The impacts of team management on customer focus: The mediating role of operation flexibility

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Abstract
The study aims to determine the impact of team management (TM) and service operations flexibility (OF) on customer focus or service (CF). A mediation model is proposed that links team management (TM) to customer focus/service (CF) via operation flexibility (OF). Drawing on a sample of 243 of operations managers of various service sectors in South Africa, Structural Equation Modeling (SEM) was employed to test the linkage. It was found that a significant relationship was established between team management to customer focus via operations flexibility. Theoretical and managerial implications are offered to explain the results.

Keywords: Operations flexibility, team management, customer focus

Introduction
Enhancing customer satisfaction through customer focus initiatives are recognized in Total Quality Management (TQM) literature. When services are given in effective ways and delighted the customers, organizations would be able to sustain their business. To realize these outcomes, one of the important factors in TQM is the utilization of teamwork to execute operations tasks. By the same token, through operations flexibility, organizations could effectively response to the needs of their customers and changing circumstances which will turn into a strategic competitive advantage to the organizations. And, the capability to be flexible must be aligned with the need of the customer. Customer service therefore should guide organizations to focus on strategies to benefit the customer. In the long run, customers will get more value for their money. Realizing

the important of these constructs, this study assesses the relationship between these operations factors which could offer guidance to managers to make prudent decisions. Additionally, it can be said that not many studies of this nature have been conducted in a service setting. Hence, this study attempts to address these research gaps. In due course, a model depicting the link between team management, operations flexibility and customer focus/service is proposed.

Literature Review

Total Quality Management, besides being criticized from all directions, continues to evolve (Bou-Llusar 2009, Molina et al., 2007, Nair 2006, Yeong et al. 2006). The principle of continuous improvement is central to the philosophy of TQM. In fact, TQM philosophy, which emphasizes training and human development is consistent with latest management trend, which is knowledge-based management and learning organization. Although, TQM has started in Japan and became popular in the United States, some European firms are also practicing the principles and has benefited from it. One of the important factors in TQM implementation is team management to manage team work.

Team management

The formation of work teams is a human resource management practice that has become a norm in manufacturing plants (Safizadeh 1991). The popularity of work teams stems from the idea that by identifying and solving work-related problems, teams can contribute to improved performance. With an increasing emphasis on high-quality, fast product innovation and improved customer satisfaction, many companies currently employ team approaches to realize these goals in an environment characterized by functional and process interdependencies. Work teams are considered to be "an integral tool aiding continuous improvement in work operations" (Cutcher-Gershenfeld and Associates 1994). Much of the evidence to date on the success of work teams, however, is in the form of anecdotes or case studies; stories of huge cost savings and quality improvements abound (Gupta and Ash 1994).

The concepts of teams and teamwork are not entirely new. Teams have the potential to offer more “adaptability, productivity and creativity than any one individual can and provide morecomplex, innovative and comprehensive solutions to organisational problems” (Salas et al. 2005). In the context of delivery of healthcare, for instance, the influence of teamwork is observed to be increasingly recognized (Weller et al. 2008, Tanco et al. 2011).

Operations flexibility

In a service environment, Correa and Gianesia (1994), for instance, introduced the concept of unplanned changes with a timing dimension. Being flexible is related to the ability to response to the unplanned changes when they take place. In the same study, the authors proposed several dimensions for controlling and filtering; such as monitoring, forecasting, standardizing, maintaining, booking, queuing and promoting, substituting, delegating and sub contracting; focusing on coordination and integration. If the unplanned changes enter through control filter for some reasons, the operation flexibility must deal with it.

In another study concerning a service setting, Harvey et al. (1997) proposed the specificity of services and service delivery process as follows:

1. Services generally involve customer contact of one kind or another;

2. Customers demand increasingly that all the services required to produce a given result be bunched together and delivered in harmony with their activity cycle; and

3. Services are generally consumed as they are produced.

Harvey et al. (1997) also determined the source of variability, both internally and externally. External variability come from market and driven by competition, internal variability comes from aspects of the organization, such as product or process design, organization structure or administrative procedures. On the other hand, Verdu and Gomez-Gras (2009) suggested that organization flexibility is the main capability that enables companies to face with environmental fluctuations, as it makes the organization more responsive to change. In this century, the organization must become more sensitive to changes in the environment in order to have a strategic organizational capability that enables them to change easily and thus to continue to maintain acceptable results without incurring high reorganization costs.

Customer focus/service

Burns and Neisner (2006) proposed that satisfaction is not a straight forward concept; its cause cannot be fully understood without recognizing the emotional dimension. In other words, it is not pre-existing in one's mind but based on the judgments that people form over time as they reflect on their experience. Yi Sit et al. (2009) defined the satisfaction is "the level of a person's felt state resulting from comparing a service's perceived performance (or outcome) in relation to the person's expectations". Badri et al. (2009) defined satisfaction as ''the summary psychological state when emotion surrounding the expectations and consumers prior feelings and experience." The same study determined the satisfaction as an insider perspective, where there is an evaluation of the outcome, assessing what is expected and what is actually received. In short, satisfaction is an emotional response (Badri 2009, Zineldine 2006)

While emphasizing on the customer oriented strategies, in the context of hospital service industry, Duggirala et al. 2008 noted that a clear patient focus strategy would entail best results in clinical care and patient satisfaction. Indeed, customer satisfaction and retention is a vital strategy in an organization, and particularly of top priority in service firms. Producing high quality products and service to ensure customer satisfaction is highly important to a firm's survival. Similarly, a focus on customers is not just a survey but a chain leading to continuous improvement through a long term planning strategy (Goetsch and Davis 2006)

H1: Team management positively influence operations flexibility

H2: Team management positively influence customer focus

H3: operations flexibility positively influence customer focus

Furthermore, as the outcomes could be relied through operations flexibility, this study hypothesized that;

H4: operations flexibility mediates the relationship between Team management and customer focus

Method

In this section, we describe the data collection methods, instrument, and respondent's profile

Data collection method

The survey instrument is composed of questions relating to three constructs, namely: operation flexibility, the extent of team management implementation, and customer focus. The conceptual definition of the operation flexibility construct was adapted from two practices identified in the works of Idris et al. (2010); Moreover, these constructs are deemed to be the most comprehensive practices for measuring the impact of operation flexibility on team management and customer focus, thus making them suitable for the research objectives of this study. The customer focus measures was adapted from many studies in TQM (Boyer and McDermort 1999, Idris 2011). The team management measures focus construct was adopted from Boyer and McDermort (1999). Minor modifications were made to some items in the original scale to adjust for semantic meanings. Scales were based on the seven-point Likert scale, ranging from "least important" to "very important".

Sample size

An ideal sample size depends entirely upon the type of research being conducted. Generally, however, the rule of thumb for determining statistical power (viz., sample size) is 'five observations for each independent variable' (Hair et al. 2010). To this end, the researcher selected a moderate yet appropriate sample size of two hundred and fifty (243) respondents from the Hotels, Fast food, Hospitals, Auto repair, Retail store, Retail Bank, Private college, Architect, and Accountant. However, only two hundred and forty-three (243) respondents were ultimately available.

Respondents' profile

Table 1: Characteristics of respondents in terms of their Demographic Variables

		Frequency (N)	percent (%)
Firm's market			
	Not Stated	11	4.5
	local / national	130	53.5
	regional	31	12.8
	global / international	71	29.2
Profession			
	Not Stated	1	.4
	Manager	96	39.5

	Middle Manager	16	6.6
	Top Manager	57	23.5
	others	73	30
Years operation of firm			
	Not Stated	2	.8
	1-3 years	7	2.9
	3-6 years	10	4.1
	6-10 years	5	2.1
	More than 10 years	219	90.1
Type of Service			
	hotel	27	11.1
	fast food	27	11.1
	hospital	23	9.5
	Auto repair	28	11.5
	retail store	27	11.1
	bank	28	11.5
	private college	29	11.9
	Architect	26	10.7
	accountant	28	11.5

Note: Total number of Respondents = 243

In Table 1, out of the 243 respondents participated in the study, 11 (4.5) were not stated, 130 (53.5%) were national firm while the rest of the 31 (12.8%) firms were regional and 71 (29.2) were global firms . The majority of the respondents (96 or 39.5 %) were managers.

Regarding the years operation of firm, 7 (2.9%) were between (1-3 years), 10 (4.1%) were between (3-6 years), 5 (2.1%) were between (6-10), 219 (90.1%) were more than 10 years.

The majority services of the respondents organization, hotels, fast food, hospitals, auto repair, retail store, bank, private college, architect, accountant.

Reliability and validity

Hair et al. (2010) define reliability as an assessment of the degree of consistency between multiple measurements of a variable. We found the measures are reliable and consistent. Because of the limitation of space, we don't show it in this paper.

Results

This section presents an analysis of both the direct and indirect effects of one construct on another. First, a full-fledged Structural Equation Modeling (SEM) analysis was performed — inspired by the views of quantitative research scholars that the SEM analysis provides adequate opportunities to examine and explore the effect of one construct on the other (Byrne 2010, Kline 2011). The results of the analysis indicate that the hypothesized model fits and describes the data accurately.

The analysis also reveals some crucial deductions. First, team management practice has direct effects on operation flexibility and a direct impact on customer focus. Second, operation flexibility a good mediating variable between team management practices and customer focus. Detailed evidence of the 'goodness of fit' of the model is presented in Figure 1 and Table 3. In Figure 1, the tow factors of the operation flexibility construct (external flexibility and internal robustness) are represented by External Flex. & Interal Robu.; the four items of the customer focus construct are represented by FPQ1, FPQ2, FPQ3, and FPQ4; and lastly, the three items of the team management construct are represented by InfTM2, InfTM3, and InfTM4.

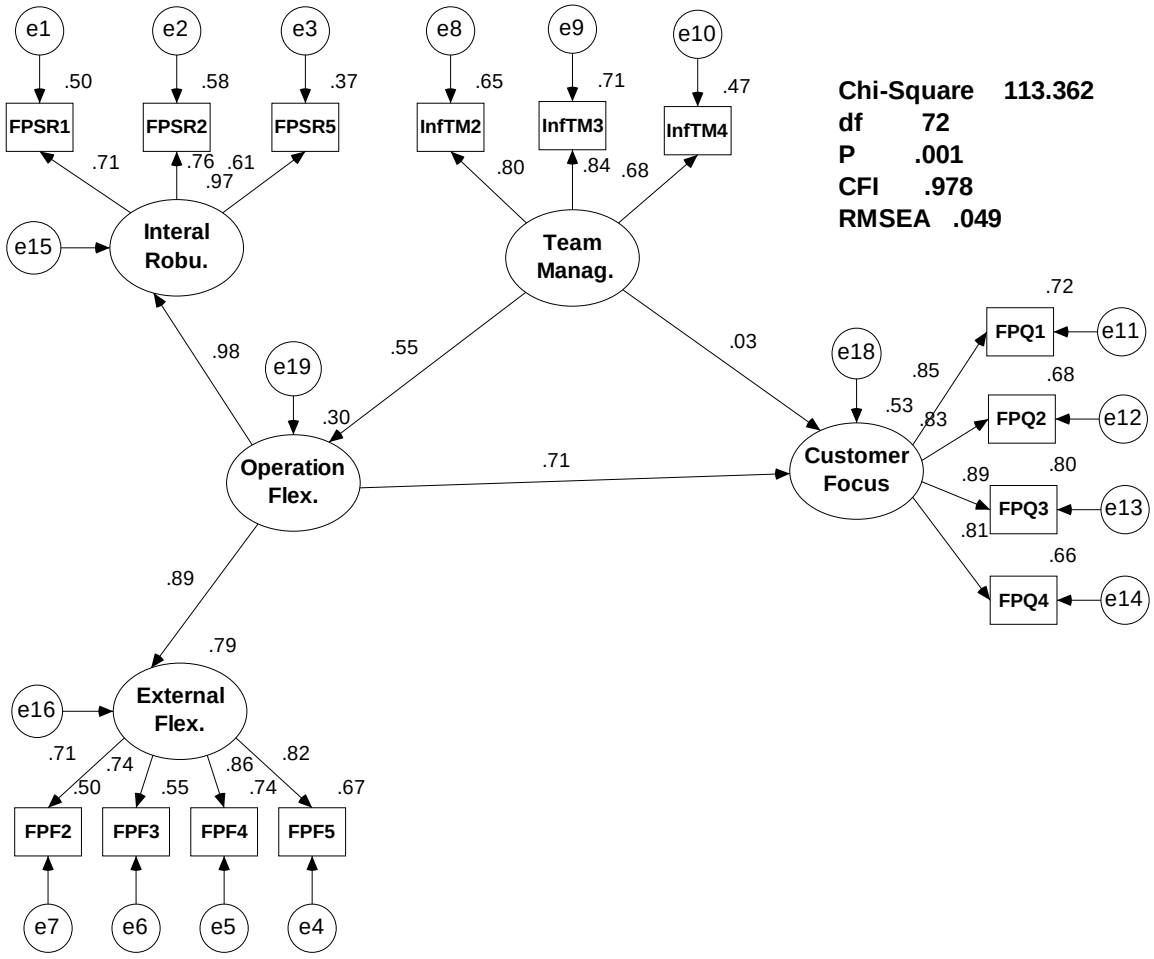

Figure 1: The Full-Fledged Structural Equation Model (SEM)

Figure 1 shows the full-fledged SEM and the resultant estimations of causal effects among the constructs. The model contains fourteen items altogether for the three constructs (seven for operation flexibility, four for customer focus, and three for team management). The model indicates a good fit for the data. The goodness of fit statistics are both statistically adequate and practically important — the Root Mean Squared Error of Approximation (RMSEA) = 0.049, and the Comparative Fit Indices (CFI and TLI) are robust (.978 & .972 respectively). Other goodness of fit indices of the model include: a Chi-square (113.362), degree freedom (72), p-value = .001, and a Normed Chi-square

(Cmin/ df) = 1.574. The summary of the goodness of fit statistics of the model is displayed on the Table 1, below:

Table 3: The Summary of the Fit Statistics for the Full-Fledged SEM Model

Model	X^2	df	P	Cmin/ df	RMSEA	CFI	TLI
Fit Statistics	113.362	72	.001	1.574	.049	.978	.972

The goodness of fit information contained in Table 3 supports the adequacy of the model, as they obtained statistics conform to the recommended values for a satisfactory fit of a model to data. The Norm-Chi-square (Cmin/df) is within the acceptable below of 3 (Bollen 1989, Browne and Cudeck 1993), the RMSEA < .08, and the CFI & TLI > .9 (Bollen 1989, Browne and Cudeck 1993).

All the parameter loadings of the model are practically reasonable and statistically important, implying loading coefficients that range between .61 to .89 — far greater than the recommended threshold of 0.6 (Byrne 2010, Kline 2011), and without any offending estimates. Inspection of estimate outputs further reveals that the hypothesized relationships among the constructs are all statistically significant. Specifically, the relationships among the three constructs (operation flexibility & team management; operation flexibility & customer focus) are considered significant, as indicated by the Critical Ratio (CR) values of each of the inter-variable relationships (Byrne 2010, Kline, 2011) greater than 1.96 (the absolute value), at an alpha level of .05.

Also revealed in the model is the evidence of direct and indirect relationships among the constructs of the model. The analysis shows that: team management direct effect on operation flexibility = 0.55; operation flexibility direct effect on customer focus = 0.71; team management indirect effect on customer focus via operation flexibility = 0.39 and team management direct effect on customer focus = 0.03 (no effect) because the effect estimates below 0.2 . All effect estimates are statistically significant and logically reasonable, and their values are of an acceptable standard for evidence of direct and indirect effects (.2) (Byrne 2010, Kline, 2011). Thus, it may be emphatically stated that this study found operation flexibility to be n a good mediator between team management and customer focus.

Discussion and Conclusion

An empirical research involving a triangulation of team management, operation flexibility, and customer focus (constructs), particularly within the context of service industry in South Africa. Previous studies had examined these constructs either discretely or in two-way relationships. The novelty of this research lies in its inclusion of team management practices while investigating the relationship between team management and operation flexibility, operation flexibility and customer focus, and team management and customer focus via operation flexibility, especially in service sector. Further, the study employed confirmatory factor analyses to produce empirically verified

and validated underlying dimensions of operation flexibility, team management and customer focus.

A theoretically derived model was proposed to link the constructs of team management and operation flexibility to that of customer focus. Structural Equation Modeling (SEM) was then applied to test the model as applied to a sample of 243 leaders in service organizations in South Africa. Finally, it was found that team management significant impact on customer focus particularly through the mediating role of operation flexibility practice. These findings, especially the final one, attests the success of the triangulation of team management operation flexibility, and customer focus in providing unprecedented results over all prior studies on the two-way relationship team management and customer focus.

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