, 2011).

Results

Table 1 demonstrates that 76.4% were male while 23.6% were females. This skewed result was a reflective of the Ethiopian business climate whereby females accounted for only 24% in leadership positions. The analysis shows that about half (50.2%) of the participants were middle managers; 30% were top managers, and 19.2% were supervisors. In the context of this research, middle managers were considered as the key participants that fit best in terms of their time, comprehension of, and commitment to the implementation of TQM. In this study, as illustrated in Table 1, 54.2% of firms were from manufacturing, while 45.8 % were service sectors. This implies that about the same number of manufacturing and service firms are almost aware of the role of the quality issue and make an effort to excel in quality to create and sustain competitive advantage in the current consolidated competitive environment. As presented in Table 1, 61.6% have been using TQM for the long term, while 38.4% have used it for less than five years since its adoption. It implies the majority of the firms had a long year of experience with TQM issues.

Table 1

Information Relating to the Gender of the Participants

	Frequency	Valid Percent	Cumulative Percent
Male	155	76.4	76.4
Female	48	23.6	100.0
Total	203	100.0	
Top Manager	61	30.0	30.0
Middle Manager	102	50.2	80.3
Supervisor	40	19.7	100.0
Total	203	100.0	
Manufacturing	110	54.2	54.2
Services	93	45.8	100.0
Total	203	100.0	
Short Time(for < 5 years since its adoption)	78	38.4	38.4
Long Time(for >5 years since adoption)	125	61.6	100.0
Total	203	100.0	

As revealed in Table 2, all factor loadings of the observed items (ranging from .56-.98) were significant at $p < .001$. The composite reliabilities (CR) of the latent variables ranged between .79 and .95, which exceeded the recommended criteria of .70 (Hair e al., 2010). In addition, the AVEs for the latent variables exceeded .50, ranging between .51 and .70. Consequently, according to these results, the measure utilized in this study verified the convergent validity of the constructs.

Table 2

Validity and Reliability of the Measurement Model

Factors	No. of items	Standardized Loading	AVE	CR
Transformational leadership	3	.82–.78	.64	.88
Intellectual stimulation	4	.86–.78	.67	.90
Individual consideration	4	.86–.78	.65	.87
Charisma-inspiration	12	.81–.63	.54	.93
Transactional leadership	2	.97–.56	.63	.83
Contingent-reward	3	.84–.82	.69	.89
MBEA	3	.79–.56	.51	.78
Servant leadership	14	.80–.65	.52	.94
Competitor orientation	4	.79–.67	.54	.83
Inter-functional coordination	6	.79–.73	.59	.91
TQM	5	.90–.76	.71	.95
People management	6	.82–.67	.58	.89
Customer focus	6	.83–.71	.60	.91
Process management	3	.86–.81	.71	.89
Strategic planning	6	.86–.74	.64	.93
Information and analysis	6	.82–.67	.58	.92

We used discriminant validity to gauge how far the latent variables are divergent and to know that the latent constructs are not extremely correlated with others (Hair et al., 2010). Hence, Table 3 offers support for discriminant validity as the value of the square root of the AVE for each construct is larger than its correlations.

Table 3

Discriminate Validity Coefficients

	1	2	3	4	5	6
1. Transformational Leadership	**.80**					
2. Transactional Leadership	.73	**.79**				
3. Servant Leadership	.69	.64	**.72**			
4. Competitor Orientation	.60	.35	.53	**.73**		
5. Inter-functional Coordination	.46	.41	.56	.54	**.77**	
6. Total Quality Management	.66	.62	.71	.67	.70	**.84**

Testing Hypothesized Structural Models

The anticipated model was analyzed via structural equation modeling, and the data is robust and reasonably fits the model. The structural robustness of the model across all useful GOF measures met a tolerable level (Chi-square (χ^2) =884.66 with df = 581, p = .000, RMSEA = .05, CFI = 0.927, TLI = .92 and ChSq/df = 1.52).

The results of direct path coefficients were analyzed in three sections. First, as shown in Table 4, the direct paths from transformational leadership to the implementation of TQM (ß = .03, p = .80) were not significant, providing no evidence to support hypothesis H1. Concerning Hypothesis 3, which conceived a direct and negative effect between transactional leadership and the implementation of TQM, our result proves that the effect is significant (ß = .22, p = .02). However, the direction of the effect is contradictory to what we have hypothesized (ß = .22). Thus, hypothesis 9 was not supported. Moreover, our results confirmed a positive and direct impact of servant leadership on the implementation of TQM (ß = .22, p < .01), providing support for H2.

Transformational leadership was significantly and positively related to competitor orientation (ß = .59; p = .000) and inter-functional coordination (ß = .25; p = .04), thus supporting Hypothesis 8. Table 4 also reveals that servant leadership influenced the level of

inter-functional coordination (ß = .41; *p* = .000) and competitor orientation (ß = .28; *p* = .01). Moreover, transactional leadership was significant but linked negatively to the competitor orientation (ß = -.26; *p* = .05) but no support was found for the significant impact on inter-functional coordination (ß = -.04; *p* =.66) though the direction of the relationship was negative, providing partial support to H6. This means that by concentrating on internal issues and creating stiff competition between individuals and departments, transactional leaders might obstruct the development of inter-functional collaborations, resource sharing, and concern for the movements and actions of competitors.

The link between competitor orientation and TQM was significant and positive (ß = .29; *p* = .000). Likewise, the relationship between inter-functional coordination and TQM was significant and positive (ß = .32; *p* = .000). Thus, hypothesis 7 was fully supported. This highlights that both competitor orientation and inter-functional coordination are antecedents to implementing TQM.

Table 4

Direct Effects: Path Coefficient Results

Direct paths	ß	S.E.	C.R.	*P*
Transformational Leadership →Competitor Orientation	.59	.15	3.86	.00***
Transformational Leadership→ Inter-functional Coordination	.25	.13	1.96	.04*
Servant Leadership →Competitor Orientation	.28	.08	2.54	.01**
Servant Leadership →Inter-functional Coordination	.41	.08	3.95	.00***
Transactional Leadership →Competitor Orientation	-.26	.22	-1.95	.05
Transactional Leadership →Inter-functional Coordination	-.04	.19	-0.43	.66
Transformational leadership →TQM	.03	.12	0.24	.80
Servant leadership →TQM	.22	.06	2.72	.00***
Transactional leadership →TQM	.22	.17	2.17	.02*
Competitor Orientation →TQM	.29	.08	3.65	.00***
Inter-functional Coordination →TQM	.32	.06	4.82	.00***
Industry Type →TQM	-.02	.05	-0.51	.60
Time of TQM use →TQM	.02	.06	0.58	.56

*Note. (*Chi-square (χ^2) =884.66 with df = 581, *p* = .000, RMSEA = .05, CFI = .92, TLI = .92 and ChSq/df = 1.52);
****p* < .001; ***p* < . 01; **p* < .05

Mediation Test

According to the results from AMOS for the structural model, the structural model fits the data well, and all fit indices lie within the recommended criteria. Our hypothesized model for the indirect effects of leadership types on the implementation of TQM through competitor orientation and inter-functional coordination also fits the data well (Chi-square (χ^2) =955.97 with df = 616, *p* = .000, RMSEA = .05, CFI = .93, TLI = .92 and ChSq/df = 1.65).

The study found diverse indirect paths. First, the indirect effects between transformational leadership and TQM were analyzed through the bootstrapping method of AMOS 23 with Bootstrap ML and Monte Carlo (95% bootstrap CIs). Findings showed a significant indirect effects between transformational leadership and TQM through competitor orientation (ß = .17, *p* < .01) and inter-functional coordination (ß = .07, *p* < .05) (see Table 5). In addition, the bootstrapped confidence intervals also established the result, because its 95% confidence intervals (CI) did not enclose zero for competitor orientation [Lower =.04; Upper =.56] and for inter-functional coordination [Lower =.01; Upper =.20]. Therefore, both inter-functional coordination and competitor orientation were regarded as full mediators between transformational leadership and the implementation of TQM.

Second, servant leadership have a significant indirect effects on the implementation of TQM through inter-function coordination (ß = .10, *p* = .003). In addition, the bootstrapped confidence intervals also confirmed the result because its 95% confidence intervals (CI) did not enclose zero [Lower =.03; Upper = .22]. Thus, inter-functional coordination partially mediates the servant leadership and TQM relationships. Nonetheless, servant leadership had non-significant indirect effects on the implementation of TQM through competitor orientation (ß = .06, *p* = .09). In addition, the bootstrapped confidence intervals also confirmed the result, because its 95% confidence intervals (CI) contained zero [Lower = -.00; Upper =.19]. This study result suggests that competitor orientation does not serve as a mediator between servant leadership and TQM. Thus, hypothesis 9 was partially supported.

Third, we looked at the indirect path from transactional leadership to TQM through competitor orientation, while the assessment of the mediating role of inter-functional coordination between transactional leadership and the implementation of TQM was excluded. Accordingly, transactional leadership has a significant negative indirect effect on implementing TQM through competitor orientation (ß = -.12, *p* = .03).

Table 5

Mediation Effects: Bootstrapping

Direct paths	Indirect Effect	Direct Effect	Lower (95%)	Upper (95%)	Mediating Role
Transformational leadership → competitor orientation→TQM	.17**	.03	.04	.56	Full Mediator
Transformational leadership → Inter-functional coordination →TQM	.07*	.03	.01	.20	Full Mediator
Servant leadership → inter-functional coordination → TQM	.10**	.28**	.03	.22	Partial Mediator
Servant leadership → competitor orientation → TQM	.06	.28**	-.00	.19	No Mediation
Transactional Leadership → Competitor orientation →TQM	-.12*	.22*	-.57	-.00	Partial Mediator

*Note. ** p < .01, * p < .05.*

Discussion

Results showed that implementing TQM in Ethiopian firms was affected by multiple organizational factors: leadership styles (e.g., transformational, transactional, and servant leadership), competitor orientation, and inter-functional coordination. To implement TQM effectively, firms need all critical organizational factors. The challenges with regards to organizational factors that the organizations are facing, therefore, need to be addressed as a matter of urgency. A lack of such crucial requirements such as leadership styles, competitor orientation, and inter-functional coordination was particularly worth noting because, without a strong and required leadership behavior, competitor orientation, and inter-functional coordination base, it is very difficult for organizations to succeed in the implementation of the TQM initiative. Having the right combination of leadership behavior is particularly important in helping organizations establish a requisite organizational culture for their businesses as well as in ensuring effective inter-functional coordination in gathering competitor and customer information and sharing the same information among functional units and employees. With regards to competitor orientation as well as inter-functional coordination, among others, the study showed that developing and sustaining a culture of competitor orientation and inter-functional coordination will help capacitate organization to be able to implement TQM successfully. Without the right combination of leadership behavior and organizational culture, firms will certainly find it difficult to implement TQM.

The role as a mediator for both competitor orientation and inter-functional coordination is in line with previous literature suggesting positive impacts on the implementation of TQM. For

instance, Reed et al. (2000) showed that inter-functional coordination enhances the implementation of TQM due to information sharing and collaboration. Likewise, Samson and Terziovski (1999) indicated that the degree of benchmarking undertaken on competitors' overall practices could play a significant role in implementing TQM. In this sense, transformational leadership can be described as a starting point for improvement as opposed to a direct influence on the implementation of TQM. It is to say that competitor orientation and inter-functional coordination are needed for transformational leadership to influence the implementation of TQM. In fact, a lack of competitor orientation (Erdil & Erbıyık, 2019) and cooperation among functional units (Lakhe & Mohanty, 1994) prevents the organization from successfully implementing TQM. In short, it seems that a culture of competitor orientation and inter-functional coordination are conducive to the successful implementation of TQM; and a transformational leadership style can play a key role in enhancing competitor orientations and inter-functional coordination.

In the same manner, the results confirmed that inter-functional coordination mediated the link between servant leadership and TQM (ß = .10, p = .003). Servant leadership could provide the required job resources to assist firms in creating inter-functional coordination. A more person and service-oriented leadership motivate an employee more and increase their rendezvous and dedication to implementing TQM. Lastly, our study also found that competitor orientation negatively mediates transactional leadership's effect on the implementation of TQM (ß = -.12, p = .03). The negative mediation of competitor orientation provides support for the current movements to the more flexible and externally oriented organization, which are characterized by identifying competitor's strengths, weaknesses, strategies, objectives, market positioning, and likely reaction patterns of competitors (Jaworski et al., 2002; Peyrot et al., 2002). This finding is in line with previous findings as leadership style geared towards expectation specification, procedure setting, and task allocation obstruct all facets of market-oriented culture constituents (Harris & Ogbonna, 2001; Kassim & Sulaiman, 2011) when the objective is responding to shifting customer needs and market trends (Jansen et al., 2009).

Conclusion

For an organization to progress in TQM, it is imperative to comprehend the factors influencing its execution. Hence, in this study, we examined the role of leadership and cultural factors in executing TQM. The empirical literature from this study revealed that both subjects were critical determinants of the implementation success of TQM. Moreover, the main goal of this work was to examine competitor orientation and inter-functional coordination as a mediator between leadership styles and the implementation of TQM by taking samples from both manufacturing and service firms. Building on the findings of the current research paper, the major conclusion that could be drawn from the results is that the successful implementation of TQM is not restricted to leadership styles but also competitor orientation and inter-functional coordination. That is, transformational, servant, and transaction leadership styles might not be enough to affect the implementation of TQM. First, competitor orientation and inter-functional coordination are pivotal determinants of the relationship between transformational leadership styles and the implementation of TQM. This study provides insight into the role of transformational leadership in enabling the implementation of TQM through indirect means. Thus, organizations that would like to implement TQM would do well to ensure that leadership

is transformational and that the organizational culture is supportive of the implementation of TQM. Second, inter-functional coordination is a pivotal determinant of the relationship between servant leadership and the implementation of TQM, while competitor orientation can be a negative determinant of the relationship between transactional leadership and the implementation of TQM.

Practical Contribution

We think that this evidence provides important practical implications. Leadership styles used impacts change implementations and organizational performance (Alomiri, 2015; Carter & Greer, 2013). In this sense, this study makes implications for firms to invest in leadership development to influence TQM implementation. Adopting TQM practices requires leadership commitment and support (i.e., decision implying resource investments and creating a clear collaboration with customers) (Gallear & Ghobadian, 2004). In the same line of argument, a supportive climate (i.e., competitor orientation and inter-functional coordination) for implementing TQM practices is nurtured by leaders (Harris & Ogbonna, 2001). Hence, it is important to mention that TQM practices will be easier to implement in market-oriented culture dimensions (e.g., competitive orientation and inter-functional coordination).

This study highlights the importance of competitor orientation in the TQM implementation process. The results implied that focusing on the internal aspect alone may not be sufficient to implement TQM successfully. Rather, the orientation given to the competitors fundamentally drives the implementation of TQM. Moreover, when implementing TQM, awareness of the role of inter-functional coordination will help firm managers to plan TQM practices appropriately and implement them successfully. Our study has plainly also signified that, in the process of using external knowledge for successfully implementing TQM, leaders should facilitate a culture of inter-functional coordination, which informs employees so that they remain open-minded to the inflow of new and fresh ideas and thus build a good collaboration system between functional units and departments. However, inter-functional coordination is one of the most challenging tasks to handle in an organization as Kohli and Jaworski (1990) state that barriers in terms of deficiencies like communication gap and risk aversion of top management, senior managers' attitude toward change, and inter-departmental conflict can constrain the positive role of inter-functional coordination on successful implementation of TQM practices.

Limitations and Future Research

This study has its limitations. First, our data were collected using single-source self-reported questionnaires. As such, we note that common method bias may be present. Future research should consider collecting data from multiple respondents for dependent and independent variables. Second, our sample companies come from different industries (both the manufacturing and service sectors). Future studies could consider samples from manufacturing and service sectors independently to control and reduce the bias resulting from industry differences. Lastly, our study used cross-sectional data and cannot account for possible causal relationships. Aspects of leadership, competitor orientation and inter-functional coordination may develop over time, and their impact on TQM implementation may differ. Hence, longitudinal data treatment might yield additional insights into the influences of leadership

styles and market-oriented culture dimensions (competitor orientation and inter-functional coordination) on TQM implementation.

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References

Acar, A. Z., Zehir, C., Ozgenel, N., & Ozsahin, M. (2013). The effects of customer and entrepreneurial orientations on individual service performance in banking sector. *Procedia-Social and Behavioral Science*, *99*(2013), 526–535.

ADA (2017). *Small and growing businesses in Ethiopia. Brussels*: ADA asbl and First Consult PLC.

Adidam, P. T., Banerjee, M., & Shukla, P. (2012). Competitive intelligence and firm's performance in emerging markets: An exploratory study in India. *Journal of Business & Industrial Marketing*, *27*(3), 242– 254. https://doi.org/10.1108/08858621211207252

Ahearne, M., Mathieu, J., & Rapp, A. (2005). To empower or not to empower your sales force ? An empirical examination of the influence of leadership empowerment behavior on customer satisfaction and performance. *Journal of Applied Psychology*, *90*(5), 945–955. https://doi.org/10.1037/0021-9010.90.5.945

Alharbi, M., & Yusoff, R. Z. (2012). Leadership styles and their relationship with quality management practices in public hospitals in Saudi Arabia. *International Journal of Economics and Management Sciences*, *1*(10), 59–67.

Alomiri, H. (2015). *The impact of leadership style and organizational culture on the implementation of E-services: An emprical study in Saudi Arabia*. Plymouth University.

Asikhia, O. (2011). Adjusted Narver and Slater's market orientation concept and firm performance in Nigerian companies. *Global Journal of Management and Business Research*, *11*(7), 54–61.

Avolio, B., Bass, B., & Jung, D. (1999). Re-examining the components of transformational and transactional leadership using the multifactor leadership questionnaire. *Journal of Occupational and Organizational Psychology*, *72*, 441–462.

Barbosa, F. M., Gambi, L. do N., & Gerolamo, M. C. (2017). Leadership and quality management-a correlational study between leadership models and quality management principles. *Gestao. Producao., Sao Carlos*, *24*(3), 438–449.

Bass, B. M., & AVolio, B. J. (1993). Transformational leadership and organizational culture. *PAQ Spring*, 113–121.

Birhanu, B., & Daniel, K. (2014). Quality management practice in Ethiopia. *African Journal of Business Management*, *8*(17), 689–699. https://doi.org/10.5897/AJBM2013.1624

Bryant, S. E. (2003). The role of transformational and transactional leadership in creating , sharing and exploiting organizational knowledge. *Journal of Leadership and Organizational Studies*, *4*(4), 32–44. https://doi.org/10.1177/107179190300900403

Cândido, C. J. F., & Santos, S. P. (2011). Is TQM more difficult to implement than other transformational strategies ? *Journal of Total Quality Management*, *22*(11), 1139–1164. https://doi.org/10.1080/14783363.2011.625185

Carr, A., & Muthusamy, S. K. (2008). The cross-functional coordination between operations, marketing, purchasing and engineering and the impact on performance. *International Journal of manufacturing technology and management*, *13*(1), 55–77.

Carter, S. M., & Greer, C. R. (2013). Strategic leadership : Values, styles, and organizational performance. *Journal of Leadership and Organizational Studies*, *20*(4), 375–393. https://doi.org/10.1177/1548051812471724

Cavallo, A., Sanasi, S., Ghezzi, A., & Rangone, A. (2021). Competitive intelligence and strategy formulation : Connecting the dots. *Competitive Review:Journal of International Business*, *31*(2), 250–275.

Chan, P. H., & Ng, P. K. (2012). Identifying the link between leadership styles and TQM practices: A conceptual framework. In *2nd International conference on Design and concurrent Engineering at Melaka, Malassia*.

Chan, S. W., Tiwari, S. T. D. S., Ramlan, R. binti, & Ahmad, M. F. (2016). The relationship between leadership styles and quality management practices in Malaysian manufacturing firms. In *Proceedings of the 2016 International Conference on Industrial Engineering and Operations Management Kuala Lumpur, Malaysia, March 8-10, 2016* (pp. 2167–2173).

Coetzer, M. F., Bussin, M. H. R., & Geldenhuys, M. (2017). Servant leadership and work-related well-being in a construction company. *SA Journal of Industrial Psychology*, *43*, 1–10. https://doi.org/10.3390/admsci7010005

Daft, R. L. (2010). *Organizational theory and design* (Tenth Edition). Cengage learning.

Dale, B. G. (2003). *Managing quality* (Fourth Edi). Oxford: Wiley-Blackwell.

Daniel, K., & Fasika, B. (2003). Quality management : Efforts and problems in Ethiopian manufacturing industries. *Journal of EEA*, *20*(1), 56–74.

Dierendonck, D. Van. (2011). Servant leadership : A review and synthesis. *Journal of Management*, *37*(4), 1228–1261. https://doi.org/10.1177/0149206310380462

Erdil, A., & Erbıyık, H. (2019). Importance of benchmarking for the management of the firm : Evaluating the relation between total quality management and benchmarking. *Procedia Computer Science*, *158*, 705–714.

Eva, N., Robin, M., Sendjaya, S., Dierendonck, D. Van, & Liden, R. C. (2019). Servant leadership : A systematic review and call for future research. *The Leadership Quarterly*, *xxx*(July 2018), xxx–xxx. https://doi.org/10.1016/j.leaqua.2018.07.004

Fotopoulos, C. B., & Psomas, E. L. (2009). The impact of "soft " and " hard " TQM elements on quality management results. *International Journal of Quality and Reliability Management*, *26*(2), 150–163. https://doi.org/10.1108/02656710910928798

Gallear, D., & Ghobadian, A. (2004). An emprical investigation of the channels that facilitates a total quality culture. *Total Quality Management*, *15*(8), 1043–1067.

Gheysari, H., Rasli, A., Roghanian, P., & Norhalim, N. (2012). A review on the market orientation evolution. *Procedia - Social and Behavioral Sciences*, *40*, 542–549.

Ghobadian, A., Gallear, D., & Hopkins, M. (2007). TQM and CSR Nexus. *International Journal of Quality and Reliability Management*, *24*(2), 704–721.

Glenn, D. (2012). *Determining sample size,Florida cooperative extension service.* Institute of Food and Agricultural Sciences, University of Florida.

Hair, J., Black, W., Banin, B., & Anderson, R. (2010). *Multivariate data analysis* (Seventh Edition). Anderson Seventh Edition.

Harris, L. C. (2000). The organizational barriers to developing market orientation. *European Journal of Marketing*, *34*(5/6), 598–624. https://doi.org/10.1108/03090560010321956

Harris, L. C., & Ogbonna, E. (2001). Leadership style and market orientation : An empirical study. *European Journal of Marketing*, *35*(5/6), 744–764. https://doi.org/10.1108/03090560110388196

Ho, K. L. P., Nguyen, C. N., Adhikari, R., Miles, M. P., & Bonneya, L. (2018). Exploring market orientation, innovation, and financial performance in agricultural value chains in emerging economies. *Suma de Negocios*, *3*(3), 154–163.

House, R. J., & Aditya, R. N. (1997). The social scientific study of leadership:Quo valids. *Journal of Management*, *23*(3), 409–473.

Jabnoun, N., & Sedrani, K. (2005). TQM, culture, and performance in UAE manufacturing firms. *QMJ*, *12*(4), 1–16.

Jansen, J. J. P., Vera, D., & Crossan, M. (2009). Strategic leadership for exploration and exploitation : The moderating role of environmental dynamism. *The Leadership Quarterly*, *20*(1), 5–18. https://doi.org/10.1016/j.leaqua.2008.11.008

Jaramillo, F., Grisaffe, D. B., Chonko, L. B., & Roberts, J. A. (2009). Examining the impact of servant leadership on sales force performance. *Journal of Personal Selling and Sales Management*, *XXIX*(3), 257–275. https://doi.org/10.2753/PSS0885-3134290304

Jaworski, B. J., Macinnis, D. J., & Kohli, A. K. (2002). Generating competitive intelligence in organizations. *Journal of Market Focused Management*, *5*, 279–307.

Judge, T. A., & Piccolo, R. F. (2004). Transformational and transactional leadership : A meta-analytic test of their relative validity. *Journal of Applied Psychology*, *89*(5), 755–768. https://doi.org/10.1037/0021-9010.89.5.755

Kahsay, G., Osanna, P. H., & Durakbasa, N. M. (2007). Investigation of quality awareness, developments and factors impeding product quality improvement in Ethiopian medium and large scale manufacturing industries [Paper presentation]. I*nternational Conference on African Development Archives*. 115. https://scholarworks.wmich.edu/africancenter_icad_archive/115

Kasper, H. (2005). *The culture of market oriented organisations* (METEOR Research Memorandum, No. 052).

Kassim, Z. A., & Sulaiman, M. (2011). Market orientation and leadership styles of managers in malaysia. *International Journal of Leadership Studies*, *6*(2), 231–245.

Khan, N. (2017). Adaptive or transactional leadership in current higher education : A brief comparison. *International Review of Research in Open and Distributed Learning*, *18*(3).

Kohli, A. K., & Jaworski, B. J. (1990). Market orientation : The construct, research propositions, and managerial implications. *Journal of Marketing*, *54*(1), 1–18.

Kotter, J. P. (1995). Leading change:Why transformational efforts fail. *Harvard Business Review*, 59–67.

Kumar, S. (2018). Servant leadership : A review of literature. *Pacific Business Review International*, *11*(1), 43–50.

Kumar, V., & Sharma, R. R. K. (2018). Leadership styles and their relationship with TQM focus for Indian firms : An empirical investigation. *International Journal of Productivity and Performance Management*, *67*(6), 1063–1088. https://doi.org/10.1108/IJPPM-03-2017-0071

Lakhe, R. R., & Mohanty, R. P. (1994). Total quality management concepts , evolution and acceptability in developing economies. *International Journal of Quality &Reliability Management*, *11*(9), 9–33.

Levene, F., & Higgs, M. (2018). Leadership and change implementation in a Russian context. *Journal of General Management*, *44*(1), 5–16.

Li, S., Wang, K., Huo, B., & Zhao, X. (2021). The impact of cross-functional coordination on customer coordination and operational performance : An information processing view. *Industrial Management and Data System*, 122(1), 167–193. https://doi.org/10.1108/IMDS-04-2021-0265

Liaw, Y. J., Chi, N. W., & Chuang, A. (2010). Examining the mechanisms linking transformational leadership , employee customer orientation, and service performance : The mediating roles of perceived supervisor and coworker support. *Journal of Business Psychology*, *25*, 477–492. https://doi.org/10.1007/s10869-009-9145-x

Liden, R. C., Wayne, S. J., Meuser, J. D., Hu, J., Wu, J., & Liao, C. (2015). Servant leadership : Validation of a short form of the SL-28. *The Leadership Quarterly*, *26*(2), 254–269. https://doi.org/10.1016/j.leaqua.2014.12.002

Maden, D., Göztaş, A., & Topsümer, F. (2014). Effects of service standards communication and servant leadership on strategic competence and customer orientation. *Chinese Business Review*, *13*(11), 659–667. https://doi.org/10.17265/1537-1506/2014.11.001

Mann, R., & Kehoe, D. (1995). Factors affecting the implementation and success TQM. *International Journal of Quality and Reliability Management*, *12*(1), 11–23. https://doi.org/10.1108/02656719510076212

Mayer, D. M., Bardes, M., & Piccolo, R. F. (2008). Do servant-leaders help satisfy followers needs? An organizational justice perspective. *European Journal of Work and Organizational Psychology*, *17*(2), 180–197. https://doi.org/10.1080/13594320701743558

Melchar, D. E., & Bosco, S. M. (2010). Achieving high organization performance through servant leadership. *The Journal of Business Enquiry*, *9*(1), 74–88.

Menguc, B., Auh, S., & Shih, E. (2007). Transformational leadership and market orientation : Implications for the implementation of competitive strategies and business unit performance. *Journal of Business Research*, *60*, 314–321. https://doi.org/10.1016/j.jbusres.2006.12.008

Muller, R., & Smith, E. (2018). Perceptions regarding the impact of servant leadership on organizational performance in the Eastern Cape, *10*(1), 46–62.

Narver, J. C., & Slater, S. F. (1990). The effect of a market orientation on business profitability. *Journal of Marketing*, *54*, 20–35.

Narver, J. C., Slater, S. F., & Tietje, B. C. (1998). Creating a market orientation. *Journal of Market Focused Management*, *2*, 241–255. https://doi.org/10.1023/A

Niculescu, M., Xu, B., Hampton, G. M., & Peterson, R. T. (2013). Market orientation and its measurement in universities. Administrative Issues Journal : Education, Practice, and Research. https://doi.org/10.5929/2013.3.2.2

Nikezić, S., Purić, S., & Purić, J. (2012). Transactional and transformational leadership: Development through changes. *International Journal for Quality Research*, *6*(3), 285–296.

Olavarrieta, S., & Friedmann, R. (1999). Market-oriented culture , knowledge-related resources , reputational assets and superior performance : A conceptual framework. *Journal of Strategic Marketing*, *228*, 215–228.

Ozsashin, M., Zehir, C., Acar, A. Z., & Sudak, M. K. (2013). The effects of leadership and market orientation on organizational commitment. *Procedia-Social and Behavioral Sciences*, *99*, 363–372. https://doi.org/10.1016/j.sbspro.2013.10.504

Pereira-Moliner, J., Pertusa-Ortega, E. M., Tarí, J. J., López-Gamero, M. D., & Molina-Azorin, J. F. (2016). Organizational design, quality management and competitve advantage in hotels. *International Journal of Contemporary Hospitality Management*, *28*(4), 1–44.

Peyrot, M., Childs, N., Doren, D. Van, & Allen, K. (2002). An empirically based model of competitor intelligence use. *Journal of Business Research*, *55*, 747–749.

Pless, N. M. (2017). Understanding responsible leadership : Role identity and motivational drivers. *Journal of Business Ethic*, *74*(4), 437–456. https://doi.org/10.1007/sl0551-007-9518-x

Powell, T. C. (1995). Total quality management as competitive advantage: A review and emprical study. *Strategic Management Journal*, *16*(1), 15–37.

Pradhan, B. L. (2017). Confirmatory factor analysis of TQM implementation constructs : Evidence from Nepalese manufacturing industries. *An International Journal of Management Review*, *12*(1), 26–56.

Rad, A. M. M. (2006). The impact of organizational culture on the successful implementation of total quality management. *The TQM Magazine*, *18*(6), 606–625. https://doi.org/10.1108/09544780610707101

Reed, Lemark, D. J., & Mero, N. P. (2000). Total quality management and sustainable competitive advantage. *Journal of Quality Management*, *5*, 5–26.

Reinke, S. J. (2004). Service before self : Towards a theory of servant leadership. *Global Virtue Ethics Review Volume*, *5*(3), 30–57.

Rougan, D. (2015). A study on TQM development, performance and sustenance in service industries through effective communication, critical success factors and market orientation. *Journal of Business and Management*, *17*(1), 1–12. https://doi.org/10.9790/487X-171XXXXX

Samat, N., Ramayah, T., & Saad, N. M. (2006). TQM practices , service quality, and market orientation developing country. *Management Research News*, *29*(11), 713–728. https://doi.org/10.1108/01409170610716025

Samson, D., & Terziovski, M. (1999). The relationship between total quality management practices and operational performance. *Journal of Operations Management*, *17*(1), 393–409.

Simiyu, G., & Bonuke, R. (2018). The conditional effect of inter-functional coordination on the relationship between customer orientation and firm performance : Empirical evidence from manufacturing firms, Nairobi, Kenya. *International Journal of Economics, Commerce and Managem,ent*, *VI*(9), 611–629.

Spears, L. C. (2005). The Understanding and Practice of Servant- Leadership. *The International Journal of Servant-Leadership*, *1*(1), 29–45.

Srivastava, A., Bartol, K. M., & Locke, E. A. (2017). Empowering Leadership in Management in Teams:Effects on Knoweledge Sahring, Efficacy, and Performance. *The Academy of Management*, *49*(6), 1239–1251.

Stevenson, W. J. (1999). *Production-operations management (5th ed.).* Burr Ridge, IL.: Irwin.

Subramanian, R., & Yauger, C. (1998). Examining the market orientation- performance relationship : A context-specific study. *Journal of Management*, *24*(2), 201–233.

Talavera, M. G. V. (2004). Development and validation of TQM constructs: The Philippine experience. *Gadjah Mada Interantional Journal of Business*, *6*(3), 335–381.

Thamizhmanii, S., & Hasan, S. (2010). A review on an employee empowerment in TQM practice. *Journal of Achieement in Materials and Manufacturing Engineering*, *39*(2), 204–210.

Thongsri, N., & Chang, A. K. H. (2019). Interactions among factors influencing product innovation and innovation behaviour : Market orientation , managerial ties , and government support. *Journal of Sustainability*, *11*, 1–21.

Tomy, Siagian, H., & Tarigan, Z. J. H. (2018). The effect of information technology application on organizational performance through cross functional team and total quality management implementation. *Petra International Journal of Business Studies*, *1*(2), 98–105.

Tyler, B. B., & Gnyawali, D. R. (2002). Mapping managers' market orientations regarding new product success. *Journal of Product Innovation and Management*, *19*, 259–276.

Wang, C., Chen, K., & Chen, S. (2012). Total quality management, market orientation and hotel performance : The moderating effects of external environmental factors. *International Journal of Hospitality Management*, *31*(1), 119–129.

World Bank. (2018). *The inescapable manufacturing-service nexus:Exploring the potential od distribution services*. Washingiton DC.

Yukl, G. (1999). An evaluative essay on current conceptions of effective leadership an evaluative essay on current conceptions. *European Journal of Work and Organizational Psychology*, *8*(1), 33–48. https://doi.org/10.1080/135943299398429

Zhang, D. D., Bruning, E., & Sivaramakrishnan, S. (2007). Differential influences of market and entrepreneurial orientations on aspects of firm performance [Paper presentation]. *Administrative Sciences Association of Canada (ASAC) Conference Proceedings, Ottawa, ON*.

Zhang, X., Bartol, K. M., Zhang, X., & Bartol, K. M. (2010). Linking empowering leadership and employee creativity: The influence of psychological empowerement, intrinsic motivation, and creative process emgagement. *Journal of Academy of Management*, *53*(1), 107–128.

Zhang, Z., Waszink, A., & Wijngaard, J. (2000). An instrument for measuring TQM implementation for Chinese manufacturing companies. *International Journal of Quality & Reliability Management*, *17*(7), 730–755.

Zhou, K. Z., Brown, J. R., & Dev, C. S. (2009). Market orientation, competitive advantage, and performance: A demand-based perspective. *Journal of Business Research*, *62*(11), 1063–1070.