

A Measure of Market Orientation: Development and Validation in a Different Cultural Context

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UNA MEDIDA DE ORIENTACIÓN AL MERCADO: DESARROLLO Y VALIDACIÓN EN UN CONTEXTO CULTURAL DIFERENTE.

RESUMEN: Durante décadas, investigadores y profesionales en marketing han proclamado que la adopción de una filosofía orientada al consumidor, es la clave para desarrollar y mantener una ventaja competitiva sostenible en empresas que operan en un entorno de alta competitividad. Sin embargo, el interés no ha sido suficiente para disipar algunas preocupaciones sobre el dominio de dicho constructo, así como de la metodología seguida para su medición en diferentes contextos culturales. Este artículo examina la fiabilidad y validez de tres escalas para medir la orientación al mercado en un contexto internacional de habla española. Los resultados confirman los obtenidos a partir de esfuerzos de investigación anteriores. El estudio de las tres escalas, cuando se combinan, sugiere la existencia de seis dimensiones que pueden ser medidas con dieciocho ítems.

PALABRAS CLAVE: orientación de mercado, estrategia de marketing.

UNE MESURE DE L'ORIENTATION-MARCHÉ : DÉVELOPPEMENT ET VALIDATION DANS UN CONTEXTE CULTUREL DIFFÉRENT.

RÉSUMÉ: Depuis des décennies, chercheurs et professionnels en marketing soutiennent que l'adoption d'une philosophie orientée vers le consommateur est la clé pour atteindre et maintenir un avantage compétitif durable dans les entreprises opérant dans un environnement de haute concurrence. Cependant, on n'a pas prêté une attention suffisante à dissiper certaines préoccupations relatives à la maîtrise de ce concept et à la méthodologie à suivre pour sa mesure dans différents contextes culturels. Cet article examine la fiabilité et la validité de trois échelles de mesure de l'orientation-marché dans un environnement international hispanophone. Les résultats confirment ceux obtenus par des travaux de recherche antérieurs. L'étude des trois échelles et de leur combinaison suggère l'existence de six dimensions qui peuvent être mesurées avec dix-huit items.

MOTS-CLÉS : orientation-marché, stratégie de marketing.

UMA MEDIDA DE ORIENTAÇÃO DE MARKETING: DESENVOLVIMENTO E VALIDAÇÃO EM DIFERENTES CULTURAS

RESUMO: Por muitas décadas, pesquisadores e praticantes de marketing têm afirmado que a adoção de uma filosofia de orientação ao consumidor é a chave para o desenvolvimento e manutenção da vantagem competitiva sustentável para operação de negócios em um ambiente de alta competitividade. O interesse mostrado não tem sido suficiente para afastar algumas preocupações sobre o domínio da construção e da metodologia usada para medir tal domínio em diferentes contextos culturais. Este artigo examina a confiabilidade e validação de três escalas para medir a orientação de marketing, no contexto internacional de hispanofalantes. Os resultados confirmam aqueles obtidos nas pesquisas anteriores. O estudo das três escalas, quando combinados, sugerem a existência de três dimensões que são medíveis juntos com dezotoito itens.

PALAVRAS-CHAVE: Orientação de marketing, estratégia de marketing.

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ABSTRACT: For several decades, researchers and marketing practitioners have proclaimed that the adoption of a consumer-oriented philosophy is the key to developing and maintaining a sustainable competitive advantage for a business operating in a highly competitive environment. The interest shown has not been sufficient to dispel certain concerns about the construct's domain, and the methodology followed for measuring it in different cultural contexts. This paper examines the reliability and validity of three scales for measuring market orientation in a Spanish-speaking international context. The results confirm those obtained from previous research efforts. The study of the three scales, when combined, suggests the existence of six dimensions that are measurable with eighteen items.

KEYWORDS: Marketing orientation, marketing strategy

Introduction

Since 1990, the discussion of market orientation has occupied a prominent place in the specialized literature and is attracting renewed interest on the part of academics and researchers (Harris, 2002; Deshpandé & Farley, 1998; Homburg & Pflesser, 2000; Kohli & Jaworski, 1990; Narver & Slater, 1990; Shapiro 1988; Webster, 1988). Two perspectives have dominated conceptualization and research into market orientation. Kohli and Jaworski (1990) proposed the first, called behavioral, and Narver and Slater (1990) suggested the second, called cultural.

From the measurement perspective, the existing literature emphasizes four important points. First, the construct's duality affects its operationalization and measurement. Even though the literature and research results support the scales developed to measure the cultural and behavioral perspective, there is no consensus about which of these is the best measure. Second, research has found that certain dimensions show low reliability, very weak independence between some of the dimensions, and redundancy in the items (Deshpandé & Farley, 1998; Ellis, 2006; Gray, Matear, Boshoff & Matheson 1998). Third, the measures used in certain studies appear to be inadequate for evaluating business performance and determining the possible relationship between market orientation and performance (Kirca, Jayachandran

& Bearden, 2005; Deng & Dart, 1994; Ellis, 2006; Gray et al., 1998; Matsuno, Mentzer y Rentz, 2005; Narver & Slater, 1990). Finally, most of the research on market orientation suggests the need to extend it to different international contexts (Camino & Ayala, 2006; Kirca et al., 2005; Deshpandé & Webster, 1989; Deshpandé, Farley & Webster 1993; Deshpandé & Farley, 1998; Ellis, 2006; Farley & Lehmann, 1994; Harris, 2002; Homburg & Pflesser, 2000; Kohli & Jaworski, 1990; Matsuno et al., 2005; Narver & Slater, 1990; Selnes, Bernard, Jaworski & Kholi, 1996; Olsen & Olsen, 2004). Consequently, there is a need for reliable, valid and parsimonious measure of market orientation that can then be extended to different industries and cultural contexts to facilitate analysis of the relationship between market orientation and performance.

The purpose of the present study is as follows: first, to establish the external validity of the scales developed by Kohli, Jaworski and Kumar (1993), Narver and Slater (1990), and Deshpandé, Farley and Webster (1993) to measure market orientation; second, to develop a parsimonious scale that integrates the most robust dimensions and items of the three scales, specifically those applicable to other cultural contexts and different industries; and third, to determine the external validity of the relationship between market orientation and business performance. To achieve the proposed objectives, the paper has the following structure: first, we will review the literature to clarify and specify the construct domain. Next, we will describe the methodology used to establish the external validity of the three scales and the procedure followed to develop a parsimonious scale and to explore the relationship between market orientation and performance. Finally, conclusions, limitations and implications for future research will be discussed.

Literature review

The troublesome ambiguity and confusion between the marketing concept and market orientation begin to dissipate with clear differentiation of the marketing concept as a management philosophy, and market orientation as those activities and behaviors required for implementing this philosophy successfully (Deng & Dart, 1994; Gray et al., 1998; Kohli & Jaworski, 1990). The marketing concept is in essence a philosophy, an ideal, an approach or a policy. Kohli and Jaworski (1990) used the term market orientation to refer to the operationalization and implementation of the marketing concept as reflected in the activities and behaviors of an organization.

Construct Domain

Research into market orientation has relied primarily on two perspectives: the cultural and the behavioral (Griffiths & Grover, 1998; Matsuno et al., 2005). The cultural perspective establishes that "market orientation is the organization culture that most effectively and efficiently creates the necessary behaviors for the creation of superior value for buyers" (Narver & Slater, 1990, p. 21). The behavioral perspective holds that market orientation is the implementation of the marketing concept (Kohli & Jaworski, 1990).

The most widely accepted operational definitions of the construct were proposed by Narver and Slater (1990) and Kohli and Jaworski (1990). Kohli and Jaworski (1990) suggest that market orientation has three components: intelligence generation, intelligence dissemination and responsiveness. Narver and Slater (1990) consider market orientation as a construct involving three behavioral components: customer orientation, competitor orientation and interfunctional coordination.

A Measure of Market Orientation

Few measurements of market orientation facilitate comparison and generalization based on results among industries in different cultural contexts (Deng & Dart, 1994; Deshpandé & Farley, 1998; Gray et al., 1998; Narver & Slater, 1990; Selnes et al., 1996). The review of the literature shows that three scales have gained wide acceptance for valid and reliable measurement of the market orientation construct and its influence on company performance.

Narver and Slater (1990) studied how to construct a valid market orientation measure that would make it possible to analyze its effect on company profit. Based on a 15-item scale, evaluated with a Likert seven-point scale, they found that the Cronbach's alpha for measuring each one of the dimensions' reliability - customer orientation, competitor orientation and interfunctional coordination - was higher than 0.7.

Kohli et al. (1993) constructed a measure of market orientation known as MARKOR. This scale contains twenty items: six of them measure intelligence generation; five measure intelligence dissemination and nine measure responsiveness. They subsequently used the same scale in a study conducted in Scandinavia.

Deshpandé et al. (1993) designed a customer orientation scale as part of a broader study that included the impact of corporate culture and innovation on the performance of a Japanese company's sample. The authors came up with



a nine-item scale based on a thirty-item list. This scale also proved useful in research the authors conducted in the United States, Germany, France, England, India, Vietnam, Thailand, Hong Kong and China. Subsequently, Deshpandé and Farley (1998) did a comprehensive transnational study that synthesized and validated the measurement scales developed by Narver and Slater (1990), Deshpandé et al. (1993) and Kohli and Jaworski (1990). The results show that the three scales are comparable, complement one another and are interchangeable. They suggest that the summarized ten-item scale (MORTN) focuses more on activities related to customer orientation than on activities corresponding to the other components of the construct.

In Latin American there have been very few studies on market orientation, its measurement and its relationship to performance (Olavarrieta & Friedmann, 2008). Most have used scales known as Narver and Slater (Rivera & Molero, 2006; Olavarrieta & Friedmann, 2008), the MARKOR scale (Olsen & Olsen, 2004; Rojas-Méndez, Kara & Spillan, 2006; Gattermann & Hoffmann, 2002), and the combined scale of Gray et al. (Felix & Hinck, 2005).

In summary, the literature review underlines the following: first, while the different approaches are complementary

and supported by research results, other research casts doubt on the existence of some of the dimensions and the correspondence and parsimony of the items (Deshpandé & Farley, 1998; Gray et al., 1998). Second, evidence of the need to extend this type of research to different cultural contexts and companies is compelling. In this regard, there is a glaring absence of research carried out in Spanish-speaking socio-cultural contexts. Third, the results of previous research suggest that a valid instrument for measuring market orientation in different cultural contexts would likely consist of the most robust elements of the three scales. Fourth, the measurements used in different research studies appear to be inadequate for evaluating business performance and examining the potential relationship between a company's market orientation and its performance.

The present study seeks to develop, in the Colombian context, a valid and reliable instrument for measuring market orientation in a sample of companies that represent different sectors of the Colombian economy and which vary in size and geographical location. The first section establishes the external validity of the scales developed by Kohli et al. (1993), Narver and Slater (1990), Deshpandé et al.

(1993), and Deshpandé and Farley (1998) for measuring market orientation in the Colombian context. A subsequent exploratory and confirmatory approach suggests that market orientation is a construct consisting of six dimensions. To achieve this objective, this study adopted the procedures suggested by Churchill (1979).

Methodology

Sample

The sampling framework consisted of companies and executives that have participated in executive education programs at universities in Bogotá, Colombia. The sample included a broad range of Colombian companies of various sizes and from different sectors and locations. The sampling unit consisted of executives from marketing, finance, planning, human resources, and research and development. The survey team contacted 126 executives at 31 firms, of whom 93 responded to an Internet survey.

Construct's Domain Specification

The preliminary scale had the following dimensions, proposed and described by Narver and Slater (1990), Kohli, Jaworski and Kumar (1993), and Deshpandé, Farley and Webster (1993): customer orientation, competitor orientation, interfunctional coordination, intelligence generation, intelligence dissemination and responsiveness.

Measurement Instrument

In the scales constructed by Kohli, Jaworski and Kumar (1993), Narver and Slater (1990), and Deshpandé, Farley and Webster (1993), there were items corresponding to each of the six previously established dimensions. A committee consisting of two professors and one research assistant reviewed the wording and comprehension of the items and made suggestions for improvement of the scale. This process allowed retention of only those items showing a 100% index of agreement (Kassarjian, 1997). Two professional translators translated all of the items on the preliminary scale from English to Spanish and from Spanish to English.

A 42-item scale resulted, with the following distribution: fourteen items were from the Narver and Slater scale (1990), twenty from the Kohli, Jaworski and Kumar scale (1993), and eight from the scale designed by Deshpandé, Farley and Webster (1993). Out of the total of forty-two items, fourteen pertain to customer orientation, four to

competitor orientation and four to interfunctional coordination; six correspond to intelligence generation, five to intelligence dissemination and nine to responsiveness. A Likert 10-point scale enabled participants to express their degree of agreement or disagreement with each of the statements, with 10 indicating complete agreement. (Appendix 1)

To evaluate the validity of the construct, there were certain questions addressing subjective perceptions about financial and sales performance and one question about sales orientation (Deshpandé & Farley, 1998; Kohli, et al., 1993; Narver & Slater, 1990). In addition, application of Deshpandé and Farley's (1998) MORTN scale facilitated evaluation of that scale's reliability.

Results Analysis

The results analysis consists of two stages. The first stage is a presentation of the reliability and validity analysis of the individual scales developed by Narver and Slater (1990), Kohli, Jaworski and Kumar (1993) and Deshpandé, Farley and Webster (1993). It is followed by a reliability and validity analysis of the combined scale, consisting of the dimensions proposed by Narver and Slater (1990), Jaworski, Kohli and Kumar (1993) and Deshpandé, Farley and Webster (1993).

A. Reliability and Validity of the Individual Scales

Reliability. Table 1 shows the reliability and validity of the three scales used to measure market orientation. The reliability indexes of the three scales used in this study have values higher than the limit (Cronbach $\alpha \geq 0.70$) suggested by Nunnally and Bernstein (1994, p. 265) for exploratory studies, and are comparable to the reliability indexes obtained in the previous studies. Additionally, a confirmatory factor analysis using each scale validated neither the suggested dimensions of each nor the pertinence of the respective items. As in previous studies, the results of this analysis confirm that certain items show low correspondence with their respective dimension and a high relationship to the other construct dimensions (Deshpandé & Farley, 1998; Gray et al., 1998).

Validity. Examination of the validity of the individual scales took into account convergent validity, discriminant validity and concurrent validity. Correlation among the three scales was calculated to evaluate convergent validity. Close correlation among the three scales indicates that they all measure the same construct. In Table 1 we observe that all correlations are ≥ 0.75 and are statistically significant ($p \leq 0.01$).

To evaluate discriminant validity, the questionnaire included descriptions of two business philosophies suggested in previous studies, called sales-oriented philosophy and marketing-oriented philosophy (Kohli, Jaworski & Kumar, 1993). Considering that market orientation is the implementation and operationalization of the concept and philosophy of marketing, a consequent negative correlation was anticipated between market orientation and the sales-oriented philosophy (Deshpandé & Farley, 1998). Correlations between each of the three scales and sales orientation measures was negative and statistically significant ($p \leq 0.05$).

To determine the concurrent validity of the three scales, the questionnaire included certain subjective measures for evaluating performance. Using the performance measure, the correlation of each of the three scales was examined to establish concurrent validity. Table 1 presents the three scales, showing low correlations with profit and sales measures.

B. Reliability and Validity of the Combined Scale

The sample was randomly split into two samples ($n_1 = 46$ and $n_2 = 47$). Analysis using sample 1, followed by replication with sample 2, tested the construct's reliability. Items were eliminated based on Cronbach's alpha and correlation of the items in each dimension with their respective totals (Nunnally & Bernstein 1994). The results show that intelligence generation in the first sample and competitor orientation in the second sample obtained a final Cronbach's alpha ≥ 0.68 ; the remaining final Cronbach's alphas were higher in both samples than the threshold value of 0.70 suggested by Nunnally and Bernstein (1994). Of

the forty-two original items, thirty-three remained for the factor analysis.

An exploratory factor analysis using Varimax rotation and principal components estimation was conducted to eliminate any possible overlaps and redundancies of items. The thirty-three items were analyzed using the total sample ($N = 93$). Those items with factor loadings lower than 0.6 were eliminated and ambiguous items were re-assigned. The six original dimensions showed Eigen values ≥ 1 and explain the 71.967% of variance. Four of the six dimensions of Cronbach's alpha showed good internal consistency between the items in each dimension ($\alpha \geq 0.70$).

Although the results suggest the existence of a six-dimensional market orientation model, it is noteworthy that only consumer orientation and intelligence generation preserve some of their original items. In the other dimensions, competitor orientation, intelligence dissemination, inter-functional coordination and responsiveness, there was no exact correspondence between the original items and the respective dimension (Table 2).

Construct Validity

Analysis was made in two stages. First, confirmatory factor analysis established whether the number of factors suggested in the exploratory factor analysis is a good representation of market orientation. The second stage established the construct validity.

A confirmatory factor analysis (CFA) was run using AMOS 16.0.1. CFA in the combined sample ($N = 93$) confirmed that market orientation is a multidimensional construct consisting of six dimensions which may be measured by 18

TABLE 1. Reliability and validity of the individual scales

| | Narver & Slater | Kohli, Jaworski & Kumar | Deshpandé, Farley & Webster |
|--|-----------------|-------------------------|-----------------------------|
| Reliability: measured using the Cronbach's alpha | | | |
| Original study (1) | 0.81 | n/a | 0.71 |
| Deshpandé & Farley study (1998) | 0.90 | 0.51 | 0.72 |
| This study | 0.887 | 0.872 | 0.759 |
| Validity | | | |
| Convergent: correlations | | | |
| Narver & Slater | | 0.838* | 0.759* |
| Kohli, Jaworski & Kumar | | | 0.648* |
| Discriminant: correlation between market orientation scale and sales-oriented philosophy | -0.322* | -0.351* | -0.317* |
| Concurrent: correlation between market orientation scale and performance measures | | | |
| Profit | 0.212** | 0.219** | 0.069 |
| Sales | 0.139 | 0.250** | -0.006 |

(1) Deshpandé & Farley (1998)

*Significant $\alpha = 0.05$. **Significant $\alpha = 0.01$

items using a ten-point Likert scale. 17 of the 18 standardized loadings are high (0.59 to 0.92). Hair, Black, Babin, Anderson and Tatham (2005, p. 752) suggest that "a model reporting the χ^2 value and degrees of freedom, the CFI and RMSEA will often provide sufficient unique information to evaluate a model." The chi-squared and the two fit indices provide excellent evidence of model fit ($\chi^2 = 130.02$, $df = 114$, $p = 0.145$, $CFI = 0.975$, $RMSEA = 0.039$) with t-values for each of the loadings significant at $p = 0.001$.

Construct validity. The construct validity of market orientation was evaluated by examining convergent validity, discriminating validity and concurrent validity. Strong correlation between the dimensions of market orientation indicates that they all converge in a common construct.

Correlation between two scales to measure the same construct is an alternate method for establishing reliability (Guilford, 1954). Correlations between the six dimensions and correlations of these dimensions and the MORTN scale (Deshpandé & Farley, 1998) were statistically significant ($p \leq 0.01$). Correlation between the combined scale and the MORTN scale was 0.805 ($p \leq 0.01$). The Cronbach's alpha, among all the items of the combined scale, was higher than 0.70. The results also show a negative correlation between marketing orientation and the sales-oriented philosophy (-0.331 , $P < 0.01$). Finally, to establish concurrent validity, the correlation between the combined scale and the subjective measures of sales and profit was examined. The correlations obtained were low and not significant.

TABLE 2. Items and Varimax rotated factor loadings

| | Factor 1 | Factor 2 | Factor 3 | Factor 4 | Factor 5 | Factor 6 |
|---|----------|----------|----------|----------|----------|----------|
| Customer Orientation | | | | | | |
| Our business strategies are driven by our beliefs about how we can create greater value for our customers. | | .755 | | | | |
| We constantly monitor our level of commitment and orientation to serving customer needs. | | .817 | | | | |
| We are more customer-focused than our competitors. | | .680 | | | | |
| We give close attention to after-sales service. | .716 | | | | | |
| We compete primarily based on product or service differentiation. | | | | | .716 | |
| Competitor Orientation | | | | | | |
| We target customers where we have an opportunity for competitive advantage. | | | | | .847 | |
| Our sales people regularly share information within our business concerning competitors' strategies. | .742 | | | | | |
| Interfunctional Coordination | | | | | | |
| We freely communicate information about our successful and unsuccessful customer experiences across all business functions. | .649 | | | | | |
| All of our business functions (e.g. marketing/sales, manufacturing, R&D, finance/accounting, etc.) are integrated in serving the needs of our target markets. | | | .789 | | | |
| All of our managers understand how everyone in our business can contribute to creating customer value. | | | .729 | | | |
| Intelligence Generation | | | | | | |
| We are slow to detect changes in our customers' product preferences. (R) | | | | | | .839 |
| We are slow to detect fundamental shifts in our industry (e.g., competition, technology, regulation). (R) | | | | | | .768 |
| We poll end-users at least once a year to assess the quality of our products and services. | | | | .793 | | |
| Intelligence Dissemination | | | | | | |
| Data on customer satisfaction are disseminated at all levels in this business unit on a regular basis. | | | | .660 | | |
| When something important happens to a major customer or market, the whole business unit quickly knows about it. | .682 | | | | | |
| Responsiveness | | | | | | |
| Several departments get together periodically to plan a response to changes taking place in our business environment. | .709 | | | | | |
| The activities of the different departments in this business unit are well coordinated. | | | .641 | | | |
| We periodically review our product development efforts to ensure that they are in line with what customers want. | | | | .712 | | |

Conclusions and Future Research

This study first examined the reliability and validity of three scales for measuring market orientation in a Spanish-speaking context. The results confirm previous studies. Each of the scales showed reliability and validity indexes that were statistically acceptable and comparable to those obtained in the original studies. However, factor analysis demonstrates that in the three scales, a certain number of the items generated for measuring each dimension maintain very high charges in other dimensions. These results could be explained by inconsistencies in the definition and operationalization of the construct, as has been widely cited in academic literature. Narver and Slater (1993) define market orientation as "the organization culture that most effectively and efficiently creates the necessary behaviors for the creation of superior value for buyers"; however, when the construct is operationalized they use many behavioral items.

Subsequent investigation sought to find an integrated, reliable, valid and parsimonious scale applicable to different cultural contexts. A scale integrating the dimension suggested by Narver and Slater (1993), Kohli, Jaworski and Kumar (1993) and Deshpandé, Farley and Webster (1993) was the means for finding the most appropriate dimensions and items for measurement. The results suggest that the instrument, combined and tested in a different cultural context, consists of six components measurable with eighteen items, which showed high reliability and acceptable internal and external validity.

Although the six components found do not match with the three components proposed by Kohli and Jaworsky (1993) and the three proposed by Narver and Slater (1990), they show various conceptual elements proposed by researchers.

The six components can be grouped into two categories. The first refers to the organization's strategic orientation while the second involves market intelligence activities. This is consistent with Rossiter, who reconceptualizes the market orientation concept (Rossiter, 2012). He proposes to replace it with two different constructs, managerial strategy beliefs and market intelligence usage.

The first group consists of the factor 2 and factor 5. These refer to those beliefs that guide decision-making in organizations. Factor 2 comprises items related to customer orientation, a philosophy or a part of the corporate culture that Deshpandé, Farley and Webster (1993, p.27) define as "the set of beliefs that puts the customer's interest first". Customer focus is mentioned by Kohli and Jaworsky (1993) as one of the key elements found in the different marketing concept definitions. It is also one of the three

components proposed by Narver and Slater (1993). Factor 5 grouped items related to the strategy used by the organization (product or service differentiation, competitive advantage).

The second group (factors 1, 3, 4 and 6) refers to items related to market intelligence usage. Rossiter (2012) proposes four subcomponents: (1) data-gathering extensiveness, (2) information extraction quality, (3) dissemination of information to the right people, and (4) usage effectiveness of the information. In this research, factors 4 and 6 reflect the intelligence generation or data-gathering activities, divided into two components: The first one (factor 4) refers to consumer market research activities. The second combines the activities of information gathering on macro-environment changes and trends (regulation, technology, industry). Factor 1 and 3 comprise several of the items related to intelligence dissemination and interfunctional coordination, which are consistent with subcomponents 3 and 4 proposed by Rossiter. Factor 1 consists of items associated with how information is shared throughout the organization. Factor 3 combines the activities of integration and coordination of different organizational units.

These findings open new lines for future research. Research should be aimed at finding whether marketing orientation is a uni-dimensional construct or whether it will be operationalized by two different constructs: managerial strategy beliefs and market intelligence usage.

Considering that implementation of the marketing concept is a process that takes time and involves individuals and environmental fluctuations, a longitudinal study would permit evaluation of the congruence of this approach over time, and its relationship to external performance indicators. Finally, conducting comparative studies by industry, using a company as the unit for analysis, is another line worthy of future research.

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Appendix 1

Customer Orientation

1. Our business strategies are driven by our beliefs about how we can create greater value for our customers.
2. We give close attention to after-sales service.
3. We measure customer satisfaction systematically and frequently.
4. We constantly monitor our level of commitment and orientation to serving customer needs.
5. Our business objectives are driven primarily by customer satisfaction.
6. Our strategy for competitive advantage is based upon our understanding of customer needs.
7. We know our competitors well.
8. Our product and service development is based on good market and customer information.
9. We have a good sense of how our customers value our products and services.
10. We compete primarily based on product or service differentiation.
11. The customer's interest should always come first, ahead of the owners'.
12. We have routine or regular measures of customer service.
13. We are more customer-focused than our competitors.
14. I believe this business exists primarily to serve customers.

Competitor Orientation

15. We rapidly respond to competitive actions that threaten us.
16. Top management regularly discusses competitors' strengths and strategies.
17. Our sales people regularly share information within our business concerning competitors' strategies.
18. We target customers where we have an opportunity for competitive advantage.

Interfunctional Coordination

19. Our top managers from every function regularly visit our current and prospective customers
20. All of our business functions (e.g. marketing/sales, manufacturing, R&D, finance/accounting, etc.) are integrated in serving the needs of our target markets.
21. All of our managers understand how everyone in our business can contribute to creating customer value.
22. We freely communicate information about our successful and unsuccessful customer experiences across all business functions.

Intelligence Generation

23. In this business unit, we meet with customers at least once a year to find out what products or services they will need in the future.
24. In this business unit, we do a lot of in-house market research.
25. We are slow to detect changes in our customers' product preferences. (R)
26. We are slow to detect fundamental shifts in our industry (e.g., competition, technology, regulation). (R)
27. We periodically review the likely effect of changes in our business environment (e.g., regulation) on customers.
28. We poll end-users at least once a year to assess the quality of our products and services.

Intelligence Dissemination

29. We have interdepartmental meetings at least once per quarter to discuss market trends and developments.
30. Marketing personnel in our business unit spend time discussing customers' future needs with other functional departments.
31. When something important happens to a major customer or market, the whole business unit quickly knows about it.
32. When one department finds out something important about competitors, it is slow to alert other departments. (R)
33. Data on customer satisfaction are disseminated at all levels in this business unit on a regular basis.

Responsiveness

34. It takes us forever to decide how to respond to our competitors' price changes.
35. For one reason or another, we tend to ignore changes in our customers' product or service needs. (R)
36. We periodically review our product development efforts to ensure that they are in line with what customers want.
37. Several departments get together periodically to plan a response to changes taking place in our business environment.
38. If a major competitor were to launch an intensive campaign targeted at our customers, we would immediately implement a response.
39. The activities of the different departments in this business unit are well coordinated.
40. Customer complaints fall on deaf ears in this business unit. (R)
41. Even if we came up with a great marketing plan, we probably would not be able to implement it in a timely fashion. (R)
42. When we find that customers would like us to modify a product or service, the departments involved make concerted efforts to do so.