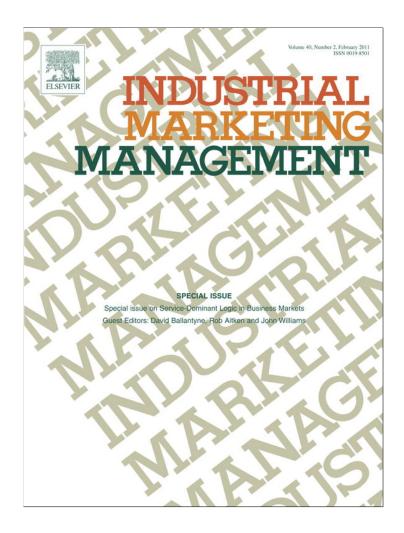
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A survey of market orientation research (1995–2008)

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ABSTRACT

Since 1990, market orientation (MO) has received considerable attention in the marketing literature. Little research so far provides preliminary and useful information to facilitate good understanding of MO. This study presents a comprehensive survey of extant marketing literature using keyword classification from 1995 to 2008. It serves as a tutorial and aims to help the beginner researcher or practitioner to have access to MO, including its definitions, applications and problem domains. Based on the scope of 514 MO articles, we find that the number of publications on MO has significantly increased since 2001 with steady growth in recent years. In addition, these selected articles are scattered across 153 journals and mostly published in 10 academic journals. The contribution of our paper is to provide a means (i.e., keyword index) to conceptualize and operationalize the coverage of MO. It provides a conceptual framework to organize this vast body of research. This study ends with some discussions and conclusions.

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1. Introduction

Given today's uncertain environment, adaptability and competitiveness are critical for the health of any organization. When an organization's market orientation (MO) produces value for customers that is rare and difficult to imitate (Narver, Slater, & MacLanchlan, 2000), it can be a sustainable source of competitive advantage which will allow firms to outperform their less market-oriented competitors. This is particularly true for business-to-business (B2B) marketers. B2B relationships tend to be more enduring and B2B marketers tend to deal with smaller numbers of larger customers that are more expensive to replace. For B2B marketers the financial implications of losing any customer can be daunting. From a theoretical perspective, MO is not only a popular measurement scale for assessing the implementation of the marketing concept within an organization, but also a foundation of long-term collaboration among partners in a value-chain.

Throughout the 1990s, MO has received considerable attention in the marketing literature (e.g., Kohli & Jaworski, 1990; Narver & Slater, 1990; Slater & Narver, 1994), and has continued to attract the attention of researchers. Most of this stream of research has focused on the interaction between MO and business performance (e.g., Diamantopoulos & Hart, 1993; Day, 1994; Chang, Mehta, Chen, Polsa, & Mazur, 1999; Sin, Tse, Heung, & Yim, 2005; Panigyrakis & Theodoridis, 2007) and the moderating effects of the environment on that relationship (e.g., Kohli & Jaworski, 1990; Jaworski & Kohli, 1993; Han, Kim, & Srivastava, 1998; Baker & Sinkula, 1999; Demirbag, Koh, Tatoglu, & Zaim, 2006; Laforet, 2008). Kohli and Jaworski (1990), drew on earlier work and established what seems to be an agreed upon definition of MO. Since then, little has been done to organize the considerable body of research on MO which now seems vast and confusing to the uninitiated.

In order to make the concept of MO more accessible, here we present a comprehensive survey of published research on MO from 1995 to 2008. Unlike a more traditional review which looks for specific key contributions and seminal pieces of literature, here we attempt to describe the totality of the research stream including its general health as a research stream and the various directions that it is moving in. We track the overall growth in MO research and present an analysis of publication outlets, problem domains and industry settings where the research was conducted. We take a close look at the impact of MO on performance as well as the moderators and mediators of that impact. We introduce a conceptual model of MO in order to organize the vast body of research on the topic. Our goal is to provide a sort of roadmap to those interested in gaining a better understanding of MO research.

The following section describes the methodology used in carrying out our survey. This is followed by an analysis of the overall growth,

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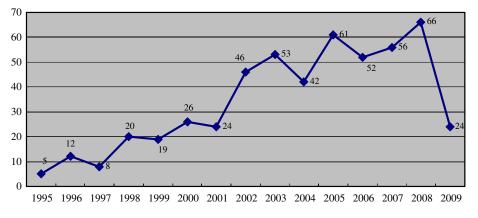


Fig. 1. The distribution of MO articles by years.

publication outlets, problem domains and industry settings employed in MO research. Based on these analyses we then present a conceptual model capturing the relationships between the domains of MO research. This is followed by a discussion of some of the limitations of our research as well as directions for further research and some brief conclusions.

2. Research methodology

In order to identify a comprehensive list of articles for inclusion in our survey we utilized a simple keyword search of available online journal databases. The following five online journal databases were searched with the major keyword phrase, "*market orientation*" on Feb 15, 2009 to provide a complete bibliography of the academic literature on MO:

- Scopus;
- Science Direct;
- Emerald Fulltext;
- SAGE;
- Taylor & Francis.

We started with approximately 800 articles based on the descriptor 'market orientation'. The full text of each article was reviewed to eliminate those articles that were not actually related to MO. The selection criteria were as follows.

- Only those articles that had been published in *Marketing, Business* and *Management*, and *Economics Journals* were selected, as these were the most appropriate outlets for MO research and the focus of the survey.
- Conference papers, master and doctoral dissertation, textbooks and unpublished working papers were excluded, as academics and practitioners alike most often use journals to acquire information and disseminate new findings. In general, journals represent the highest level of research (Nord & Nord, 1995).
- ◆ Articles with no significant keywords were neglected.
- While considerable discussion of MO occurs in the popular practitioner oriented press, no attempt was made to include these in the analysis.

3. Classification and analysis

After filtering these original articles, we selected 514 articles for intensive analyses by year of publication, published journal, keyword index and applied industries.

3.1. The growth of MO research

The distribution of articles published by year is shown in Fig. 1. Research output in MO has increased significantly since 2001. This situation is not consistent with Vargo and Lusch (2004) who found that MO peaks around 2000. There was a slight drop in 2001, but only twice in the period studied did the raw number of articles increases two years in a row. As can be seen in the figure, the overall growth trend is strong and steady. In the first five years (1995–1999) there were only 64 publications (12.43% of the total), with the total publications of the next five years (2000–2004) accounting for approximately 200 articles (37.08% of the total). In the most recent four-year period (2005–2008), 45.72% of the fourteen-year total were published. In other words, there has been a steady growth in MO research since 1995. While the number of articles in Table 1 appears to diminish in 2009, it only represents articles published in the first 46 days of that year.

3.2. Publication outlets

These 514 articles on MO were published in a total of 153 different journals. The top ten journals in terms of frequency of publication accounted for 46.6% of the total. Table 1 includes a listing of these top ten as well as the frequency of MO articles for each year included in the study. While we located articles in many different disciplines, all of the top ten journals would clearly be classified as marketing specific journals except *the Journal of Business Research* (27 articles, 5.25% of total).

Of these top ten MO journals, two (including this publication and the Journal of Business and Industrial Marketing) are publications represent almost 10% (51 out of 514) of the total articles published on MO indicating that, at least in the editors' views, MO is of particular interest to B2B marketers. In addition to these two journals, only The Journal of Business Research, the Journal of Global Marketing and the Journal of Service Marketing are based in the United States. The other five of the top ten Journals are all European based publications. Of the publications in the top ten journals, the European journals lead the U.S. journals by a 55% to 45% margin. Forty seven percent (51 out of 108) of the articles in U.S. journals were in the B2B oriented publications.

We also found that only three out of the 10 journals could be tracked by science citation index (SCI), and/or the social science citation index (SSCI).⁴ Therefore, it seems that researchers should not emphasize SSCI/SCI at the expense of other non-SSCI/SCI journals as it would likely narrow the scope of their research and increase the risk of missing articles.

⁴ Industrial Marketing Management, the Journal of Business Research, and the International Journal of Research in Marketing.

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Table 1 Top 10 journals on MO (1995–2008).

	~1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009~	NP
European Journal of Marketing	11	5	4	12	8	6	5	1	4	7	2	65
Industrial Marketing Management	-	-	-	1	4	6	4	8	4	7	5	39
Journal of Business Research	-	-	3	2	3	3	5	2	4	4	1	27
Journal of Strategic Marketing	9	1	-	1	3	2	1	0	4	1	0	22
Marketing Intelligence and Planning	2	1	1	1	2	4	3	5	1	0	0	20
Journal of Global Marketing	1	3	1	0	2	4	3	1	1	1	0	17
International Journal of Research in Marketing	3	1	2	-	3	3	-	1	-	1	0	14
Journal of Service Marketing	4	2	-	2	1	1	1	1	-	1	0	13
Journal of Business and Industrial Marketing	2	-	1	5	1	-	2	-	-	1	0	12
International Journal of Bank Marketing	1	1	-	1	2	1	2	1	1	1	0	11

NP: number of publications.

3.3. Research domains

The '*keywords*' used in articles were used to classify the domain of the 514 identified MO articles. There were a total of 2372 keywords (averaging 4.6 per article). Most articles had either four or five keywords. Six categories were identified that had substantial research activity related to MO. By far the most common area of inquiry was an examination of the relationship between MO and performance, but innovation, marketing, learning, competition and quality also had substantial research activity devoted to them.

3.3.1. Keywords involving MO and performance

A total of 38 articles (7.4% of the total) were devoted to an examination of the relationship between MO and performance over a range of different contexts. Of these 38 articles, 22 examined the impact of MO directly on performance, six examined moderators of the relationship and ten examined mediating variables. Only two published articles out of the 38 found no significant relationship between MO and performance, and two others found a weak relationship. Early authors argued that the results regarding a relationship had not been conclusive (Diamantopoulos & Hart, 1993; Greenley, 1995; Han et al., 1998), but with 36 out of 38 articles finding a relationship it would seem that the evidence is overwhelming in favor of a relationship. However, it is impossible to determine just how many authors and/or editors would have given up on an article when no relationship was determined especially given the preponderance of evidence in the literature that such a relationship exists. Indeed, given the level of attention that MO receives in the literature, a finding indicating no relationship with performance might seem nearly heresy.

In general, the literature seems to have moved past the establishment of a relationship between MO and performance. The moderating and mediating effect portions of Table 2 take the performance issue to the next level in an attempt to explain the when and how of the impact of MO on performance. The moderating effects portion of Table 2 looks at a number of studies, which examined environmental variables and assessed their impact on the MO–performance linkage. The mediating effects portion of Table 2 looks at studies that attempt to answer how MO works to improve performance. It seems that MO affects performance in a number of ways, either by providing a customeroriented focus or reshaping an organization's culture for developing superior value for customers.

Performance can be seen as a multi-dimensional construct consisting of more than simply financial performance (e.g., Baker & Sinkula, 2005; Henderson & Cockburn, 1994; Jaworski & Kohli, 1993). While the majority of the performance measurements identified focused on macro level-business performance (Cravens & Guilding, 2000; Ogbonna & Harris, 2002; Santos-Vijande, Sanzo-Perez, Alvar-Gonzalez, & Vazquez-Casielles, 2005; Martin-Consuegra & Esteban, 2007), a more micro performance perspective is dealt with in several studies, for example, new product performance (Hsieh, Tsai, & Wang, 2008), financial performance (Lonial, Tarim, Tatoglu, Zaim, & Zaim, 2008), retail performance (Panigyrakis & Theodoridis, 2007), and specific brand performance (O'Cass & Ngo, 2007). Based on the concept of Siguaw, Brown, and Widing (1994), Piercy, Cravens, and Lane (2009) strongly argue that a market-oriented company would influence salespeople's selling behaviors and their performance. The keywords involving MO and performance are categorized in Table 3. It is clear from the literature that MO not only affects many types of performance measures, but also impacts performance on a number of different levels from the overall organization to individual brands to individuals within the organization.

3.3.2. Keywords involving MO and innovation

Traditionally, many studies have identified a positive relationship between MO and innovation. For example, Aldas-Manzano, Kuster, and Vila (2005) conclude that MO and innovation are not isolated fields. Mavondo, Chimhanzi, and Stewart (2005) argue that firms manifest their MO via the success of new innovation. Sondergaard (2005) demonstrates that the understanding of customer needs with the purpose of better serving the customer would help to achieve market-oriented new product development (NPD). Han et al. (1998) propose that a market-oriented firm is likely to be innovative, which, in turn, is likely to lead to achievement of superior performance. Im, Hussain, and Sengupta (2008) empirically examine the argument of Jaworski and Kohli (1993) and further support the relationship between MO and creativity.

Innovativeness, to some degree, is similar to entrepreneurial orientation. The former is defined as the notion of openness to new ideas as an aspect of a firm's culture (Hurley & Hult, 1998, p. 44). The latter refers to a firm's willingness to encourage creativity, flexibility, and to support risk (Morris & Paul, 1987). Therefore, firms that have high innovativeness, which is akin to an organizational culture that encourages employees to be innovative, are likely to have more innovation (Menguc & Auh, 2006). On the other hand, firms that are entrepreneurial (e.g., proactive, innovative and risk takers) would benefit by developing strong market-driven capabilities in intelligence gathering and dissemination (Zahra, 2008).

Based on the comparison between innovativeness and entrepreneurial orientation, we suggest that innovativeness is cultureoriented whereas entrepreneurial orientation is process-oriented. Both help organizations move toward innovation. The keywords involving MO and innovation are categorized in Table 4.

3.3.3. Keywords involving MO and learning

Learning organizations are not only able to become competent but also able to remain competent (Chang & Sun, 2007). Baker and Sinkula (1999) discuss a learning orientation (LO) in the market information processing activities of firms. Thus, while MO would impact the scope of such activity, LO would influence the higher order examination and retention of the results. The research of Mavondo et al. (2005) also supports that there is a strong relationship between LO and MO.

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Table 2

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The research results related to MO-performance relationship.

Scholars (years)	Results
Narver and Slater (1990); Pitt, Caruana, and Berthon (1996)	Positive relationship
Chang and Chen (1998); Doyle and Wong (1998)	
Raju, Lonial, Gupta, and Ziegler (2000)	
Slater and Narver (2000); Harris and Ogbonna (2001)	
Pulendran, Speed, and Widing (2003)	
Qu and Ennew (2003); Santos-Vijande et al. (2005)	
Martin-Consuegra and Esteban (2007)	
Farrell, Oczkowski, and Kharabsheh (2008)	
Panigyrakis and Theodoridis (2007); Singh (2009)	
Wood, Bhuian, and Kiecker (2000)	Strong positive relationship
Ramaseshan, Caruana, and Pang (2002)	
Haugland, Myrtveit, and Nygaard (2007)	
Megicks and Warnaby (2008)	
Caruana, Pitt, and Ewing (2003); Nwokah (2008)	Weak relationship

Scholars (years)	Moderator	Results
Slater and Narver (1994)	Competitive environment	Limited support for a moderating role of competitive environment on MO-performance relationship.
Appiah-Adu (1998)	Competitive intensity	MO has a positive impact on sales growth when the competitive intensity is medium to high. MO has an
	Market dynamism	increased effect on ROI in conditions of low market dynamism.
Baker and Sinkula (1999)	Learning orientation	A strong learning orientation is prerequisite to the superior market-oriented processes for creating or sustaining a competitive advantage.
Wong and Ellis (2007)	Product life cycle	MO-performance relationship is found to be strongest in the growth stage and weakest in the introductory stage of the product life cycle.
Tsai, Chou, and Kuo (2008)	Technological turbulence	MO-performance relationship is under a low level of technological turbulence or competitive intensity.
	Competitive intensity	
Zahra (2008)	Industry context	The relationship between MO and performance is moderated by industry context, turbulence and hostility.
	Turbulence and hostility	

MO is positively related to business performance (mediating effects)

Scholars (Years)	Mediator	Results
Han et al. (1998)	Innovation	MO makes a significant contribution to performance through innovations.
Chang et al. (1999)	Operating effectiveness Cost efficiency	MO-performance relationship is mediated by operating effectiveness and cost efficiency.
Matear, Osborne, Garrett, and Gray (2002)	Innovation	MO is found to contribute to performance through innovation.
Mavondo and Farrell (2003)	Marketing implementation	MO-performance relationship is mediated by marketing implementation.
Sittimalakorn and Hart (2004)	Competitive superiority	Market-oriented firms can gain a higher position of business performance through competitive superiority.
Mavondo et al. (2005)	Human resource practices	The MO-performance relationship is mediated by human resource practices.
Wang and Wei (2005)	Learning orientation Quality orientation	Learning orientation and quality orientation could be very critical in mediating the effects of MO on performance.
Menguc and Auh (2006)	Innovativeness	The effect of MO on firm performance is strengthened by innovativeness.
Demirbag et al. (2006) Taylor et al. (2008)	TQM implementation Relationship commitment	MO has a positive and significant impact on organizational performance through TQM implementation. Sales staff with MO would lead to higher relationship commitment and drives improved business performance.

There is no significant relationship between MO and business performance

Caruana, Pitt, and Berthon (1999)NO significant relationshipLonial et al. (2008)NO significant effect on financial performance

Table 3

Keywords involving MO and performance.

Keywords index	Researchers
Business performance	Cravens and Guilding (2000); Ogbonna and Harris (2002); Sittimalakorn and Hart (2004); Santos-Vijande et al. (2005); Langerak (2003); Martin-Consuegra and Esteban (2007)
Brand performance	O'Cass and Ngo (2007)
Financial performance	Lonial et al. (2008)
New product performance	Hsieh et al. (2008)
Retail performance	Panigyrakis and Theodoridis (2007)
Salesperson performance	Piercy et al. (2009)

Santos-Vijande et al. (2005) indicate that LO stimulates the marketoriented behavior and that it also positively affects the establishment of long-term relationships with strategic clients. Celuch, Kasouf, and Peruvemba (2002) further argue that MO and LO should work together to generate competitive advantage, or could result in critical gaps in capabilities. MO is really one aspect of an LO in an organization. LO refers to an organization-wide activity involved in creating and using knowledge to enhance competitiveness, while MO refers to organization-wide responsiveness to market information. A strong MO can promote an organization to absorb market knowledge from its competitors and customers, so it is certain that MO can enhance market-based organizational learning.

MO appears to be an aspect of organizational culture (OC) (Oplatka & Hemsley-Brown, 2007). Kotter and Heskett (1992) identify an adaptive, learning culture as the optimal culture for organizations

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Table 4

Keywords involving MO and innovation.

Keywords index	Researchers
Creativity	Im et al. (2008)
Entrepreneurial orientation	Luo et al. (2005); Qiu (2008); Zahra (2008)
Innovation	Conrad (1999); Deshpande, Farley, and Webster (2000); Maydeu-Olivares and Lado (2003); Matear, Gray, and Garrett (2004); Mavondo et al. (2005); Aldas-Manzano et al. (2005); Keskin (2006); Low, Chapman, and Sloan (2007); Laforet (2008)
Product development	Sondergaard (2005)
Innovativeness	Sandvik and Sandvik (2003); Menguc and Auh (2006)

pursuing long-term innovation and performance in a dynamic environment. Conrad (1999) indicates that a firm with an innovative/entrepreneurial culture would have a different perception of MO. Leisen, Lilly, and Winsor (2002) argue that OC in tandem with MO is an important determinant of marketing effectiveness. The keywords involving MO and learning are categorized in Table 5.

3.3.4. Keywords involving MO and marketing

MO is a popular term used as a central concept to indicate the extent to which a firm implements the 'marketing concept' (Agarwal, Erramilli, & Dev, 2003). Indeed, MO can be seen as how successful an organization is in actualizing the marketing concept. In a word, a market-oriented firm is one whose actions are based on marketing concepts (Esteban, Millan, Molina, & Martin-Consuegra, 2002). An MO approach, as a whole, has been cited as the ultimate expression of a focus on customer value (Cravens & Guilding, 2000). In contrast to MO, internal market orientation (IMO) represents the adaptation of MO to the context of employer–employee exchanges in the internal market (Lings & Greenley, 2005). Hence, internal suppliers need to focus on satisfying the requirements of their internal customers to provide superior value to the external customer (Conduit & Mavondo, 2001).

Table 6 summarizes research, which ties MO to many of the functions of marketing. Changes in the business environment would have a great impact on an organization through the entire supply chain. Thus, any firm should pay more attention to practice relation marketing (Yau et al., 2000). Kohli and Jaworski (1990) have shown that it is critical for firms to know the needs and preferences not only of the end-consumers, but also of the distributors that market their products. Min, Mentzer, and Ladd (2007) indicate that MO has a strong, positive impact on supply chain management (SCM). Zhao and Cavusgil (2006) show that supplier's MO is significantly related to manufacturer's trust, which affects the manufacturer's long-term orientation toward the supplier. Blesa and Bigne (2005) argue that the MO of a manufacturer affects the behavioral dimensions of channel relationships.

Table 5

Keywords involving MO and learning.

Keywords index	Researchers
Organizational culture/culture	Conrad (1999); Deshpande et al. (2000); Sin and Tse (2000); Leisen et al. (2002); Ogbonna and Harris (2002); Oplatka and Hemsley-Brown (2007); O'Cass and Ngo (2007)
Learning orientation	Celuch et al. (2002); Wang and Wei (2005); Santos-Vijande et al. (2005)
Learning organization	Keskin (2006); Swift and Hwang (2008); Hoe (2008)
Organizational learning	Conrad (1999); Mavondo et al. (2005); Keskin (2006); Kandemir, Yaprak, and Cavusgil (2006); Lu, Chen, and Liao (2008); Santos-Vijande et al. (2005); McGuinness and Morgan (2005)

Table 6

Keywords	involving	MO and	marketing.

Keywords index	Researchers
Channel collaboration	Blesa and Bigne (2005); Hyvonen and Tuominen (2007)
Customer focus	Cravens and Guilding (2000); Nwokah (2008)
International marketing	Deshpande et al. (2000); Agarwal et al. (2003)
Internal marketing	Bennett (1999); Lings and Greenley (2005); Yam et al. (2005)
Marketing concept	Esteban et al. (2002); Agarwal et al. (2003)
Marketing intelligence	Qiu (2008)
Marketing strategy	McGuinness and Morgan (2005)
Relationship marketing	Nielsen (2002); Santos-Vijande et al. (2005); Camarero (2007); Yau et al. (2000)
Supplier relationships	Zhao and Cavusgil (2006); Elg and Paavola (2008)
SCM	Min et al. (2007); Sternquista, Runyanb, and Chena (2008)

Hyvonen and Tuominen (2007) demonstrate the importance of channel collaboration and MO in contributing to a firm's competitive superiority. Facing an ever-changing business environment, organizations need long-term collaborative relationships with suppliers and channel members to exploit profitable new marketing opportunities. MO with respect to every level of the channel will help organizations offer value added products and services. The keywords involving MO and marketing are categorized in Table 6.

3.3.5. Keywords involving MO and competition

Table 7 presents research that links the concept of MO to competition. The impact in these studies flows in both directions as both levels of competition have an impact on MO and MO impacts how competitive an organization can be. A resource-based view (RBV) considers organizations as collections of strategic assets or resources, which are valuable, rare, inimitable and non-substitutable. These assets and resources can be used to implement value-creating strategies that will provide sustainable competitive advantage (Barney, 1991; Wernerfelt, 1984). According to RBV, MO might increase an organization's ability to understand and satisfy customers, thereby increasing its organizational capabilities (Luo, Sivakumar, & Liu, 2005). Drawing on the RBV of the firm, Menguc and Auh (2006)

Table 7

Keywords involving MO and competition.

Keywords index	Researchers
Alliance management	Kandemir et al. (2006)
Competitive environment	Appiah-Adu (1998); Qu and Ennew (2003)
Competitive strength	O'Cass and Ngo (2007); Augusto and Coelho (2009)
Competitive strategy	Akimova (2000); Qiu (2008)
Organizational change	McGuinness and Morgan (2005); Yam et al. (2005) Borjesson and Dahlsten (2004); Beverland and Lindgreen (2007)
Organizational resource	Santos-Vijande et al. (2005)
RBV	Luo et al. (2005); Menguc and Auh (2006); Ellinger, Ketchen, Hult, Elmadag, and Richey (2008)
Resource management	Macedo and Pinho (2006)
SHRM	Harris and Ogbonna (2001); Wei and Lau (2005)

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address the dynamic capability-generating capacity of MO on firm performance.

Table 9

Keywords involving industry.

Akimova (2000) suggests that the level of a firm's competitiveness in the turbulent environment of a transitional economy is associated with the level of the development of MO. Appiah-Adu (1998) also indicates that the competitive environment influences the MOperformance link. Yam, Tam, Tang, and Mok (2005) argue that organizations should transform themselves towards MO in order to face new challenges in their environments in order to develop organizational change capability (OCC) relating to MO and LO for influencing the success of strategic outcomes (McGuinness & Morgan, 2005). The change required to move a firm forward to a new set of values requires supportive policies in order to form closer relationships between organizations and their marketplaces (Beverland & Lindgreen, 2007). The keywords involving MO and competition are categorized in Table 7.

3.3.6. Keywords involving MO and quality

TQM leads to better product and service quality. Both marketing activities and implementation of TQM practices need close coordination among other departments in the organization and also necessitate systematic data collection for the purpose of satisfying customer expectations (Demirbag et al., 2006). Such improvements from TQM lead to higher value perceptions among customers, which can be a source of differentiation to the organization (Samat, Ramayah, & Saad, 2006). Based on the research of Yam et al. (2005), TQM was found to be a potentially effective approach for electric utilities to change to MO. Sittimalakorn and Hart (2004) further indicate that both MO and quality orientation (QO) would have complementary roles in achieving business superiority. The keywords involving MO and quality are categorized in Table 8.

3.4. Distribution by industries

MO has been researched in an enormous variety of industries and settings. Within each of the manufacturing, service and non-profit organization sectors a wide range of specific industries have been examined. Firms of different sizes and different scopes have also been examined. Apparently, MO is equally applicable to all organizations regardless of size, scope, or industry. It seems that no concept in marketing has a broader range of application than MO. The keywords involving industry are categorized in Table 9.

4. Discussion

Fig. 2 presents a road map to the 514 pieces of MO research summarized in this article. Here we see MO along with LO and QO as important impacts on an organization's culture. All three are in turn influenced by the environment facing the organization. The figure shows that based on environmental impacts these three will integrate into an organization's culture to establish an equilibrium in order to create a sustainable competitive advantage. This is the strategy level of the framework as it reflects a major impact on the adaptability and responsiveness of the organization. Representative of this area would

Table 8

Keywords involving MO and quality.

Keywords index	Researchers
Internal quality Service quality TQM Market-oriented behavior Ouality	Raju et al. (2000) Samat et al. (2006); Voon (2006) Yam et al. (2005); Demirbag et al. (2006); Samat et al. (2006) Cadogan, Souchon, and Procter (2008) Sittimalakorn and Hart (2004)
orientation	

Targeted industry		Researchers
Manufacturing	Clothes High- technology	Mazaira, Gonzalez, and Avendano (2003) Mavondo et al. (2005); Kandemir et al. (2006)
	Electronics Motors	Ashayeri and Selen (2005) Chang et al. (1999); Liu, Roos, and Wensley (2004);
	Food	Grunert et al. (2005)
	Textile	Aldas-Manzano et al. (2005); Demirbag et al. (2006)
	Wines and	Jordan, Zidda, and Locksin (2007);
	beverage	Hussain, Cholette, and Castaldi (2007)
Services	Banking	Paulin, Ferguson, and Payaud (2000); Hughes (2002)
	Hotel	Sandvik and Sandvik (2003); Sin et al. (2005)
	Grocery	Elg and Paavola (2008)
	Retailing	Chang, Jackson, and Grover (2003); Elg (2007); Lings and Greenley (2005);
	Tourism	Sternquista et al. (2008)
	Hospitality	Qu, Ennew, and Sinclair (2005) Gray, Matear, and Matheson (2000)
International firms Multi-national firms	nospitality	Agarwal et al. (2003); Qu (2007)
Small and medium-sized enterprises (SMEs)		Ibeh, Ibrahim, and Panayieds (2006)
Non-profit organizations	Hospital	Raju et al. (2000); Mavondo et al. (2005)
(NPOs) and public sectors	Charities	Gainer and Padanyi (2005)
	Education	Voon (2006); Oplatka and Hemsley- Brown (2007)
	Private foundation	Vazquez, Alvarez, and Santos (2002)
	Museums	Camarero and Garrido (2007)
	Library	Sen (2006); Singh (2009)

be the work of Eng and Quaia (2009) from the B2B literature, who integrate continuous learning to MO to enhance upgrading of capabilities for NPD and extensive communications in uncertain environments.

The center of the model represents the capability level of the literature on MO. The equilibrium made possible by the embracing of MO would not only create a favorable internal climate conducive to the development of organizational capabilities (e.g., innovation, marketing implementation and TQM), but also generate competitive advantages externally by improving overall performance (e.g., profitability, market share and growth). Bonner's (2010) work on integration and innovation provides a B2B exemplar at this level of the model.

This last level we refer to as the overall level. It represents the bulk of MO research to date. This reflects the impact of MO on the organization's ability to survive and grow and is reflective of the large quantity of research that investigates the MO–performance link.

5. Limitations and suggestions

Restricted to limited knowledge, this study makes a brief literature survey on MO from 1995 to 2008 in order to explore how MO and its applications have developed in this period. MO is now too broad a concept to deal with completely in any single review. Here we step back and take a broader overview of the concept.

A study of this nature certainly has limitations. First, all categorizations and classifications in our study are based on the keyword index and that might hinder presenting an overall picture of this subject. Second, some academic journals listed in the SCI and SSCI are excluded from our search for lack of keywords. These journals as well as other practical reports would provide more complete information to explore the development of MO and its applications. Third, non-English publications are not considered in

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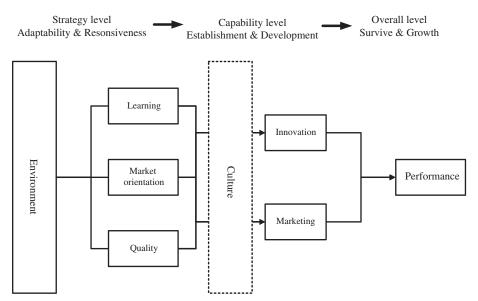


Fig. 2. The conceptual framework of MO related keywords.

this survey. A cross-cultural viewpoint would certainly add to this study. Finally, most of the MO articles in this study are about what MO can do, with little indication as how to actually bring the concept to life. Owing to these limitations, suggestions for the further research will broaden the scope of study on MO.

- Integration of methodologies. A methodology aims to solve a problem domain. In our study, some MO articles focus on qualitative method and some focus on quantitative method. Such isolated approaches can easily lead to incomplete conclusions to get the whole picture (Liao, 2003). Thus, an integration of methodologies might be an important direction for future research.
- Integration of technologies. Due to its interdisciplinary nature, future index based research related to MO needs integration with different technologies. For example, using data mining, in contrast to keyword searching, to explore all possible associations among specific indexes (e.g., the first author's nationality, the research regions, the research methods, the keywords, and the industries etc.). The integration of technologies might offer useful information to facilitate understanding.
- Integration of applications. It is evident that there is not a simple explanation for the MO-performance relationship. As mentioned earlier, MO is a strategy-driven mechanism responsible for balancing the outside and inside environments of an organization. Accordingly, it is not at all surprising that there might be interactions between environment, strategy and capability. The integration of technologies, methodologies and applications should lead to a better understanding of reality.
- The streams of research approach to MO. Different from keywords searching, the streams of research approach to MO would suggest another angle for broadening our research scope to rebuild the various roles of MO in context of an environment–strategy– performance relationship. Accordingly, future research should empirically validate these possibilities in order to clarify more managerial implications.

6. Conclusions and managerial implications

This study provides a guide to anyone interested in learning about market orientation and it's impact and interactions with factors both inside and outside the organization. It is based on a thorough survey and synthesis of MO literatures from 1995 to 2008 using a keyword index search. We conclude that research on MO has had a significant increase since 2001 and a steady growth in recent years. MO is certainly a strong and thriving area of research with an everbroadening scope of application. Even though some academic journals are not included in our searched list, researchers and practitioners of interest could find a major portion of MO relevant research in 10 journals. While the articles come from journals from many perspectives, B2B journals represent a substantial portion of our knowledge of MO. There are a host of ways that MO creates and contributes to performance for B2B marketers. It impacts a number of types of performance including everything from creating value for customers (Ulaga, 2003), to enhancing trust (Lohtia, Bello, & Porter, 2009), to improving sales force performance (Piercy et al., 2009). Based on the analysis we propose a conceptual model to serve as a road map to the uninitiated guided by six categories derived from an analysis of 2372 keywords from 514 articles. Our aim is to make MO more accessible to researchers and practitioners alike.

What is clear from the body of research on MO is that while some environmental factors may moderate its effectiveness, a strong market orientation is related to improvement on a broad array of performance outcomes within a broad array of settings. When integrated into an organizations culture MO accomplishes these performance enhancements through a variety of mechanisms, from an increase in innovation to better coordination of channel members. This may be particularly true with B2B organizations because they deal with inherently smaller markets. Finally, while a few studies have failed to show a relationship between MO and a particular performance measure, no study has shown MO to lead to a negative impact on performance. What may be happening is that MO is now so widely and well accepted, that it has become simply a cost of doing business in many industries. Any competitive advantage will likely diminish as competitors continue to adopt it. Given the preponderance of literature coming out of Europe regarding MO, firms on other continents that may have enjoyed competitive advantage through MO may see that edge diminishing as more and more organizations worldwide adopt more of an MO perspective.

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