
Organisational culture of customer care: market orientation and service quality

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Abstract: The purpose of this study is to assess the proposition that adoption of a market orientation leads to improved service quality for service sector organisations. We argue that an organisational culture incorporating customer care as its central tenet and involving efforts to understand the needs of customers through a market orientation enables the organisation to provide quality services that satisfy the identified customer needs. Data were collected from 15 service providers using the MORTN scale to measure market orientation and the SERVPERF scale to measure service quality. The results support the theorised positive link between market orientation and service quality.

Keywords: market orientation; service quality; services; standards.

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1 Introduction

Customers worldwide find no shortage of advertisements on various media channels, such as television, websites, radio and newspapers, about numerous services that are available at their disposal. It is common knowledge that not all services are able to sustain themselves in this competitive global marketplace. Many entrepreneurial and established organisations often fail to convince the customer of the utility and value of their so-called new and revolutionary services. No matter how much effort an organisation puts into its service, why should customers purchase it unless they are convinced of the value and utility?

In simple words, we are suggesting that it is the survival of the 'fittest' or rather the survival of organisational ventures that prelude their success in the global marketplace by orienting themselves to what would 'fit the customer needs' and, thereafter, deliver quality services that meet those identified needs. The philosophy of quality as '*conformance to requirements*' (Crosby, 1979) applies in the services sector. It is impossible to 'conform to requirements', unless the service-providing organisation knows the customer requirements. Hence, organisations need to follow the maxim of '*staying close to the customers*' (Peters and Waterman, 1982), in order to discover the requirements of the customers. Once the customer requirements are understood through effective market orientation, organisations must conform to the standards for ensuring the customer perceptions of high quality.

The need to have an organisational culture that incorporates this need for 'pragmatism' and 'customer orientation' (Hofstede et al., 1990; Hofstede, 1998) has always been stressed in the organisational culture literature. Customers perceive the quality of delivered services to be high when the services meet the customer requirements. We believe that this organisational culture of customer orientation involves: a market orientation that focuses on and assesses customer needs and enables customers to perceive a high service quality by meeting those needs in a 'feel good' manner.

In recent times, the *International Journal of Services and Standards* has published various papers that provide examples indicating a strong relationship between market orientation towards customers' needs and the service quality provided. For example, Lainema and Hilmola (2006) while discussing industrial training, described how effective market orientation allowed companies to ensure that their new products more closely met customer desires and eventually led to increased volume for service providers. Additionally, Seetharaman, Sreenivasan and Murugeson (2006) described how electronic payments through Financial Electronic Data Interchange (FEDI) brought about huge savings via reduction in paper checks, time in processing and administration work, and have therefore been responsible for improving market transparency, accountability and the increase in customer service levels. Furthermore, Sohail and Al-Ghatani (2005) studied the development of King Fahd International Airport in Dammam, Saudi Arabia, and suggested that travellers' evaluation of service quality is influenced by various factors that need to be taken into account to maintain the expected standards of service. In addition, Ahsan and Herath (2006) studied the software developed by a Sri Lankan firm that targets low-cost airlines in Europe, and described how this software is designed such that customer queues are reduced and therefore value is added to the service provided by the airlines. Hence, these examples suggest that market orientation focuses on assessing the needs of the customer, and then subsequently delivering high service quality. However, despite numerous such examples, there seems to be a lack of empirical investigation in the literature regarding this assumed relationship between market orientation and service quality in various industries.

The primary purpose of our investigation is to assess the proposition that adoption of a market orientation strategy leads to improved service quality for organisations within the services sector. Data related to market orientation and service quality were collected from 15 different service providers. The MORTN scale (Deshpande and Farley, 1998) was used to measure market orientation, and the SERVPERF scale (Parasuraman, Zeithaml and Berry, 1988; Cronin and Taylor, 1992) was used to measure service quality.

2 Research question

Our research question can be simply framed as follows:

“Is an organisation's market orientation positively related to the delivery of high-quality services to its customers?”

This question encompasses broad aspects of the terms 'market orientation' and 'service quality'. Market orientation consists of two dimensions: customer focus – the extent to which organisational objectives, strategy and competitive nature are based on the understanding of customer needs and needs assessment – the extent to which an organisation monitors its own commitment and orientation towards meeting customer needs, routinely measures and assesses customer needs and disseminates to all concerned parties the gathered information about the extent to which customer needs are being satisfied. The term service quality encompasses multiple aspects that capture the customer's perception about the organisation's visible abilities to deliver services, the faith in the reliability of the organisation and its services, the responsiveness of the organisation, the assurance with which the organisation comforts the customer and the empathy displayed by the service provider.

3 Literature review

3.1 Organisation culture that cares for its customers

Modern organisations across the world are going to great lengths to incorporate ‘customer care’ as in the integral part of their organisational culture. Staying close to the customer (Peters and Waterman, 1982) is now considered to be an essential part of any organisations strategy towards ensuring greater sales. Doherty and Perry (2001), for example, described the case where a workflow management system is used by an organisation to strengthen the organisational culture towards greater customer orientation, quality of services and performance.

Hofstede (1998) and Hofstede et al. (1990) identified the organisational culture dimension of pragmatism, which deals with the concept of customer orientation as an important practice that could be used to distinguish organisational cultures worldwide. Moreover, they proposed that pragmatic units in organisations are market-driven, that there is a major emphasis on meeting customer needs and that the pragmatism concept is in line with the suggestion of Peters and Waterman (1982), staying close to the customer. Furthermore, Hofstede et al. (1990, p.314) state that *“the popular stress on customer orientation (becoming more pragmatic ...) is highly relevant for most organisations engaged in services and the manufacturing of custom-made, quality products”*.

Hofstede (1998) also introduced the customer interface organisational culture component, which encouraged continual interactions and face-to-face contact with customers. He further suggested that the customer interface culture is results-oriented and that *“it is the customer interface people who bring in the business”* (pp.8–10), and without them many organisations cannot survive. Hofstede et al. (1990), for example, describe the case of a European airline company named DLM that went through an amazing turnaround in the 1980s. The essence of the turnaround was that the new leadership of the organisation changed its focus *“from a product-and-technology to a market-and-service orientation”* and that a *“discipline of service toward customers”* (pp.293–294) was built. The case of Hofstede et al. (1990) suggests that the commitment for a market or customer orientation needs to come from the top management and the employees should be strongly encouraged to focus on the customer, assess their needs and provide the highest quality of service.

“The president recognised that in the highly competitive air transport market, success depended on catering to the needs of current and potential customers. These needs should be best known by the employees with face-to-face customer contact”. (Hofstede et al., 1990, pp.293–294)

“The employees demonstrate a problem-solving attitude toward clients: they show considerable excitement about original ways to resolve customers’ problems, in which some rules can be twisted to achieve the desired result”. (Hofstede et al., 1990, p.294)

We believe that this customer-oriented organisational culture would involve: focusing on and assessing the customer needs through effective market orientation and thereafter making the customer feel good by delivering high-quality services in response to those needs. It is only when the services provided meet the needs of the customer that the customer perceives the quality of service to be high.

3.2 Market orientation – focusing on and assessing customer needs

Market orientation is an important precursor to effective customer care. For this paper, we adopt the definition by Deshpande and Farley (1998, p.213) for market orientation as, ‘the set of cross-functional processes and activities directed at creating and satisfying customers through continuous needs-assessment’. Market orientation is a popularly studied construct in the business literature. Kohli and Jaworski (1990) theorised a market orientation model that has been the basis for much of that research, and there is considerable evidence supporting their general proposition that adoption of a market orientation will lead to improved organisational performance (Cano, Carrillat and Jaramillo, 2004; Green et al., 2005).

Green and Inman (2006) suggested that market orientation involves two dimensions, customer focus and needs assessment. The customer-focus dimension attempts to capture the extent to which:

- 1 organisational objectives are driven by customer satisfaction
- 2 organisational strategies are based on an understanding of customer needs
- 3 the organisation is more customer-focused than competitors
- 4 the ability of the organisation to show that it exists primarily to serve customers.

The needs-assessment dimension attempts to capture the extent to which:

- 1 the organisation constantly monitors its commitment and orientation to customer needs
- 2 the customer frequently/routinely/systematically measures customer satisfaction and quality of services
- 3 the organisation freely communicates/disseminates information and data about its customers’ experiences and satisfaction.

3.3 Service quality – showing the customer that you care

Service quality may be considered to be the ‘feel good’ factor, which is perceived by customers during the process of service delivery. It is what the customer perceives while receiving services from the provider. Through high-quality service, an organisation can show its customer that it truly cares. Parasuraman, Zeithaml and Berry (1988, p.16) offer the following definition of perceived service quality: “a global judgment, or attitude, relating to the superiority of the service”. Service quality is one of the most researched aspects of marketing (Fisk, Brown and Bitner 1993). According to Kettinger, Choong and William (1994), making accurate specifications for providing uniform controlled quality is difficult since services tend to be performance-oriented. In an exploratory investigation of service quality, Parasuraman, Zeithaml and Berry (1985) conducted a series of focus group interviews with executives and customers at well-recognised service-providing organisations. This led to the development of the SERVQUAL instrument, which is now frequently used as a measure of service quality. They arrived at the conclusion that consumers evaluate service quality based upon the criteria falling into the following categories: tangibles, reliability, responsiveness, assurance and empathy. Parasuraman,

Zeithaml and Berry (1988) provide the following definitions of the service quality dimensions:

- 1 Tangibles – physical facilities, equipment and appearance of personnel
- 2 Reliability – ability to perform the promised service dependably and accurately
- 3 Responsiveness – willingness to help customers and provide prompt service
- 4 Assurance – knowledge and courtesy of employees and their ability to inspire trust and confidence
- 5 Empathy – caring, individualised attention the firm provides its customers.

Service quality can be understood as how best an organisation conforms to the requirements of its customers, and satisfies them in various aspects of the delivery of a service (Chakrabarty, 2006). Service quality has been found to positively impact customer satisfaction, which in turn leads to improved organisational performance (Cronin and Taylor, 1992; Lee and Hwan, 2005). Delivering high service quality can result in considerable gains for organisations, such as increased market share, revenue, sales and profitability (Zeithaml, Berry and Parasuraman, 1988). Service quality has been shown to influence purchase intentions in various industries such as banking, dry cleaning, pest control and fast food (Cronin and Taylor, 1992), and also the customer's willingness to remain loyal to the service provider (Zeithaml, Berry and Parasuraman, 1996). Furthermore, perceptions of service quality have been shown to influence customer behaviours such as recommendations and positive word-of-mouth regarding the service provider by the customers (Boulding et al., 1993). Hence, organisations work hard to strategically position themselves in the market and give high importance to service quality (Parasuraman, Zeithaml and Berry, 1988; Brown and Swartz, 1989).

4 Theoretical context: why a market orientation can lead to better service quality

As discussed in the introduction, any service delivered to a customer would be most meaningful to the customer only when it fits well with the customer's aspirations (Sohail and Al-Gahtani, 2005; Ahsan and Herath, 2006; Lainema and Hilmola, 2006; Seetharaman, Sreenivasan and Murugeson, 2006). Hence, it is very important for an organisation to make efforts for focusing on and assess the needs of the customer. We propose that adoption of a market orientation will result in improved service quality (Chang and Chen, 1998), and we wish to empirically test this across a large cross-section of industries. In the context of technology services delivery, Ethiraj et al. (2005) suggested that the development of customer-specific capabilities based on repeated interaction with customers is positively related to the organisation's performance in satisfying customers. Customer-focused capabilities and the associated needs assessment by a service provider bolster the ability of an organisation to better understand the customer. By understanding how the service being delivered would fit into the customer's needs, an organisation would be able to provide services in such a manner that would lead to customer satisfaction. This can be done by better comprehending what the customer wants through repeated interactions with the customer and, thereafter, making efforts to deliver the desired service. For example, if it is noticed that customers

are complaining about standing in long queues to purchase air tickets or carrying out other activities at an airport, then effort must be made to assess the needs of the customer, and software and related processes need to be designed and re-engineered in a customer-friendly manner such that customer queues are reduced and therefore value is added to the service provided by the relevant airlines and the airport (Sohail and Al-Ghatani, 2005; Ahsan and Herath, 2006).

An organisation with high market orientation would try to learn the specific needs of its customers and provide services to the customer that satisfies those needs. Ethiraj et al. (2005) believe that organisations that have customer-specific capabilities benefit from favourable cost and revenue advantages. Lainema and Hilmola (2006) suggested that service-providing organisations can train the personnel towards better orienting them to customer and market needs, such that 'new products more closely meet customer desires' and this would eventually lead to greater sales volume and revenue for the organisations. A customer would be willing to pay higher prices if an organisation is able to convince the customer of why the provided service is of the desired quality and is the optimal solution to the customer's needs. However, this can be done only when the organisation itself is sure of what the customer wants, which is dependent on effective market orientation that engages in needs assessment and customer focus. Additionally, effective market orientation with the client can preclude unsavoury situations and prevent the costs associated with services that fail to match the specific needs to the customer, such as the costs involved in last-minute conflicts over requirements or features, post-delivery service or return requests from customers, delayed delivery of services and poor estimation of service delivery related logistics.

An organisation with high market orientation would have an unambiguous comprehension of customer needs. On the other hand, an organisation with poor market orientation would fail to satisfy the customer's specific needs, even if the product or service is something revolutionary. The customer does not care whether or not an organisation thinks that its service is revolutionary, unless the service actually meets the aspirations of the customer. Unless a customer finds utility or value in the delivered service, the customer would not purchase it. Hence, it is up to the organisations to find out what customers want through effective market orientation and then provide the relevant service in a manner that the customer would be tempted to pay for it.

5 Hypotheses

As measured, market orientation has two dimensions (customer focus and needs assessment) and service quality has five dimensions (tangibles, reliability, assurance, responsiveness and empathy). The combinations of the market orientation and service quality variables give rise to ten hypotheses.

The *tangibles* dimension of service quality is associated with the service provider's physical facilities, equipment and appearance of personnel (Parasuraman, Zeithaml and Berry, 1988). Service providers need to have up-to-date equipment, visually appealing facilities and well-dressed and neat employees. The customer-focus dimension of market orientation includes the ability of the service provider to show that it exists primarily to serve customers (Green and Inman, 2006). A service provider can therefore display its customer-driven focus explicitly by making sure that the tangibles such as facilities and appearance of personnel are of high quality. Hence, we expect customer-focus dimension

of market orientation to be positively associated with the exhibition of high-quality tangibles by the service provider. The needs assessment dimension of market orientation includes the extent to which the service provider assesses the needs of the customer such that it can satisfy the customer (Green and Inman, 2006). Hence, when a service provider is doing a good job of assessing customer needs, it will be able to perform better on the tangibles dimension of service quality by providing facilities, equipment and personnel, in accordance with the assessed need of the customers. Specifically, we hypothesise the following:

Hypothesis 1a. Customer focus positively impacts the tangibles dimension of service quality.

Hypothesis 1b. Needs assessment positively impacts the tangibles dimension of service quality.

Crosby (1979) defined quality as ‘conformance to requirements’, which indicates the delivery of services that reliably meets customer requirements. The *reliability* dimension of service quality deals with the ability to dependably and accurately provide the promised services. A reliable service provider is dependable, keeps its records accurately and provides its services at the promised time (Parasuraman, Zeithaml and Berry, 1988). When a service provider has a high customer focus, then its objectives would be driven towards high customer satisfaction (Green and Inman, 2006), which would then entail the delivery of services in a reliable manner. Delivering reliable services would also require constantly monitoring customers needs. Hence, both the customer-focus and needs-assessment dimensions of market orientation would be positively associated with the reliability dimension of service quality.

Hypothesis 2a. Customer focus positively impacts the reliability dimension of service quality.

Hypothesis 2b. Needs assessment positively impacts the reliability dimension of service quality.

As discussed earlier, Hofstede (1998, pp.8–10) encouraged face-to-face contact and continual interactions with customers, because ‘it is the customer interface people who bring in the business.’ The *assurance* dimension of service quality is an indicator of the knowledge and courtesy of service provider’s employees and their ability to inspire trust and confidence (Parasuraman, Zeithaml and Berry, 1988). This implies that the employees of the service provider can be trusted, the customers feel safe speaking to them and they get polite and adequate responses for their enquiries. A service provider with high customer focus would pursue the goal of high customer satisfaction, and this can be possible only when the employees of the service provider behave in a manner that makes the customers feel assured and satisfied. Moreover, an effective needs assessment strategy that systematically measures the quality of services provided would allow organisations to provide services in a manner that would increase the trust and confidence of customers in the service provider (Green and Inman, 2006). Hence, both customer-focus and needs-assessment dimensions of market orientation would be positively associated with the assurance dimension of service quality.

Hypothesis 3a. Customer focus positively impacts the assurance dimension of service quality.

Hypothesis 3b. Needs assessment positively impacts the assurance dimension of service quality.

Willingness to help customers and provide prompt service is measured by the *responsiveness* dimension of service quality. A responsive service provider tells its customers exactly when a service will be provided, is willing to help customers and is never too busy to respond to customer requests promptly (Parasuraman, Zeithaml and Berry, 1988). A service provider that is more customer-focused than competitors will attempt to provide more prompt service and more willingly help customers to capture a larger market share through goodwill among customers. Such prompt service can be better provided when customer needs are frequently and routinely assessed and understood (Green and Inman, 2006). Hence, both customer-focus and needs-assessment dimensions of market orientation would be positively associated with the responsiveness dimension of service quality.

Hypothesis 4a. Customer focus positively impacts the responsiveness dimension of service quality.

Hypothesis 4b. Needs assessment positively impacts the responsiveness dimension of service quality.

It is important for the customer interface people to exhibit empathy towards customers in order to bring in more business (Hofstede, 1998). Empathy is the caring and individualised attention a service provider gives to its customers (Parasuraman, Zeithaml and Berry, 1988). This is practiced by giving personal attention to the customers, attempting to know what the customer's needs are, keeping the best interests of the customer in heart and having operating hours that are convenient to a majority of customers. This can be achieved by a greater customer focus that keeps the customers concerns in mind, and by the needs assessment that is committed and strongly orientated towards monitoring customer requirements and convenience (Green and Inman, 2006). Hence, both customer-focus and needs-assessment dimensions of market orientation would be positively associated with the empathy dimension of service quality.

Hypothesis 5a. Customer focus positively impacts the empathy dimension of service quality.

Hypothesis 5b. Needs assessment positively impacts the empathy dimension of service quality.

In summary, we propose that adoption of a market orientation that enables organisations to stay close to their customers (Peters and Waterman, 1982) will result in improved perception or service quality by customers.

6 Measures

In this paper, perceived service quality dimensions are measured using the 22-item performance-based SERVPERF scale recommended by Cronin and Taylor (1992), which is derived from the original work of SERVQUAL by Parasuraman, Zeithaml and Berry (1988). The instrument to measure market orientation dimensions is adapted from the MORTN scale, originally developed by Deshpande and Farley (1998). Green and Inman

(2006) thoroughly assessed the scale and identified two dimensions: Items 1, 4, 7 and 8 of the MORTN scale comprise a customer-focus dimension, and Items 2, 3, 5, 6, 9 and 10 comprise a needs-assessment dimension. These dimensions directly support the definition offered by Deshpande and Farley (1998). Both the MOTRN and SERVPERF scales have been thoroughly assessed for dimensionality, validity and reliability (Cronin and Taylor, 1992; Green and Inman, 2006). Both have also been subsequently used to successfully measure market orientation (Green, McGaughey and Casey, 2007) and service quality (Lee and Hwan, 2005). The scales were slightly modified to accommodate individual organisations and are presented in Appendices A and B.

7 Methodology

Fifteen service organisations were identified, and data related to market orientation and service quality were collected from a sample of customers for each organisation. Generally, students enrolled in a graduate research course contacted a wide array of service organisations and administered the survey instrument by asking willing customers to respond anonymously. For ensuring high external validity, we did our best to get as broad representation as possible. We managed to get responses from a wide array of industries such as accounting, law, race track and marine. Even within the educational industry, we have a wide representation in the types of specialisation of the educational institutions, such as accounting, sociology, international studies, math, marketing, community college. Hence, sincere and extensive efforts were taken to get as wide a representation as possible.

The market orientation dimension scales and service quality dimension scales were assessed for internal reliability for each sample. The data were summarised by sample, and descriptive statistics were computed. The means were correlated, and regression analysis was performed to assess the type and strength of the relationship between the market orientation dimensions as the independent variables and each of the quality dimensions.

8 Results

A total of 534 individuals responded in the combined 15 samples. The samples included five private businesses such as accounting and law firms, eight university departments from two different four-year universities and two community college business programmes.

Although the MORTN (Green and Inman, 2006) and SERVPERF (Cronin and Taylor 1992) scales have received thorough assessment, we provide additional assessment in terms of content validity, dimensionality, reliability, convergent, discriminant and criterion validity. There is no statistical test for content validity. Establishing such validity depends heavily upon the scale development process outlined by Churchill (1979). The MOTRN scale was carefully developed by Deshpande and Farley (1998) based upon the prior work done by Narver and Slater (1990), Kohli, Jaworski and Kumar (1993) and Deshpande, Farley and Webster (1993). The SERVPERF scale was derived from the carefully developed SERVQUAL scale developed by Parasuraman, Zeithaml and Berry (1988). Based upon this prior work, we consider the scales to be well-grounded

in the literature and to have been carefully assessed by experts in the field indicating sufficient content validity. The unidimensionality of each of the MORTN and SERVPERF sub-scales was assessed using confirmatory factor analysis as recommended by Ahire, Golhar and Waller (1996) and Garver and Mentzer (1999). Goodness-of-Fit Index (GFI) values greater than 0.90 (Ahire, Golhar and Waller, 1996) indicate unidimensionality. GFI values for all of the sub-scales exceed the recommended 0.90 level. Garver and Mentzer (1999) recommend the use of Cronbach's alpha values to assess scale reliability with values greater than 0.70, indicating sufficient reliability. The Cronbach's alpha coefficients for each of the study sub-scales for each of the 15 samples are displayed in Table 1. The alpha scores for each of the scales exceed the 0.80 level when computed with the data from all 534 respondents. To assess for discriminant validity, chi-square difference tests were conducted on each pairing of sub-scales as recommended by Ahire, Golhar and Waller (1996). In each case the chi-square difference was determined significant indicating discriminant validity (Ahire, Golhar and Waller, 1996). Convergent validity was established based upon the Normed-Fit Index (NFI) values as recommended by Ahire, Golhar and Waller (1996). All NFI values exceeded the required 0.90 level (Ahire, Golhar and Waller, 1996). Finally, the criterion or predictive validity was assessed using the correlation matrix of summary variables displayed in Panel B of Table 2. As expected, all variables are positively and significantly correlated.

Table 1 Scale reliability scores for service organisation samples

Sample	N	MO	MO	SQ				
		Customer focus	Needs assessment	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Accounting firm	38	0.986	0.969	0.982	0.991	0.983	0.990	0.964
Law firm	15	0.959	0.980	0.890	0.988	0.497	0.487	0.838
Accounting education	37	0.877	0.881	0.804	0.893	0.902	0.828	0.805
Sociology education	46	0.835	0.935	0.777	0.895	0.920	0.940	0.919
Title company	36	0.951	0.951	0.882	0.957	0.936	0.946	0.942
Race track	51	0.845	0.892	0.738	0.840	0.901	0.881	0.845
Math education	47	0.838	0.824	0.865	0.942	0.929	0.932	0.888
Community college Business	40	0.911	0.907	0.641	0.907	0.934	0.918	0.886
Marina	33	0.934	0.937	0.894	0.933	0.875	0.860	0.904
education	40	0.848	0.805	0.883	0.845	0.854	0.930	0.875
Math education	36	0.934	0.946	0.764	0.927	0.938	0.909	0.875
Marketing education	18	0.706	0.525	0.899	0.732	0.797	0.902	0.930
Seminar education	36	0.911	0.942	0.750	0.847	0.881	0.929	0.895
Community college business	31	0.905	0.891	0.859	0.899	0.909	0.863	0.878
International education	30	0.734	0.820	0.720	0.900	0.833	0.944	0.893
All samples	534	0.903	0.919	0.853	0.916	0.908	0.917	0.887

Table 2 Descriptive statistics and correlation matrix for all 15 service organisations

A. Descriptive statistics

	<i>N</i>	<i>Mean</i>	<i>SD</i>
Market orientation	15	5.0438	0.69332
Customer focus	15	5.0694	1.36848
Needs assessment	15	4.9151	1.34297
Service quality	15	5.5853	0.53654
Tangibles	15	5.4984	0.71776
Reliability	15	5.4958	0.52383
Assurance	15	5.8622	0.46282
Responsiveness	15	5.6132	0.53359
Empathy	15	5.4734	0.56752

B. Correlation matrix

	<i>CF</i>	<i>NA</i>	<i>TAN</i>	<i>REL</i>	<i>ASR</i>	<i>RESP</i>	<i>EMP</i>
MO Customer focus (CF)	1.000						
MO Needs assessment (NA)	0.832	1.000					
SQ Tangibles (TAN)	0.562	0.522	1.000				
SQ Reliability (REL)	0.697	0.609	0.665	1.000			
SQ Assurance (ASR)	0.638	0.558	0.643	0.783	1.000		
SQ Responsiveness (RESP)	0.670	0.578	0.642	0.851	0.838	1.000	
SQ Empathy (EMP)	0.692	0.617	0.630	0.801	0.827	0.801	1.000

All correlation coefficients are significant at the 0.01 level (2-tailed).

Table 2 displays the descriptive statistics and correlation matrix for the market orientation dimensions (customer focus and needs assessment) and the service quality dimensions (tangibles, reliability, assurance, responsiveness and empathy). Both customer-focus and needs-assessment correlate significantly (0.01 level) with all of the service quality dimensions supporting our general proposition that adoption of a market orientation leads to improved service quality within service organisations.

Table 3 displays the results of the regression analyses incorporating the market orientation dimensions as independent variables and the service quality dimensions as dependent variables. All regression equations are significant at the 0.01 level with R^2 values ranging from 0.309 for the tangibles equation to 0.469 for the reliability equation. The customer-focus coefficient is significant at the 0.01 level in each of the equations. Needs assessment is significant at the 0.01 level in the tangibles and empathy equations and at the 0.05 level in the reliability and assurance equations, but is not significant in the responsiveness equation. The variance inflation factor for the independent variables is 3.241, indicating that multi-collinearity is not a problem in the analyses. These results support the general proposition. With the exception of Hypothesis 4b (needs-assessment positively impacts service responsiveness), all hypothesised relationships are statistically significant.

Table 3 Regression results: Market orientation as independent and service quality as dependent variables

<i>Service quality dimension</i>	<i>MO</i>		<i>F-statistic</i>	<i>F-significance</i>	<i>R²</i>
	<i>Customer-focus Beta</i>	<i>Needs assessment Beta</i>			
Tangibles	0.345**	0.236**	107.749	0.000	0.309
Reliability	0.564**	0.140*	212.804	0.000	0.469
Assurance	0.508**	0.135*	154.124	0.000	0.391
Responsiveness	0.563**	0.109	182.940	0.000	0.432
Empathy	0.518**	0.186**	207.407	0.000	0.463

*Significant at the 0.05 level.

**Significant at the 0.01 level.

Customer focus and needs assessment return a variance inflation factor of 3.241.

9 Managerial implications

We recommend that service operations managers, wishing to improve the performance of their organisations, work to implement a market orientation within their organisations. They should work towards developing an organisational culture where employees focus on customers and continuously assess and respond to the changing needs of those customers

As suggested by Hofstede et al. (1990), the commitment towards focusing on the needs of the customer or market must come from the top management. The management should encourage employees to develop a customer focus, assess the customer needs and use that information to provide the highest possible service quality. Additionally, technologies and processes such as a 'Workflow Management System' (Doherty and Perry, 2001) can be used. Furthermore, customer-oriented software systems such as those that reduce customer queues at airports (Ahsan and Herath, 2006) or those that allow easy electronic payments (Seetharaman, Sreenivasan and Murugeson, 2006) should be considered. Additionally, Hou and Yang (2006) described how data mining can be used to explore the characteristics of customers and classify the customers into critical and non-critical categories, such that the efficiency and effectiveness of business promotion can be increased. The maxim of "*staying close to the customers*" (Peters and Waterman, 1982) makes very good business sense.

10 Conclusion

In this study, which is probably among the first of its kind, we investigate the relationship between market orientation and service quality across a wide array of industries, and incorporate these constructs into the domain of organisational culture focused on customer care. Based upon the results of this study, we conclude that adoption of a market orientation by service organisations will lead to improved service quality. Of the two market orientation dimensions measured, customer focus is the more powerful in terms of explaining variation in the service quality dimensions of tangibles, reliability,

assurance, responsiveness and empathy. This study validates the extant research supporting the propositions that market orientation and service quality positively impact organisational performance.

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Appendix A

MORTN market orientation scale (Deshpande and Farley, 1998)

Customers were asked to relate the following set of statements to their feelings about the service provider, and indicate the extent to which they agree or disagree with each statement (1 = strongly disagree, 7 = strongly agree).

<i>Statement</i>	<i>Market orientation dimension</i>
The organisational objectives of this service provider are driven primarily by customer satisfaction.	Customer focus
This service provider's strategy for competitive advantage is based on its understanding of customers' needs.	
This service provider is more customer-focused than its competitors.	
I believe that this service provider exists primarily to serve customers.	
This service provider constantly monitors its level of commitment and orientation to serving customer needs.	Needs Assessment
This service provider freely communicates information about its successful customer experiences across all departments.	
This service provider measures customer satisfaction systematically and frequently.	
This service provider has routine or regular measures of customer service.	
This service provider polls customers at least once a year to assess the quality of its services.	
Data on customer satisfaction are disseminated at all levels in this service provider on a regular basis.	

Note: In the above table, the customer-focus dimension corresponds to Items 1, 4, 7 and 8, and the needs-assessment dimension corresponds to Items 2, 3, 5, 6, 9 and 10 of the original MORTN Market Orientation scale by Deshpande and Farley (1998).

Appendix B

SERVPERF service performance scale (Parasuraman, Zeithaml and Berry, 1988; Cronin and Taylor, 1992)

Customers were asked to relate the following set of statements to their feelings about the service provider, and indicate the extent to which they agree or disagree with each statement (1 = strongly disagree, 7 = strongly agree).

<i>Statement</i>	<i>Service quality dimension</i>
This service provider has up-to-date-equipment.	Tangibles
This service provider's physical facilities are visually appealing.	
This service provider's employees are well dressed and appear neat.	
The appearance of the physical facilities of this service provider is in keeping with the type of educational services provided.	Reliability
When this service provider promises to do something by a certain time, it does it.	
When you have problems, this service provider is sympathetic and reassuring.	
This service provider is dependable.	
This service provider provides its services at the time it promises to do so.	
This service provider keeps its records accurately.	Responsiveness
This service provider tells its customers exactly when services will be performed.	
You receive prompt service from this service provider's employees.	
Employees of this service provider are always willing to help customers.	
Employees of this service provider are not too busy to respond to customer requests promptly.	Assurance
You can trust the employees of this service provider.	
You can feel safe in your transactions with this service provider's employees.	
Employees of this service provider are polite.	Empathy
Employees get adequate support from this service provider to do their jobs well.	
This service provider gives you individual attention.	
Employees of this service provider give you personal attention.	
Employees of this service provider know what your needs are.	
This service provider has your best interests at heart.	
This service provider has operating hours convenient to all their customers.	