A Comprehensive Review of International Research on Market Orientation and the Development of an Applied Model

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Abstract
Considering the importance of performance improvement in the third millennium and its dependence on market orientation as a valuable construct, the aim of the present study was to conduct a comprehensive review of the literature on market orientation and to provide an applied model. Thus, a mixed-methods research that involved quantitative and qualitative measures was adopted. To this end, a systematic review was carried out on the international articles about market orientation and performance indexed in the Web of Science (WoS) database during 1900-2020. The quality of the articles was assessed by the CASP checklist. Then, to analyze and map the scientific literature in the field of market orientation, the VOSviewer software was used. In the second stage, through the content analysis with the NVIVO software, the key variables and criteria related to market orientation were extracted from the research articles in the field. Accordingly, a model was developed based on the grounded theory approach. Interpretive structural modeling (ISM) was carried out using the MIC MAC software to assess the constitutive variables of the model and identify the interrelationship of the variables. The results showed that market orientation may be improved in conjunction with learning orientation, entrepreneurship orientation, strategic human resource management, innovation capability, marketing capability, information and communication capability, organizational structure, dynamism of organizational units, total quality management, competitive structure, and business strategy. The results also revealed that increased market knowledge can lead to a better competitive advantage in market, namely competitive and financial performances. Through analyzing the works on market orientation and developing a comprehensive model, the present study provides insights for researchers in the field of marketing and serves as an applied framework for managers and practitioners in various industries.

Keywords: market orientation, scientometrics, systematic review, grounded theory.

1. Introduction

The contemporary world is characterized with economic globalization, mass production and excess capacity in most markets, intense competition, a wealth of accessible information, and increasing customer power. Therefore, markets have demonstrated a greater need for the dynamicity of companies, manufacturers, and service institutions. The companies that assume an important role in globalization and take a considerable share in economy may not guarantee their long-term survival if they neglect environmental changes (Bititci et al., 2012;

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Teimouri Asl, 2015). In a situation where keeping up with changes has become a competitive advantage, businesses need new approaches and procedures. In this regard, market orientation is one of the vital elements contributing to corporate success and survival in a competitive world. Market orientation, alternatively referred to as market intelligence in Iranian research publications, may guide company goals, strategies, and plans. It can also contribute to superior performance and larger market share (Doyle & Stern, 2009).

Some managers have no clear idea of what market orientation is or what potentials it has. With regard to the importance of market orientation, many studies have addressed various aspects and variables pertaining to it so as to help make it operational. The multitude of models and variables related to market orientation has made it difficult to arrive at a proper understanding of the issue. Aiming to investigate the strengths and weaknesses of the existing models, the present study provides a comprehensive review of the literature on market orientation. The research is, indeed, a re-study of how market orientation affects the performance based on various variables. According to the results of the systematic review presented in this study, some researchers have already tested and evaluated the effects of market orientation on performance in terms of mediating and moderating variables. The practical application of market orientation in improving the performance of companies is difficult. Therefore, this study has been conducted to eliminate the shortcomings of previous research by providing a comprehensive overview of the research background and then offering a practical model in the field of market orientation.

This research may open a window to understanding the emerging paradigms in this field by developing a model applicable to businesses. The comprehensive model provided for market orientation seeks to draw business managers' attention to gaining competitive advantage by the use of market knowledge.

2. Theoretical Foundations and Literature Review

2.1. Definitions of Market Orientation and Approaches to It

Market orientation emanates from the philosophy of marketing concept that sets the ultimate goal of every organization as meeting customer needs to maximize profits. Adam Smith started to develop the concept of market orientation about 300 years ago by introducing what is currently known as customer sovereignty. The idea was reconfirmed Six decades ago by Theodore Levitt. However, the concept was solemnized in the marketing books published in the 1960s. Besides, European marketing journals began to publish in 1967 when the concept of marketing or market knowledge was considered as a step forward to contribute to customer satisfaction and organizational commitment of employees. Then, the concept experienced a turning point in the early 1980s when the companies showed inclination to make it operational. The most common approaches to market orientation as recorded in the literature are summarized in Table 1.

In 1990, cultural and behavioral approaches were introduced along with the organizational approach to applying the concept of marketing in the form of a market orientation paradigm. So far, researchers have proposed various operational solutions to apply the concept. Due to the importance of organizational decision-making, a new paradigm was introduced in 1988. Other paradigms such as customer orientation and strategic management emerged in less than five years after that to complement it. In the same decade, managerial and supportive behaviors conjoined organizational norms to help interested managers operationalize market orientation. In less than ten years after the introduction of the concept, the researchers began to notice the impact of managers' support and role in developing the behavioral norms

governing the employees. However, it should be noted that researchers paid greater heed to the importance of a complex set of such factors in mixed paradigms at the dawn of the third millennium. This indicates the evolution of the understanding of the issue by those researchers who had perceived the deficiencies of previous single-aspect paradigms.

Table 1. Approaches to Market Orientation

Approach	Researcher(s)	Topics of interest in the approach
Market orientation as a set of activities	Kohli & Jaworski (1990)	Having top management commitment, having a better relationship between organizational units and reduced mutual conflicts, redesigning the organizing systems (e.g., organizational structure, reward systems)
Market orientation as behavioral norms	Lichtenthal & Wilson (1992)	Recognizing the current organizational value system, listing the expected behaviors, devising top-down plans to change the existing norms and/or develop new norms
Market orientation as an attitude	Ruekert (1992)	conception existing behaviors , systems, personal outcomes and job performance; systems compatibility for recruitment, selection and training
Market orientation as a capability	Day (1994)	Identifying the measurability of the current market, customer relations and ability to link distribution channels, predicting future customer needs based on company capabilities, redesigning and improving business processes, top management commitment, and creative use
Market orientation as organizational culture	Narver & Slater (1990)	Using training to nurture commitment and create a sustained superior customer value, using empirical learning to nurture a sound understanding of the correct implementation of the norms

A new wave of emphasis on cultural developments appeared in 2006, sixteen years after the initial cultural paradigm of Narver and Slater (1990). This suggests the effect of this dimension on all other organizational dimensions. The empowerment paradigm has also gained cultural richness. A review of the evolution of the paradigms governing market orientation reveals a need for a comprehensive approach to operationalizing the concept. Addressing market orientation as a behavioral approach (Dursun & Kilic, 2017; Fernandes et al., 2020; Osuagwu, 2019), a cultural norm (Hernández-Linares et al., 2020; Sundström et al., 2020), an attitude (Aydin, 2020; Javalgi et al., 2005; Maydeu & Lado, 2013; Yang et al., 2010) and a capability (Armario et al., 2008; Velean et al., 2014; Wang et al., 2013) is suggestive of different attempts by researchers to operationalize this concept. The review of the literature shows that market orientation, either as organizational culture or as a set of measures and activities, paves the way for the better organizational performance through customer satisfaction and for the continuous monitoring of market forces including the competitors. This approach encapsulates the intra- and extra-organizational perspectives in a single frame so that it can provide a comprehensive picture of the activities performed by companies in their struggle for development. The implementation of market orientation requires full-fledged support in organizations (Moayerifard & Kianmehr, 2017).

Companies equipped with market knowledge have a better understanding of customers' needs, competitors' strategies and capabilities, and external forces. They can give timely responses to the needs of the changing environment so as to have a competitive advantage (Acosta et al., 2018). In an organizational culture fostered with market orientation, employees attach the greatest importance to business profitability through customer retention by creating superior value for them. Such an attitude extends over all organizational units and tends to meet the current and future needs of customers and markets. The benefit of market orientation is that it prepares the organization to effectively deal with the changing business environment. It can help Collect the information about all market elements and prepare businesses to give

informed responses to market needs. This type of organizational culture is a competitive advantage that is inimitable, rare, and invaluable (Narver & Slater, 1990). Market orientation emphasizes the satisfaction of customer needs. A company equipped with market knowledge may increase its profits by improving its efficiency and reducing prices, hence improving the performance (Seifollahi, 2019).

Most studies have shown that companies with market orientation outperform those that have less working knowledge of the active market agents. Rather than placing the emphasis merely on products, such companies focus on adapting their products and services to customer needs and expectations (Gronroos, 2006). Researchers contend that market orientation reveals the way the goals and culture of a company are mobilized to create value for customers. In other words, value creation becomes an institutionalized culture in such companies. They know about customer needs and expectations. They understand their customers, tend to satisfy them, and excite their feelings and interests (Fernandes et al., 2020). Some of the benefits of such knowledge are the improvement of performance (Kaffashpour & Najafi Siahroodi, 2009), creation of a rich source of development to facilitate innovation in products and services (O'Cass & Ngo, 2011), employee commitment to create sustained superior customer value (Ellis, 2006), better understanding of customer needs in a competitive structure and in the general business environment (Talaja et al., 2017), identification of latent customer needs and increased success of new products (Kakapour et al., 2016), and the dominant role of customers in market planning and strategy implementation (Nayebzadeh, 2013; WHDP, 2015).

Market orientation is a key element contributing to superior performance. Various studies have acknowledged its positive impact on performance (O'Cass & Sok, 2013; Savabieh et al., 2020). Market orientation helps companies conveniently deal with changes in every era. The knowledge directs companies toward progress and survival.

2.2. Quantitative Methodology

The literature is systematically reviewed here for a clear understanding of market orientation. To this end, all the research articles published from 1900 to 2019 pertaining to market orientation and performance were retrieved from the Web of Science database. The period was selected to be inclusive enough for the maximum number of publications in the field. The data were analyzed with the VOSviewer software version 1.6.11, which is used to cluster and visualize the structure of scientific fields and do co-occurrence analyses. The VOSviewer can also be used to study co-authorship as well as organizational and country relationships.

To retrieve the documents indexed in the field of market orientation and performance from the Web of Science with maximum recall (i.e., the maximum number of the relevant documents) and precision (i.e., the minimal number of irrelevant documents) and to increase the research validity, the Boolean operators of "AND," "OR," and "NOT" were used in the search query as "Market orientation" AND "Performance."

A CASP (critical Appraisal Skills Programs) checklist of descriptive/cross-sectional studies served to critically evaluate the articles. As a standard tool for evaluating articles, the CASP checklist was developed by the JAMA Group in 1994. It is the oldest and most widely used critical evaluation tool. The checklist consisted of 10 questions regarding the research objectives, research method, research implementation, sampling method, data collection method, reflectivity, data analysis, ethical principles, applicability of the results, and the value of the research. Thus, each article was thoroughly reviewed, and those articles that scored higher than 25 were used in the final analysis.

Accordingly, 324 articles were retrieved from the Web of Science. More than half of them fell in the business subject category. In addition, over 98% of them were published in the category of business or management. Research on market orientation in other subject categories such as economy, environment, tourism, computer science, and engineering indicates the application of the concept in interdisciplinary studies. Figure 1 illustrates the VOSviewer output. As it suggests, USA, China, and England have produced the largest number of research articles addressing the effect of market orientation on performance. Interestingly, USA stands out as the hub of research on the issue. These countries are marked with large circles in the illustration, indicating their dominant role in producing research articles on the topic. Different colors in the illustration suggest different clusters. Through the analysis of the articles, 21 contributing countries were sorted in six different clusters. Some of the linking edges in the visualization are thicker and some are thinner. The thickness of the linking lines among social entities in graphical representations suggest more extensive and closer scholarly relationship in a network. For example, the lines linking USA, China, and England are thicker than the line linking Iran and England. The researchers categorized in the clusters with fewer scientific relations are recommended to have joint research projects on their agenda. Increased international collaboration in the research on market orientation and performance makes the relation links thicker at the cross-country level in such illustrations. Researchers in different countries may cite one another's works in order to increase the strength of network relations.
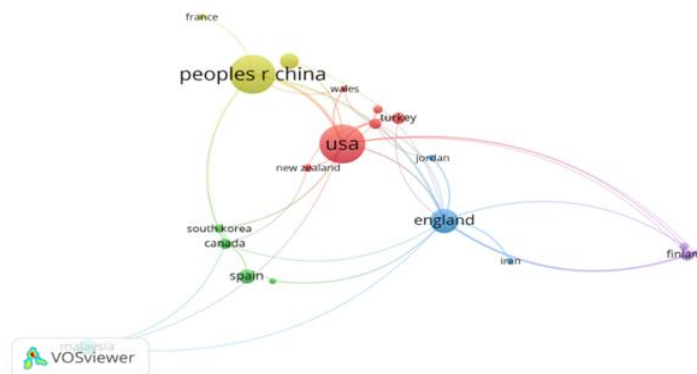

Figure 1. Analysis of the Articles by Country

Figure 2 illustrates the co-occurrence of terms in the research articles on market orientation and performance. The terms are presented with the highest frequency. Different colors indicate that the co-occurring terms fall in different clusters. The map consists of 5 clusters, 19 items, and 77 links. The size of each node shows the frequency with which a key term or concept is used by researchers in their articles. The size of the nodes indicates the frequency of the terms, and the thickness of the linking edges shows the frequency of the co-occurrence of a pair of terms. The thickness or thinness of the linking edges results from the key term interrelations and their frequency in the articles. As it was found, market orientation had the strongest link with learning orientation, entrepreneurship, and innovation. Moreover, learning orientation, entrepreneurship, innovation, and strategy had the highest frequency in the articles.

Iranian researchers are recommended to use the keywords in the figure that are marked with larger circles and thicker lines in order for their articles to attract more citations and for themselves to establish relations with other researchers in the world. Besides, research on the less frequent keywords may lead to the development of science in the corresponding subjects.

This provides the Iranian scientific community and managers with the insight that market orientation is a broad concept with wide applications.
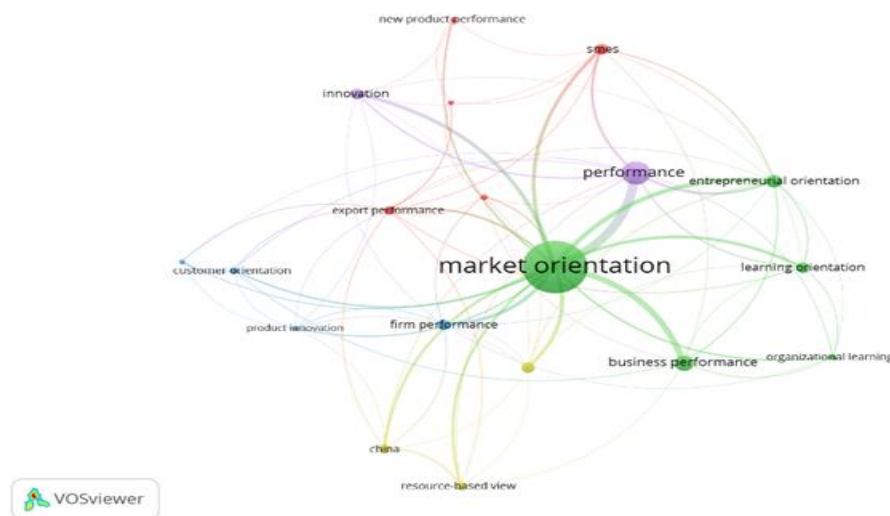

Figure 2. Co-Occurrence of the Key Terms by Frequency

3. Qualitative Methodology

Based on the onion model (Danaie Fard et al., 2004), the present study follows an interpretive paradigm. It is a basic applied type of research as it seeks to identify the intellectual paradigm of market orientation and thus provide further insight into the field to improve organizational performance. An inductive approach was adopted to do the secondary analysis of the primary research usina cross-sectional mixed-methods research (i.e., quantitative and qualitative). The study drew upon the sequential mixed method (Creswell & Clark, 2017) and content analysis to present a grounded-theory model through interpretive structural modeling (ISM). In the qualitative phase of the content analysis, the research population consisted of documents. Therefore, a document mining technique was used to identify the variables and collect the data. In the quantitative phase, marketing experts constituted the research population, and the data were collected using questionnaires. It is, however, to be noted that data validation in qualitative research is different from that in quantitative studies. For qualitative studies to be valid, it is suggested that researchers employ at least two out of the eight criteria (i.e., prolonged engagement in the field, triangulation, disconfirming evidence, peer review or debriefing, negative case analysis, member checking, thick or rich description, and external audit) (Creswell, 2007). The present study adhered to six of those criteria to increase the validity of the findings, including prolonged engagement in the field, expert review, disconfirming evidence, thick or rich description, expert approval, and debriefing.

Phase 1: Systematic Review and Content Analysis

The research articles indexed on the Web of Science were selected and reviewed in order to access the widely used variables related to market orientation and the most common approach to measure market orientation using the available sampling method.

The concepts and categories were coded for every article using the NVIVO software. Then, through the content analysis of the previous studies, 14 variables with the highest frequency pertaining to market orientation were identified.

Phase 2: Modeling Based on the Grounded Theory

Following the identification of the variables of market orientation, the research data were organized according to the systematic scheme of the grounded theory (Strauss & Corbin, 1998). There emerged six dimensions, including axial phenomena (as the main category), causal conditions, context, intervening conditions, strategies, and consequences. Eventually, the grounded theory model was presented for market orientation.

Phase 3: Interpretive Structural Modeling (ISM)

For ISM, a questionnaire was designed that included 14 variables. In the early stage, the questionnaire was prepared through a pairwise comparison and then was assigned to ten academic and industrial experts in the field of business management and marketing.

4. Qualitative Results

Results of Phase 1: All the research articles on market orientation and performance (n = 324) were examined through a systematic review. Using content analysis and the NVIVO software, 14 variables with the highest frequency were identified in those studies (Figure 3).
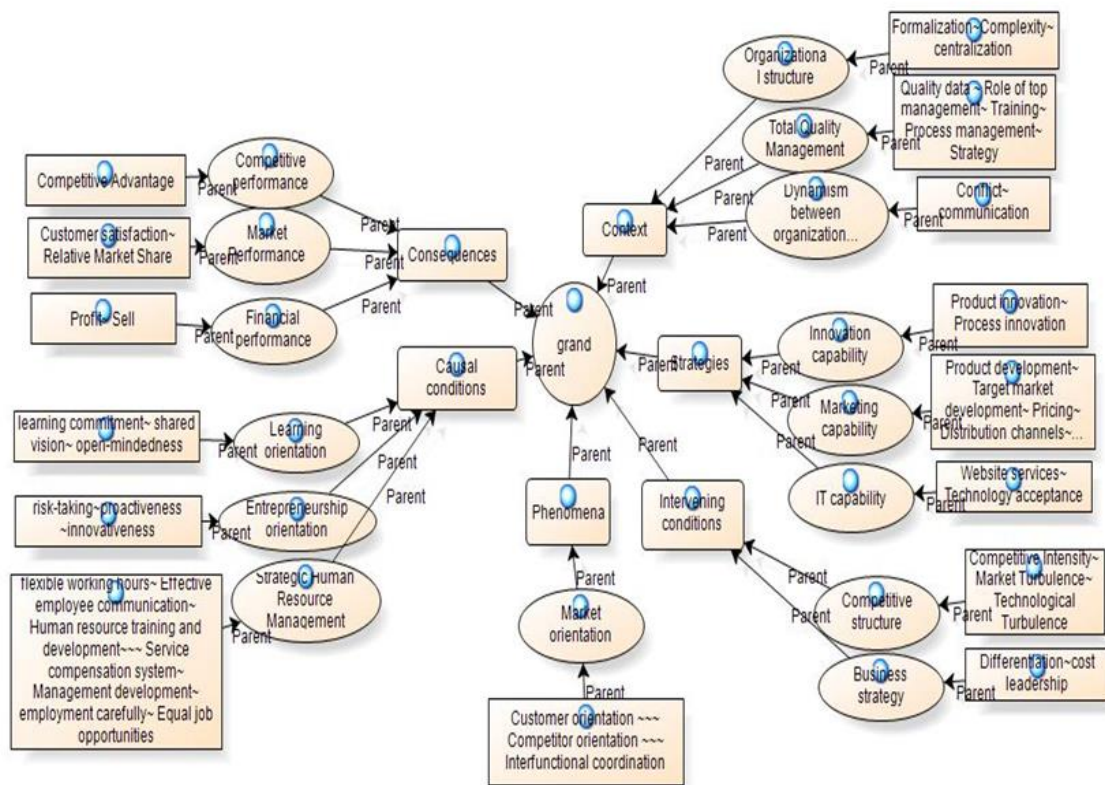

Figure 3. Components and Criteria Pertaining to Market Orientation as NVIVO Output

Results of Phase 2: The extracted categories were organized and tabulated in six dimensions (Table 2) based on the paradigmatic model proposed by Strauss and Corbin (1990). The final product constitutes the grounded theory of the study.

Table 2. The Variables and Indicators Based on the Literature

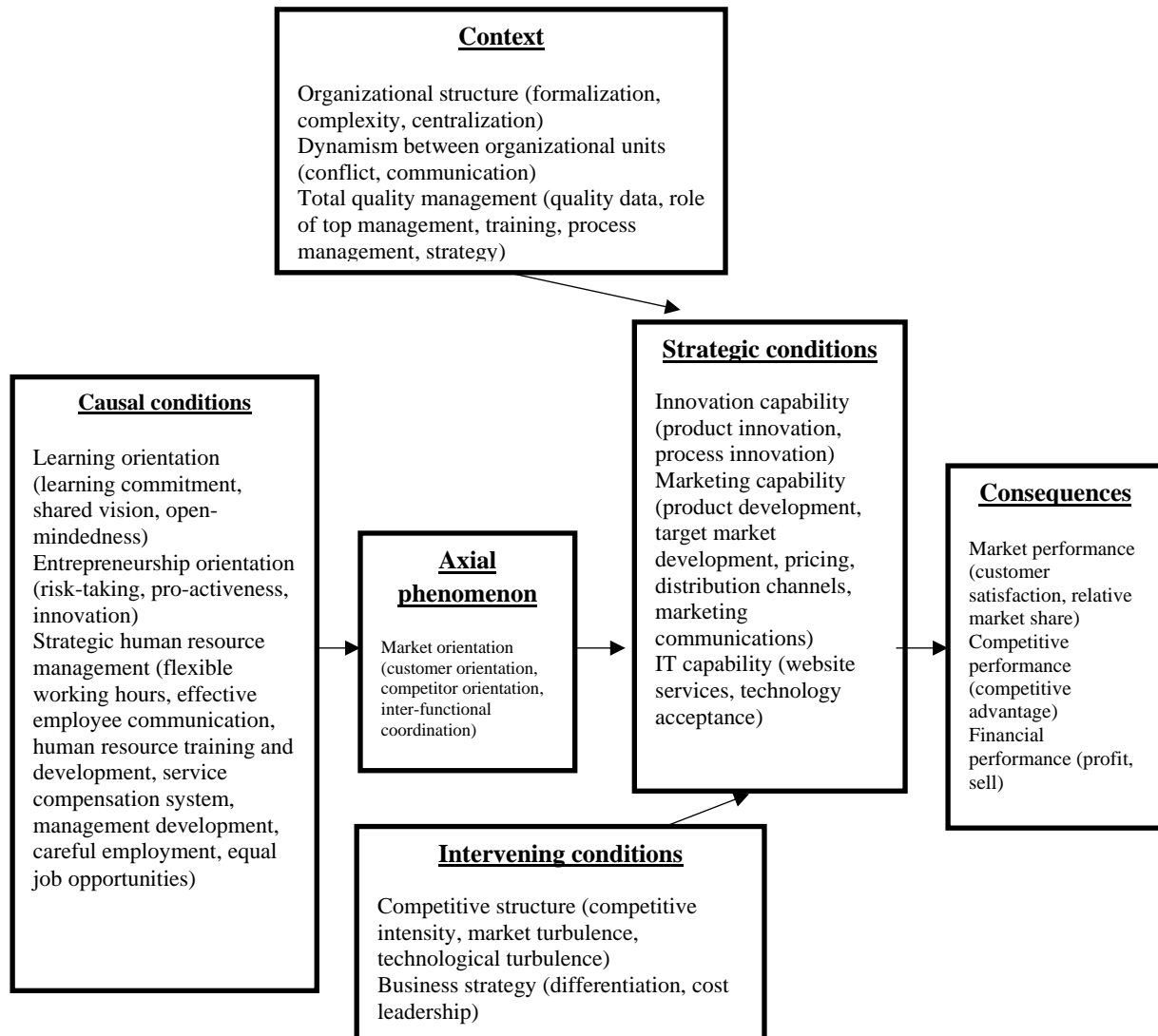| Grounded Theory	Category	Dimension	Reference
Axial phenomenon	Market orientation	Customer orientation, competitor orientation, inter-functional coordination	Habib et al. (2020) Küster & Vila (2011)
Causal conditions	Learning orientation	Learning commitment, shared vision, open-mindedness	Wahyuni & Sara (2020) Beyene et al. (2016)
	Entrepreneurship orientation	Risk-taking, pro-activeness, innovation	Shafique & Munazza (2020) Almamun et al. (2018)
	Strategic human resource management	Flexible working hours, effective employee communication, human resource training and development, service compensation system, management development, careful employment, equal job opportunities	Wei & Lau (2008) Mavondo & Farrell (2003)
Strategic conditions	Innovation capability	Product innovation, process innovation	Aryanto et al. (2020) Udriyah et al. (2019) Tajeddini et al. (2006) Tajeddini (2011) Tajeddini et al. (2013)
	Marketing capability	Product development, target market development, pricing, distribution channels, marketing communications	Takata (2016) Cacciolatti & Lee (2016)
	IT capability	Website services, technology acceptance	Tseng & Liao (2015) Chen et al. (2015)
Context	Organizational structure	Formalization, complexity, centralization	Burgess & Nyajeka (2007) Green et al. (2005)
	Dynamism between organizational units	Conflict, communication	Song & Parry (2009) Burgess & Nyajeka (2007)
	Total quality management (TQM)	Quality data, role of top management, training, process management, strategy	Demirbag et al. (2006) Abdollahi et al. (2014)
Intervening conditions	Competitive structure	Competitive intensity, market turbulence, technological turbulence	Ahmadi (2019) Kirca (2011)
	Business strategy	Differentiation, cost leadership	Murray et al. (2011) Chi (2013)
Consequences	Market performance	Customer satisfaction, relative market share	Song & Parry (2009) Sheikh et al. (2017)
	Competitive performance	Competitive advantage	Udriyah et al. (2019) Najafi – Tavani et al (2016)
	Financial performance	Profit, sell	Green et al. (2006) Kirca (2011)

Figure 4. The Paradigmatic Model of Market Orientation

The relationships that exist in this model are derived from the articles that were studied comprehensively in the first part of the research and through a systematic review. In different articles, the role of variables and the relationships among them were examined and included in the model. In addition, based on the results of the data analysis by the NVIVO software, relationships were plotted for the variables of the highest frequency, and then interpretive structural modeling was done to confirm those relationships.

Results of Phase 3: In order to do ISM, a questionnaire was designed for the pairwise comparison of 14 variables. It was assigned to ten academic and industrial experts, each with an executive history of at least 5 years in the field of business management and marketing. The experts were supposed to do comparisons between each pair of factors and mark their relationships (i.e., no relationship, one-sided relationship, mutual relationship). A symbol was assigned to each element as shown in Table 3. A self-interaction matrix was created to examine the relationships among the market orientation components. The following relationships were defined to design the matrix:

V: i leads to j.
X: mutual relationship between i and j
A: j leads to i.
O: no relationship between i and j

The initial reachability matrix was created with the completed ISM questionnaires and the frequency-based self-interaction matrix (Table 4).

The final reachability matrix was obtained through the ISM process and based on the data illustrated in Table 4. The results are shown in Table 5 below.

Table 3. Symbols Assigned to the Elements

No.	Element	Symbol	No.	Element	Symbol
1	Market performance	C1	2	Competitive performance	C2
3	Financial performance	C3	4	Organizational structure	C4
5	Dynamism between organizational units	C5	6	TQM	C6
7	Learning orientation	C7	8	Entrepreneurship orientation	C8
9	Strategic human resource management	C9	10	Innovation capability	C10
11	Marketing capability	C11	12	IT capability	C12
13	Competitive structure	C13	14	Business strategy	C14

Table 4. The Initial Reachability Matrix

	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14
C1		A	A	A	A	A	O	O	A	O	O	O	A	O
C2			V	X	O	A	V	A	A	A	A	A	A	A
C3				X	O	A	O	V	O	O	O	V	V	V
C4					V	O	V	O	O	O	O	O	V	V
C5						X	A	O	O	V	O	A	O	A
C6							X	V	A	O	O	A	V	O
C7								O	O	O	O	A	V	O
C8									O	V	V	A	O	V
C9										V	V	V	V	X
C10											O	V	V	V
C11												A	A	X
C12													X	V
C13														A
C14														

Table 5. The Final Reachability Matrix

	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14
C1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
C2	1	1	1	1	1*	1*	1	1*	0	0	0	1*	1*	1*
C3	1	1*	1	1	1*	1*	1*	1	1*	1*	1*	1	1	1
C4	1	1	1	1	1	1*	1	1*	1*	1*	1*	1*	1	1
C5	1	1*	1*	0	1	1	1*	1*	0	1	0	1*	1*	1*
C6	1	1	1	1*	1	1	1	1	0	1*	1*	1*	1	1*
C7	1*	1*	1	1*	1	1	1	1*	0	1*	1*	1*	1	1*
C8	1*	1	1*	1*	1*	0	1*	1	1*	1	1	1*	1*	1
C9	1	1	1*	1*	1*	1	1*	1*	1	1	1	1	1	1
C10	1*	1	1*	1*	1*	1*	1*	1*	1*	1	1*	1	1	1
C11	1*	1	1*	1*	1*	0	1*	1*	1*	0	1	0	1*	1
C12	1*	1	1*	1*	1	1	1	1	1*	1*	1	1	1	1
C13	1	1	1*	1*	1*	1*	1*	1*	0	0	1	1	1	1*
C14	1*	1	1*	1*	1	1*	1*	1	1	1*	1	1*	1	1

The self-interaction matrix was created with the MOD method based on the highest frequency in each element (Naderibeni et al., 2017). For level partitioning, it was necessary to identify the reachability set, the antecedent set, and the intersection set (Table 6).

The ISM model and the influence-dependency diagram are illustrated in Figure 5 based on the data in Table 6.

Table 6. Level Partitioning of the Model

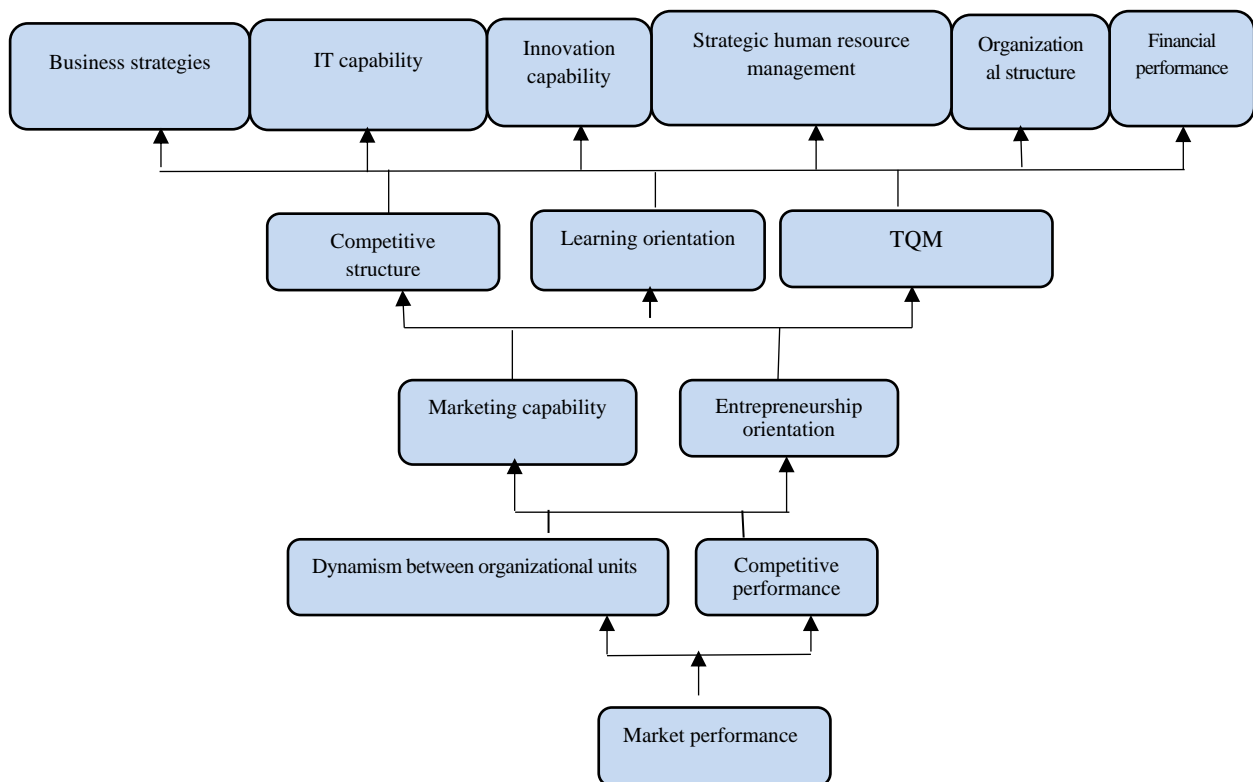| Level	Intersection set	Antecedent set	Reachability set	
5	1	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14	1	C1
4	2, 3, 4, 5, 6, 7, 8, 12, 13, 14	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14	1, 2, 3, 4, 5, 6, 7, 8, 12, 13, 14	C2
1	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14	C3
1	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14	C4
4	2, 3, 5, 6, 7, 8, 10, 12, 13, 14	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14	1, 2, 3, 5, 6, 7, 8,10, 12, 13, 14	C5
2	2, 3, 4, 5, 6, 7, 10, 12, 13, 14	2, 3, 4, 5, 6, 7, 9, 10, 12, 13, 14	1, 2, 3, 4, 5, 6, 7, 8, 10, 11, 12, 13, 14	C6
2	2, 3, 4, 5, 6, 7, 8, 10, 11, 12, 13, 14	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14	1, 2, 3, 4, 5, 6, 7, 8, 10, 11, 12, 13, 14	C7
3	2, 3, 4, 5 , 7, 8, 9, 10, 11, 12, 13, 14	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14	1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14	C8
1	3, 4, 8, 9, 10, 11, 12, 14	3, 4, 8, 9, 10, 11, 12, 14	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14	C9
1	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14	C10
3	3, 4, 7, 8, 9, 11, 12, 13, 14	3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14	1, 2, 3, 4, 5, 7, 8, 9, 11, 13, 14	C11
1	2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14	2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14	C12
2	2, 3, 4, 5, 6, 7, 8 , 11, 12, 13, 14	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14	1, 2, 3, 4, 5, 6, 7, 8 , 11, 12, 13, 14	C13
1	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14	C14

Figure 5. The Project ISM

As shown in the ISM graph, the fifth level (i.e., the lowest level) accounts for the market performance that exerts the strongest influence on the system and changes it. Therefore, when

developing market orientation, organizations should notice their current market performance and pay attention to the factors that contribute to such performance. Market performance also influences the fourth level that constitutes competitive performance and dynamism in organizational units. Entrepreneurship orientation and marketing capability lie at the third level. They are influenced by the fourth-level components and simultaneously influence the second-level components including TQM, learning orientation, and competitive structure. Business strategies, IT capability, innovation capability, strategic human resource management, organizational structure, and financial performance are set at the first level of the graph, which depend on but are less influenced by the other system elements. The influence and dependency values of the final reachability matrix were used to draw the influence-dependency diagram (Figure 6).

14		
13		
12		Connecting area
11	Determinant area	
10		2,3,4,5,6,7,8,9,10,11,12,13,14
9		
8		
7		
6		
5		Dependent area
4	Autonomous area	
3		1
2		
1		
	1 2 3 4 5 6 7 8 9 10 11 12 13 14	

Figure 6. The Influence-Dependency Diagram

According to the above-mentioned results, the components are sorted out in four areas as follows.

Autonomous area: It includes variables of low influence and dependency. They are almost separated from the model because they have poor connections (Khodaie Meydan Shah & Maleki Nezhad, 2019). There are no such variables in the present research, which indicates the strong connection of the research variables.

Dependent area: It includes variables of low influence but strong dependency. The market performance in the research sample falls in this area. The variables in this area are mainly the model outcomes contributed by many factors. However, they can scarcely, if at all, contribute to other variables.

Connecting area: It includes variables of high influence and dependency. They are unstable, so any change in the system influences both them and the other variables. The results showed that this area encompasses competitive performance, financial performance, organizational structure, dynamism among the organizational units, TQM, learning orientation, entrepreneurship orientation, strategic human resource management, innovation capability, marketing capability, IT capability, competitive structure, and business strategy.

Determinant area: It includes variables of high influence and low dependency. They considered as the key variables along with the connecting variables (Khodaie Meydan Shah & Maleki Nezhad, 2019) that constitute the model foundation. They should be addressed first for the system to begin working. None of the research variables falls in this area.

To interpret the influence-dependency matrix, the components related to market orientation are distributed across the four levels based on their influence and mutual dependence. This

rating shows that competitive performance, financial performance, organizational structure, dynamism among the organizational units, TQM, learning orientation, entrepreneurship orientation, strategic human resource management, innovation capability, marketing capability, IT capability, competitive structure, and business strategy are of high influence and dependency. Therefore, organizations need to address these variables in order to benefit from market orientation. Besides, improvement in market performance depends on the improvement in these variables.

5. Conclusion

In the turbulent contemporary world, where businesses experience rapid changes, organizations have to resort to constant learning and show sensitivity to all key factors in internal and external environments. They need to identify, respond to, and take timely actions to deal with environmental threats and opportunities. They may lose their business opportunities if they fail to understand the dynamics of the competitive world. Any attempt to survive in and benefit from the competitive world involves adherence to two basic rules. First, the role of experience is undeniable in business and marketing. Second, business managers should have financial, human, information, and technological capital at their disposal to achieve success. Thus, the present study aimed to investigate market orientation and its effects on performance in order to provide researchers and managers with useful information.

Many managers do not have a clear vision of what market orientation is and what its capabilities are. Accordingly, in view of the importance of the concept of market orientation, various researchers have tried to pave the way for the implementation of this concept by considering a wide range of variables related to it. The multiplicity of models and variables affecting market orientation has made it difficult to gain complete insight in this area. If the way is paved for the recognition of the emerging intellectual paradigms in the field, the concept of market orientation flourishes, and businesses benefit from it in the form of a practical model. Furthermore, providing a comprehensive model in the field of market orientation can draw the attention of business managers to the benefits of market knowledge to gain a competitive advantage. In this study, the market orientation model was developed based on the grounded theory. The data were collected from the published research articles using the data mining method to develop the paradigmatic model of the research. A comparison between the present and past models reveals that the current model is a comprehensive one that uses a multi-process approach to addresses the causes and consequences of market orientation and the relationships among its variables. It can also correct the deficiencies of previous studies that captured only some aspects of the issue. The current model captures all the causal, axial, contextual, intervening, and consequential factors to reflect a comprehensive approach to market orientation. It also emphasizes the role of organizational structure, TQM, and dynamism among organizational units in the development of market orientation. The model underscores the implementation of processes and strategies under complex contextual conditions such as competitive structure and business strategies. It indicates that the processes may be implemented through a set of strategies such as innovation capability, marketing capability, and IT capability, which in turn leads to an optimal performance in market performance, competitive performance, and financial performance. Improvements in causal conditions such as learning orientation, entrepreneurship orientation, and strategic human resource management help grab greater attention to market orientation in organizations.

Since the concept of market orientation can be used in most manufacturing and service industries, this study emphasizes the impact of the concept on performance, provides a

comprehensive model with several variables and, thus, gives good insight to managers who seek to improve the performance of their company by gaining knowledge about the market. Due to the dynamic nature of today's competitive markets, this study is appropriate for brands that are active in manufacturing and service companies. Given the nature of their industry, the managers of these brands can also benefit from the operational results of this research, which is presented as a roadmap model.

The investigation of the mutual relations and influences of variables using ISM helps provide a better understating of the complex business environment. A systemic approach to market orientation and a set of contributing variables help businesses capture the interplay of structures, patterns, and events so that they can gain a comprehensive insight into market orientation. Based on the findings of the present study, businesses are recommended to draw upon the hierarchical ISM perspective of the study that gives weight to every component in an organization and improves the overall performance and competitive advantages. Marketing and management researchers are also recommended to pay attention to the results of scientific mapping in market orientation. Accordingly, they can select the highly frequent keywords, use the research findings in the leading countries, and cite prolific researchers in the field in order to draw attentions to market orientation research in Iran. Finally, they can conduct studies addressing the keywords that were mapped with thinner lines so as to fill the research gaps in the field.

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