Enhancing Financial Performance of Market-driven Hospitals

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This paper empirically examines whether work environment factors moderate the relationship between market orientation and financial performance of healthcare institutions. Data were collected from a sample of private hospitals via self-administered questionnaires. Initial results reveal that market orientation does not have a positive effect on financial performance. Nonetheless, the relationship is contingent on formal service training and staff devotion to the firm's customer service vision. Organization commitment, however, did not moderate the relationship. This paper adds value to the growing body of literature in professional-services marketing. Key managerial implications and future research directions are discussed.

Field of Research: Marketing

1. Introduction

The healthcare industry is currently being challenged to cope with environmental changes, particularly with regard to shifting patterns in customer demands, advancements in information technology, and intense competition from rivals (Dawley et al., 1999; Reid 2008; Yasin et al., 1999). In an attempt to gain competitive advantage and reduce operating costs, many hospitals have made revolutionary decisions to integrate proven management techniques, strategies, and philosophies from their manufacturing counterpart. According to Lonial et al. (2008), healthcare organizations have begun shifting towards a market-driven approach to improve service delivery performance. This transformation anticipates improving resource allocations, encouraging employees to be more responsive to consumer needs, and becoming more innovative in their service offerings.

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Despite reforms to implement the market orientation paradigm, the service delivery process associated to this strategic orientation is not straightforward. Consequently, due to complexities in delivering healthcare services, which involves numerous networks, facilities, and departments, the market orientation systems within healthcare institutions have not been systematically executed (see Yasin et al., 2002). Moreover, there has been evidence from the manufacturing sector that indicate no relationship between market orientation and firm performance (Diamantophoulos and Hart 1993; Harris 2001). Will this also be the case for the healthcare industry? If so, should healthcare organizations adopt other strategic orientations, or are there any factors that will indirectly affect the market orientation-performance relationship? This calls for immediate research to illuminate the issues at hand.

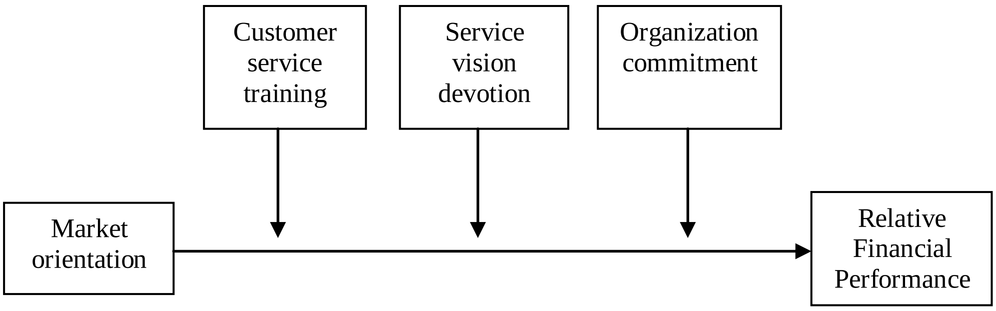
In response to the identified gaps, we contend that the effects of market orientation on firm performance can better be explained via contingency linkages, namely the moderating role of service training, staff devotion to service vision, and organizational commitment. Although there is growing interest in the healthcare services literature that examine relationships between marketing activities and firm performance (e.g., Ashill, Carruthers, and Krisjanous 2005; Lonial, Tarim, and Tatoglu 2008; Powers and Jack 2008), there is still hardly any empirical investigation from a contingent perspective. Without such enquiry, healthcare managers are left with limited guidelines to deliver superior service quality and to arrive at more effective decisions. The following research objectives are established to help conceptualize and obtain the required information: (1) to examine the primary effects of market orientation on healthcare financial performance; and (2) to identify and assess the moderating effects of work environment factors (customer service training, service vision devotion, and organizational commitment) on the market orientation–financial performance relationship. In the next sections, we provide a brief discussion on the conceptual model before introducing the research hypotheses. The research methodology will then be presented. We then report the empirical results. Managerial implications are provided in the final section.

2. Research Model and Hypotheses

The research framework was developed based on the theoretical assumption that constructive work environments in healthcare organizations would significantly enhance the relationship between market orientation and financial performance outcomes. Figure 1 depicts the effect of market orientation on financial performance, contingent on customer service training, service vision devotion, and organizational commitment.

Figure 1

Conceptual Model of the Contingent Effects of Work Environment



2.1 Direct Effects Of Market Orientation

Following Kohli and Jaworski (1990) and Narver and Slater (1990), market orientation refers to an organization-wide philosophy which illustrate proficiency in disseminating marketing information among individuals and departments. The objective is to provide quality service to customers. The market-oriented philosophy has been deployed in many healthcare institutions, especially in privately-held hospitals. From a broad perspective, the extent literature with regard to the market orientation–performance relationship seems to be inconclusive (see Lonial et. al., 2008). Megicks, Mirsha, and Lean (2005) provided a contrast of past studies that have found support for the relationship (e.g., Narver and Slater 1990; Ruekert 1992; Kumar et al., 1998) and those that did not find any direct linkages (Greenley 1995; Harris 2001).

Despite the inconsistency in past findings, it is generally more rational to predict a positive effect between market orientation and firm performance. As marketing orientation leads to greater customer satisfaction and force hospitals to focus more on cost control, it is likely that business performance should be enhanced. Since such organizations embrace the notion of service excellence as top priority, they should be better attuned to meet the requirements of customers (see Ashill, Carruthers, and Krisjanous 2005). A market-oriented hospital is market-driven and therefore, should be able to achieve superior firm performance due to broad understanding of its customers and competitors. Specifically, greater emphasis on market orientation should enable hospitals to engage in superior service quality, which in turn leads to customer retention and profitability. Therefore, we propose that:

H1: Greater market orientation in healthcare organizations will be related to greater financial performance.

2.2 Moderating Effect Of Work Environment

Customer service training. Customer service training refers to a process of developing employee expertise to deal with specific customer situations and to deliver quality services to customers (see Ashill, Carruthers, and Krisjanous 2005). We argue that the success of market-orientated hospitals is conditioned by the level of customer service training provided by management. Nearly half of unsatisfied customers are the result of employees who have not had sufficient training to deal with complaints (Bitner, Booms, and Tetreault 1990). Training would give employees the right skills to deliver quality service to customers. Most employees that have gone through training will recognize the importance of customer service and are more “equipped” with customer solving skills. These personal developments will indirectly enhance market orientation activities such as customer responsiveness and customer information dissemination. In short, healthcare organizations that invest in personal staff training should gain the advantage of not only developing human capabilities but also creating the momentum to practice market orientation more effectively. This should increase the firm’s financial performance. Therefore, we expect the following relationship:

H2 Customer service training moderates the relationship between market orientation and financial performance. In particular, increase in customer service training will strengthen the market orientation–financial performance relationship.

Service vision devotion. Service vision devotion refers to the firm’s shared belief to actively serve their customers. At present, there is lack of research that investigates the moderating effects of staff devotion to corporate vision on the relationship between market orientation and firm performance. If the hospital’s staffs are emotionally attached to their vision and are united to provide excellent service to patients, efforts to practice the various market orientation activities would be more compelling. Such conditions will greatly enhance the relationship between managers and employees and uplift inter-departmental communications. Therefore, a hospital that manages to inculcate high devotion to their service vision among staffs will likely strengthen the relationship between market orientation and financial performance. More formally, assume that:

H3 Service vision devotion moderates the relationship between market orientation and financial performance. In particular, increase in service vision devotion will strengthen the market orientation–financial performance relationship.

Organizational commitment. Organizational commitment refers to managers and employees who are affectively committed to their organizations (Meyer et al., 1989). It is assumed that the relationship between market orientation and firm performance will also be contingent upon varying degrees of organizational commitment. Individuals who perform are those that show high organizational commitment (Meyer et al., 1989). Therefore, under conditions of high organizational commitment, individuals are acquainted to their duties and enthusiastic to perform their roles. In such work environment, management constantly communicate the importance of service and provide the resources to enhance employee ability to deliver excellent service. Employees, on the other hand, are more willing to go the ‘extra mile’ to reduce inconveniences that customers are facing. This suggests that commitment qualities are consistent with the market orientation philosophy, hence should lead to superior firm performance. Based on this discussion, the following hypothesis is put forth:

H4 *Organization commitment moderates the relationship between market orientation and financial performance. In particular, increase in organization commitment will strengthen the market orientation–financial performance relationship.*

3. Methodology

3.1 Sample

A self-administered questionnaire was used to collect the data for this study. The questionnaires were distributed to a sample of privately-held general hospitals in Malaysia. The sample frame was taken from the Malaysian Medical Association which has a list of more than 200 active private hospitals of varying bed capacity. Based on the obtained telephone numbers and addresses, prospect respondents were contacted directly for screening purposes and to solicit participation. Approximately 150 questionnaires were sent in-person to hospital managers or senior executives who agreed to participate in the survey. A cover letter indicating the purpose and importance of the research was attachment to the questionnaire. Confidentiality of respondent answers was guaranteed. Our survey attracted 124 fully-useable responses within a two months period. The response rate was approximately 82.7 percent.

The distribution of the sample hospitals in terms of size is as follows: 60.5% of the surveyed hospitals had 251-500 staffs and 39.5% had less than 250 staffs. 60% had nine or more departments, while the remaining 40% had eight or less hospital departments. Average number of years of establishment is 7.2 years. The sample consisted of small and medium sized hospitals.

3.2 Measures

Existing measure were used in this study. The measurement for market orientation (MARKOR) was adopted from Kohli et al. (1993). The 18 items of market orientation were measured using a five-point Likert scale ranging from ‘strongly disagree’ to ‘strongly agree’. The measures for financial performance were adopted form the ones used by Lonial et al., (2008). The scales were based on how managers perceived organizational performance relative to their competitors. The financial performance construct included items such as revenue growth over the last three years, net profits, ROI, profit-to-revenue ratio, and cash flow. These were measured on a five-point scale, ranging from ‘much worse than other hospitals’ to ‘much better than other hospitals’.

Service training was measured on a five-point scale ranging from ‘not a priority’ to ‘critical priority’. Items include receiving personal service training, spending time and effort in service training, and exercises during training sessions. Service vision devotion was measured on a five-point Likert scale on items such as true dedication to providing excellent service, service as opportunities to serve, and fundamental service values. Organization commitment was measured on a five-point Likert scale that tapped on management spending time with customers and front-line employees, management provides resources, employee care for customers, and efforts to reduce inconveniences from customers.

3.3 Analytical Procedure

The moderated regression analysis from SPSS software was used to examine direct and interaction effects. The correlation matrix was first evaluated for early signs of collinearity amongst the studied variables. To remove possible multicolleniarity problem, Aiken and West (1991) suggest that the regression analysis should be conducted by subtracting the mean scores from interaction variables.

4. Results And Discussion

4.1 Reliability Test

The reliability analysis was conducted to determine internal consistency among variables. Nunnally (1978) suggest that Coronbach’s Alpha value of .60 is sufficient for early stage or exploratory research. All constructs demonstrated acceptable reliability scores: market orientation (.74), profit performance (.67), service training (.73), vision devotion (.67), and organizational commitment (.60). Moreover, examination of item-to-total correlations did not indicate any deviation in patterns, suggesting internal consistency (Anderson and Gerbing 1982).

4.2 Correlations

The correlation matrix was diagnosed for any signs of multicollienearity among variables. The Pearson correlation matrix shown in Table 1 suggests no serious multicollienaraity problem among the set of variables. Three control variables (firm size, firm units, and firm experience) were included in the analysis. All correlation values remained below the critical level of .90 as suggested by Hair et al. (2006). Table 1 also shows overall mean score for the study constructs.

Table 1

Descriptive Statistics and Pearson Correlation Matrix

Constructs	1	2	3	4	5	6	7	8
Mean	3.54	n.a.	n.a.	7.18	3.62	3.58	3.85	3.82
Standard Deviation	.42	n.a.	n.a.	2.77	.35	.65	.49	.46
1. Performance	1.00							
2. Firm size	.09	1.00						
3. Firm units	-.16	.05	1.00					
4. Firm experience	.39**	-.04	-.21**	1.00				
5. Market orientation	.01	.62**	.08	-.08	1.00			
6. Service training	-.33**	.28**	.22**	-.12	.31**	1.00		
7. Vision devotion	.08	.50**	-.21**	.00	.46**	-.07	1.00	
8. Commitment	-.21**	.40**	.01	-.25**	.33**	.19*	.42**	1.00

* *p* < .05 (one-tailed).

** *p* < .01 (one-tailed).

4.3 Regression Analysis

Table 2 shows results of the moderated regression analysis with relative financial performance as the dependent variable. As indicated in Table 2, the direct effects of market orientation on financial performance was not statistically significant ($\beta = .01$, $t = .04$, $p > 0.1$). The result suggests that greater market orientation among healthcare institutions does not have greater impact on financial performance. As such, the H1 is rejected.

The interaction effects of specific work environment factors were evaluated to test H2–H4. Results indicate that customer training had a significant positive interaction effect with market orientation on relative financial performance ($\beta = .22$, $t = 2.53$, $p < 0.1$). This means that the relationship between market orientation and financial performance of healthcare institutions is enhanced with greater customer service training, thus H2 is strongly supported.

With regards to vision devotion, results show that interaction between service vision devotion and market orientation was positive and significant on relative financial performance ($\beta = .30$, $t = 2.88$, $p < 0.1$). The result suggests that market orientation has greater impact on financial performance when staffs devote to their customer service vision. In conclusion, H3 receives strong support.

The interaction between organizational commitment and market orientation had a positive effect on financial performance, however was found not significant (β = .04, t = .41, p > 0.1). This result suggests that organization commitment does not moderate the relationship between market orientation and financial performance. Therefore, H4 was rejected.

TABLE 2

Results of Regression Analysis with Interaction Effects (Standardized Coefficients)

Independent Variables	Relative Financial Performance	
	β	t
Controls		
Firm size (log of employees)	.20	2.49*
Firm units (number of departments)	–.13	–1.56
Firm experience (number of years established)	.32	3.99***
Direct Effects		
Market orientation	.01	.04
Customer service training	–.29	–3.26**
Service vision devotion	.28	2.36*
Organizational commitment	–.23	– 2.37*
Interactions		
Customer service training x Market orientation	.22	2.53**
Service vision devotion x Market orientation	.30	2.88**
Organizational commitment x Market orientation	.04	.41
R^2	.39	
Adjusted R^2	.34	
F value	7.19***	
Degrees of freedom	10,113	

† $p < .10$.
* $p < .05$.
** $p < .01$.
*** $p < .001$.
Note: Significant levels are one-tailed for hypothesized variables and two-tailed for controls.

5. Discussion And Managerial Implications

The study has several practical implications for managing professional healthcare services. First and foremost, the results show that market orientation by itself will not have a direct influence on the firm's efforts to achieve high financial returns. Although this finding differs to earlier studies that examine the market orientation–performance linkages (Deshpande and Farley 1998; Narver and Slater 1990; Joworski and Kohli 1993), it corresponds to the more recent ones (Harris, 2001; Lonial et al., 2008).

Undoubtedly, market orientation plays an important role in healthcare institutions. However, the study provides empirical evidence that successful implementation of market orientation in healthcare institutions is very much dependent on work environments. This finding is perhaps the most critical for managers who work in the healthcare industry. In conclusion, the study broadens the knowledge of hospital managers and provides some indication on how to conduct market orientation more effectively. The study suggests that managers should take a contingent approach when dealing with market-orientated activities. Particular attention should be given to efforts to increase staff training and dedication towards the organization's customer service vision.

This study troughs new evidence on how market orientation should be perceived by healthcare managers. Managers should be aware that managing marketing functions can have consequences if not carried out accordingly. Managers are often extremely busy with a diverse set of tasks, hence may inadvertently neglect the marketing planning and implementation issues that are most critical. For instance, based on the findings, providing adequate resources to boost staff development through training and seminars is critical for market-oriented hospital. Management should first develop their employees, only then should employees' be able to fully focus on the needs of hospital patients. This is particularly important nowadays, as the nature of market environment faced by healthcare industry in becoming more demanding. Dealing with aggressive competitors and knowledgeable customers requires a well-organized marketing management model. In summary, proficient customer service training coupled with market orientation approach, would lead to organizational success.

The study also finds support for the need to encourage service vision devotion among managers and workers alike. This is important especially for hospitals with a market-oriented approach as the study conclude that vision devotion provides a match that increases financial performance. It seems that individual devotion to service vision enhances activities related to market orientation (i.e., information dissemination, responsiveness to customers and competitors, intelligence generation), which in turn realizes financial performance. The goal is to leverage on the firm's customer service objectives. Managers should, therefore, periodically examine the level of staff devotion and align it with the hospital's customer service vision.

6. Limitations And Future Directions

There are several limitations of this study. First, the conceptual model was tested on a single service industry. There is no guarantee that the results will be similar across other types of services industries. While focusing on one industry provides high internal validity, it limits generalizability across other industries. Therefore, future research should venture into other service sectors such as banking, consultancy, and education. Second, with a relatively small sample size, caution should be taken when interpreting the results. Future research should test a similar model with a larger sample size. Third, the regressions were examined using financial performance indicators. To enable better understanding of the outcomes of market orientation and interaction effects, future studies should incorporate multiple-performance dimensions such as relative sales, market share, competitive advantage, customer satisfaction, and loyalty. Fourth, although this study showed that performance outcome of market orientation is contingent upon training and vision devotion, it is uncertain whether other work environment variables (e.g., internal processes, role ambiguity, teamwork, empowerment, management support) would also moderate the relationship. These provide fruitful areas for enquiry.

7. Conclusion

This study contributes to marketing practice by enhancing our understanding of the relationship between market orientation and firm performance in the healthcare industry. The results of this study suggest that customer service training and vision devotion among staffs are important contingent factors that contribute to successful implementation of market orientation concept. Apart from placing greater emphasis to understand changing market environments (i.e., by means of market orientation), it may be equally important that firms endeavour to improve work atmosphere. The two perspectives complements each other.

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