Journal of Strategic Marketing

ISSN: 0965-254X (Print) 1466-4488 (Online) Journal homepage: www.tandfonline.com/journals/rjsm20

# Entrepreneurial marketing and firm performance: scale development, validation, and empirical test

Nasser Alqahtani, Can Uslay & Sengun Yeniyurt

**To cite this article:** Nasser Alqahtani, Can Uslay & Sengun Yeniyurt (2025) Entrepreneurial marketing and firm performance: scale development, validation, and empirical test, Journal of Strategic Marketing, 33:7, 859-880, DOI: 10.1080/0965254X.2022.2059773

**To link to this article:** https://doi.org/10.1080/0965254X.2022.2059773



Published online: 08 Apr 2022.

JOURNAL OF STRATEGIC MARKETING
2025, VOL. 33, NO. 7, 859–880
https://doi.org/10.1080/0965254X.2022.2059773

Routledge
Taylor & Francis Group



# Entrepreneurial marketing and firm performance: scale development, validation, and empirical test

Nasser Alqahtani[a,b], Can Uslay[c] and Sengun Yeniyurt[c]

[a]KFUPM Business School, King Fahd University of Petroleum & Minerals, Dhahran, Saudi Arabia; [b]IRC for Finance and Digital Economy, King Fahd University of Petroleum & Minerals, Dhahran, Saudi Arabia; [c]Rutgers Business School at Newark and New Brunswick, Rutgers University, Piscataway, NJ, USA

**ABSTRACT**

This research introduces a new scale (ENMAR) for measuring entrepreneurial marketing (EM). The interrelationships between EM, market orientation (MO), entrepreneurial orientation (EO), firm performance, and the moderating effects of network structure (i.e. size, diversity, and strength), environmental variables (i.e. market turbulence, technological turbulence, competitive intensity, supplier power, and market growth), and firm size are empirically examined. Using structural equation modeling, data from 401 U.S. based firms representing a broad spectrum of industries and firm sizes are analyzed. Empirical findings demonstrate that even after controlling for MO and EO, EM has a positive and significant impact on firm performance, and that impact becomes even more pronounced under highly uncertain market conditions. EM partially mediates the well-established relationships between MO, EO, and firm performance. While EM robustly boosts firm performance, it is more frequently practiced by young firms and those in B2B markets, though it may be particularly beneficial for mid-sized firms.

**ARTICLE HISTORY**
Received 25 September 2021
Accepted 25 March 2022

**KEYWORDS**
Entrepreneurial marketing; scale development; market orientation; entrepreneurial orientation; network structure; firm performance

## 1. Introduction

Traditional marketing has been criticized for delivering less value while consuming more resources (Sheth & Sisodia, 2006), whereas entrepreneurial marketing (EM) offers vast potential to be an antidote to the challenges of demonstrating ROI and improving performance during times of high turbulence. Furthermore, restoring marketing's legitimacy in the board room requires incorporating capabilities that have been associated with entrepreneurship into marketing theory. Nevertheless, EM as a construct remains relatively unknown, without an established scale, and consequently, without generalizable empirical findings that demonstrate its performance outcomes (Whalen et al., 2016).

In this article, we attempt to address these challenges. The contribution of our study is three-fold: First, we develop and validate a new scale of EM (ENMAR). To that end, we also examine the interrelationships between EM, MO, EO, and establish EM as a distinct construct by establishing its nomological and discriminant validity. Second, we deploy ENMAR to examine the impact of EM on firm performance, and the generalizability of that

**CONTACT** Nasser Alqahtani nasserali@kfupm.edu.sa KFUPM Business School, King Fahd University of Petroleum & Minerals, Dhahran, Saudi Arabia

effect to different types of firms and industries. Third, we investigate under what environmental and institutional conditions it becomes most viable for firms to utilize EM to improve their performance. Hence, we investigate the moderation effect of a large set of environmental variables (competitive intensity, market growth, market turbulence, supplier power, and technological turbulence), network structure (i.e. network diversity, network size, and network strength), and firm size on the relationship between EM and firm performance. As such, the current study addresses numerous calls for research in this domain (e.g. Peterson, 2020; Whalen et al., 2016), and to the best of our knowledge, represents the first study that simultaneously examines EM, MO, and EO and empirically demonstrates the direct performance benefits of EM on firm performance, while controlling for the effects of these established and overlapping constructs in its nomological network.

The rest of the article is organized as follows. First, we provide a brief literature review. Second, we introduce our research hypotheses and conceptual model. Third, we discuss our scale development and validation efforts, data, and methodology. Fourth, we present our results. Fifth, we elaborate on these results and their managerial implications. We conclude with limitations and directions for future research.

## 2. Literature review

Morris et al. (2002), in their seminal work, conceptualized EM as a unique construct with seven dimensions: opportunity, proactiveness, value-creation, risk-taking, resource leveraging, customer intensity, and innovation. Morrish et al. (2010) suggested that EM should not be considered as a mere combination of all the dimensions of MO and EO, but, instead, as a unique process that boost firms' competitiveness in the marketplace. Not surprisingly then, Alqahtani and Uslay (2020, p. 64) define EM as 'an agile mindset that pragmatically leverages resources, employs networks, and takes acceptable risks to proactively exploit opportunities for innovative co-creation and delivery of value to stakeholders, including customers, employees, and platform allies'.

Effectuation theory of entrepreneurship (Sarasvathy, 2001) has become influential over the past two decades. It augments our understanding of how EM may be distinct in delivering effective marketing outcomes under highly uncertain market conditions, whereby entrepreneurs rely on their pre-existing means in order to attain objectives (Hills & Hultman, 2011). For example, using protocol analysis, Read et al. (2009) reported that entrepreneurial firms tend to use intuition and market immersion more than traditional market research.

Although early EM literature focused primarily on marketing by entrepreneurs in SMEs with limited resources that operate under highly uncertain market conditions (e.g. Collinson & Shaw, 2001; Miles et al., 2015), its scope has since evolved into a more inclusive and broader conceptualization where EM can be a viable strategy for organizations of different size and profit orientation (e.g. Sethna et al., 2013). However, despite significant scholarly interest, empirical research on EM has been scant, and generalizable results have been largely elusive thus far (Whalen et al., 2016). Overall, EM draws from effectuation theory (Read et al., 2009; Sarasvathy, 2001), contingency theory (Lawrence & Lorsch, 1967) as well as the service dominant logic (Vargo & Lusch, 2004) for its theoretical

underpinnings. Please see Hills et al. (2008) and Alqahtani and Uslay (2020) for comprehensive reviews of the literature on EM and Lopes et al. (2021) for a bibliometric analysis of the past decade.

## 3. Research hypotheses and conceptual model

Extant literature has long observed that EM improves performance, either implicitly or explicitly (e.g. Whalen et al., 2016). In their meta-analyses, Kirca et al. (2005) and Rauch et al. (2009) found that financial performance and firm's MO and EO are positively related, respectively. Since MO and EO both overlap with EM (e.g. value creation and risk-taking), a positive relationship between firm performance and EM would naturally be expected.

EM enables firms to achieve growth by building unique and lasting relationships with their customers (Bjerke & Hultman, 2004). Using a qualitative framework, Jones et al. (2013) argued that an EM orientation triggers long-term growth for SMEs while Whalen et al. (2016) proposed that EM can also enable firms attain short-term competitive advantages. Despite the consistent and positive arguments for a direct relationship, empirical evidence of this relationship between EM and performance has been relatively scant and not univocal. More recently, Deku et al. (2022) reported that the entrepreneurial marketing dimension enhances the manufacturing as well as the financial performance of Halal food SME companies in Ghana. However, Crick et al. (2021) reported a negative relationship between entrepreneurial marketing orientation and financial performance from their study of 184 small tourism and hospitality firms in New Zealand. Nevertheless, we expect EM to positively influence firm performance, and also include positive effects of MO and EO on organizational performance as baseline hypotheses. Therefore,

**$H_{1a}$:** *EM positively affects firm performance.*

**$H_{1b}$:** *MO positively affects firm performance.*

**$H_{1c}$:** *EO positively affects firm performance.*

Entrepreneurship views marketing as a primary organizational function that will enhance innovation (Collinson & Shaw, 2001). The influence of entrepreneurship on marketing can be even more substantial in an EM context. Morris et al. (2002) acknowledged that four out of their seven dimensions of EM (i.e. proactiveness, risk-taking, innovation, and opportunity) were derived from the conceptualization of EO.

On the other hand, there is overlap between EM and MO conceptualizations (O'Cass & Ngo, 2011). For instance, Morris et al. (2002) observed that they drew two of their EM dimensions (customer intensity and value creation) from MO. As MO is inherently about implementing the marketing concept inside an organization, there should be a higher propensity to embrace EM in companies with higher MO. Therefore,

**$H_2$:** *Firms' EO positively affects their EM.*

**$H_3$:** *Firms' MO positively affects their EM.*

While MO has been criticized for creating reactive and excessively customer-centric organizations with diminishing innovation and proactiveness (Christensen, 2013), adopting EO by itself is not necessarily sufficient to enhance performance either (Matsuno et al., 2002). MO and EO each have their own shortcomings when implemented individually. Hamel and Prahalad (1996) suggested a more proactive perspective for marketing, and Narver et al. (2004) offered proactiveness as a fourth dimension for MO as a partial remedy. Meanwhile, EO-MO relationship remains ambiguous; when EO and MO are not modeled simultaneously, the direct relationship between EO and firm performance may disappear, or even become negative (Matsuno et al., 2002). The findings to date regarding EO and MO suggest that EM could be an overlooked link as a complementary capability for organizations to exploit their MO and EO competencies concurrently. That is, EM might be a significant partial mediator to MO, EO and performance relationships and directly influence firm performance even after the well-established direct effects of MO and EO are accounted for. Therefore,

**$H_{4a,b}$:** *EM partially mediates the relationship between a) MO and firm performance, and b) EO and firm performance.*

Performing in highly turbulent markets requires adapting to the fast-changing needs of customers. For example, MO's positive effect on organizational performance becomes more salient in highly turbulent markets (Kirca et al., 2005), which would also be expected of EM. Specifically, organizations operating under stable market conditions may not benefit from EM as much, whereas markets characterized by technological turbulence necessitate proactive and innovative marketing, in other words, EM.

While Morrish et al. (2010) suggest that the increasing intensity of competition necessitates firms to become more flexible and proactive, attributes warranted by EM, Kohli and Jaworski (1990) observe that as markets get more competitive, organizations need to become more agile and vigilant in identifying and meeting the needs of their customers. Bachmann et al. (2021) empirically demonstrated a strong and positive EM effect on firms' exploratory innovation under high level of competitive intensity. Therefore, we expect the moderating effect of competitive intensity to apply to the EM-performance relationship as well.

Supplier power tends to lead to higher procurement costs thereby suppressing the buyers' margins (e.g. Tukamuhabwa et al., 2021). Under such challenging conditions, firms tend to benefit from unorthodox approaches such as EM. Businesses that embrace EM employ their networks more efficiently, thus gaining access to additional resources and leverage to become less vulnerable to focal suppliers' demands.

Stagnant market conditions create a zero-sum game where growth must come at the expense of other players. Improving firm performance depends on offering more value to customers, assuming acceptable risks, and fostering further creativity and

innovation to exploit opportunities and serve stakeholders (Slater & Narver, 1994). In low growth markets, organizations are under ever-increasing pressure to acquire and retain customers and cross-sell and upsell them, and EM serves as a differentiator. Therefore,

**H5a,b,c,d,$_e$:** *EM and firm performance relationship is positively moderated by a) market turbulence, b) technological turbulence, c) competitive intensity, and d) supplier power, but negatively moderated by e) market growth.*

Findings to date regarding the moderating effect of firm size on strategic orientations and performance relationships have been mixed (e.g. Kilenthong et al., 2016; Rauch et al., 2009). Early EM literature solely focused on SMEs because of their unique approach to markets and customers, as well as their inherent flexibility (Morris et al., 2002). Small firms adopt EM because of their limited resources even though EM's efficacy arguably extends beyond SMEs (Alqahtani & Uslay, 2020; Whalen et al., 2016). However, medium-sized firms do not possess the adaptability, focus, agility of smaller firms, or the scale, scope, and resources of larger firms, thus engaging in EM may not benefit them to the same extent. Therefore,

**H$_6$:** *EM and firm performance relationship is moderated by firm size in U-shaped fashion.*

Network structure attributes that are particularly relevant to EM are diversity (variety of ties), strength (ratio of strong ties), and size (number of ties). The more ties a firm has, the more resources it can access effortlessly (e.g. Baum et al., 2000). The expansion of an organization's network potentially increases its accessibility to more streams of information and knowledge (e.g. Xie et al., 2016). The larger the size of a firm's network, the higher is the likelihood that the firm will discover and link structural holes in its ecosystem and generate value (Burt, 2000).

Diverse networks enable access to different bundles of resources and knowledge (Rauch et al., 2016; Xie et al., 2016), reinforcing learning and enhancing value creation and proactiveness (Jiang et al., 2010). Organizations with more diverse networks also benefit from access to a heterogeneous mix of people and organizations, which serves to enhance their perceived legitimacy (Cooper, 2002). Such networks present high potential for innovation since diversity exposes firms to various opportunities, and boosts their ability to identify and extract value from structural holes (Capaldo, 2007).

Although having strong ties grants firms flows of crucial information and resources from partners and increased market legitimacy, retaining a superfluous ratio of strong ties might turn out to be disadvantageous (Hoang & Antoncic, 2003). Over-embeddedness occurs when firms become over-dependent on the practices and flows of information from within their networks. Their access to external opportunities, ideas, intelligence, and evolving market conditions might be negatively affected (Johannisson, 2017; Uzzi, 1996) whereas firms with relatively more weak ties may be able to identify more opportunities (Baum et al., 2000). Therefore,

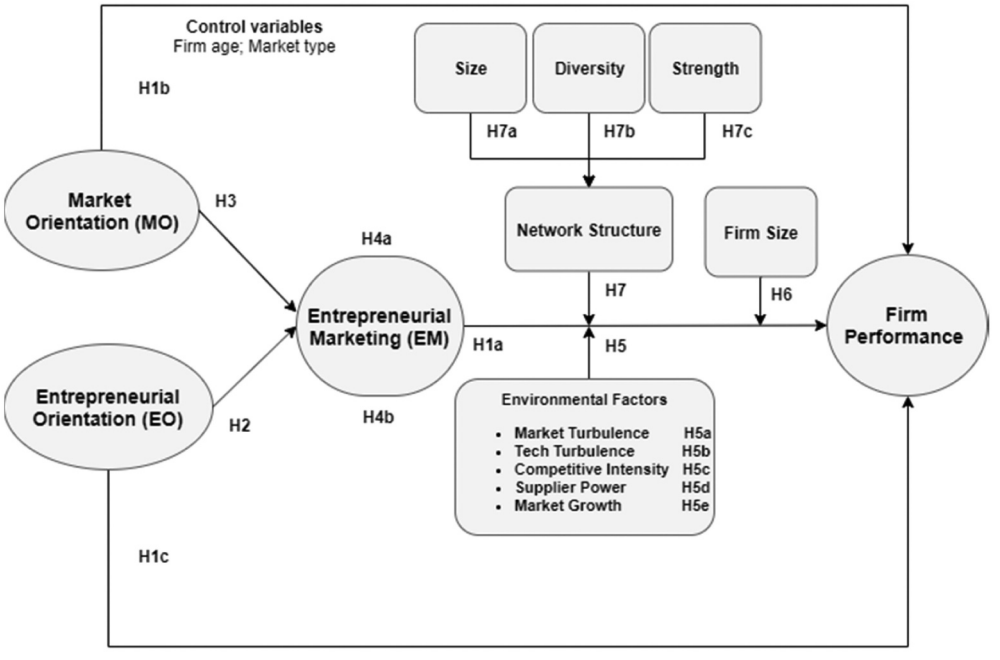


**Figure 1.** A model of entrepreneurial marketing and firm performance.

**$H_{7a,b,c}$:** *EM and firm performance relationship is moderated by network structure, in essence a) network size and b) network diversity have a positive moderating effect on the EM-performance relationship, whereas c) network strength has a negative moderating effect.*

The research hypotheses and the underlying conceptual model are illustrated in Figure 1.

## 4. Scale development, data, and methodology

### *4.1. Sampling frame*

To test the hypotheses articulated by this research, a survey of business units from a broad spectrum of US industries was undertaken. Following a theories-in-use approach (Zeithaml et al., 2020), a preliminary set of interviews was conducted with marketing executives and entrepreneurs representing private and public companies from fashion, biotechnology and pharmaceutical, advertising, and the consumer-packaged goods industries with annual revenues ranging from a few hundred thousand dollars to billions of dollars. These interviews have assisted the comprehension of the items. The appropriate participants for the survey were determined to be marketing executives (director or above). Since our study undertakes an examination of EM with respect to firm size, a stratified sampling method was used to collect data. Consequently, the sampling frame of this study included 2,034 marketing decision-makers from small, medium, and large-sized organizations from a wide spectrum of U.S. industries.

### 4.2. Measurement and instrument development

We specified the domain of each construct and reviewed the literature to locate any relevant scales that can be employed, adapted existing established scales, and created new ones when necessary (Churchill, 1979). The instrument was refined based on a pilot study and the feedback of a pool of researchers and practitioners as described next. Except for EM scale (i.e. ENMAR), the validity and reliability of the measures employed by the present study have been well established by prior research. These measures are listed and described in Table 1, and the survey items for the scales including EM are provided in Table 2. Entrepreneurial marketing (EM) scale is also provided in a dedicated table (i.e., Table A1) in the Appendix A.

#### 4.2.1. ENMAR scale development

Following Churchill (1979), we began the scale development process by specifying the construct domain for EM through a thorough review of the literature, while bearing in mind that the scale needed to be applicable to different types, sizes, and contexts of organizations. The dimensions established in prior literature were used as the conceptual basis (Alqahtani & Uslay, 2020). Accordingly, an initial pool of 99 survey items were developed. Then, seven active researchers in the field reviewed these items in order to verify the content and face validity of the scale. Accordingly, 29 items were deleted and 23 items were adjusted, and the measurement instrument was reviewed again for coherence. Based on the feedback solicited from four executives, another 21 items were revised, and 9 were dropped. After this rigorous review process, an initial scale that incorporates eight dimensions via 61 items was developed.

Next, a pilot study on a subset of the main sample (N = 49) was conducted. After obtaining the preliminary data, exploratory factor analyses (EFA) and reliability tests were conducted to further purify the scale (Thompson, 2004). Consequently, a more parsimonious 28-item EM scale was developed and used for full-scale data collection. Following data collection (N = 401), a final round of scale purification was conducted, using CFA modification indices (Churchill, 1979). Value co-creation was dropped due to cross-loading issues (suggesting value creation to be more of an abstract driving force for the remaining dimensions), and networking and inclusive attention were better-represented by a single factor (i.e. network attention). Consequently, the best model fit was offered by the final ENMAR scale introduced in this study, pertaining to six dimensions (innovative marketing, proactive marketing, acceptable risks, opportunity focus, network attention, and resource leveraging), represented by 20 items as shown in table A1 (also see Table 2).

#### 4.2.2. Data collection

An electronic message that detailed the purpose of the study and assured anonymity of data collection, and a link to the web-survey was sent to the identified informants in the sampled firms. Two weeks later, a follow-up email was sent to remind the recipients. By the end of the data collection process, 415 complete responses were received making the effective response rate 20.4%.

To ensure that informants possessed the relevant knowledge and expertise, we asked the informants to self-assess their confidence level in answering the questions on a 7-point scale (Kumar et al., 1993). Consequently, 14 respondents who rated themselves

**Table 1.** Study measures, scales, and data sources.

| Label | Variable | Measure | Scale | Source/Literature |
|---|---|---|---|---|
| Independent Variables | Entrepreneurial Marketing (EM) | 20-items 6 dimensions | 7-point Likert | Developed by the present study |
| | Market Orientation (MO) | 15-items 3 dimensions | 7-point Likert | Adapted from Narver and Slater (1990) |
| | Entrepreneurial Orientation (EO) | 9-items 3 dimensions | Paired statements (1–7) | Adapted from Covin and Slevin (1989) |
| Dependent Variable (Firm Performance) | Firm Performance (i.e. Overall) | 2-items | (1 = poor 7 = excellent) | Adapted from Jaworski and Kohli (1993) |
| | Firm Performance (i.e. Market effectiveness) | 2-items | (1=much worse than competitors 7=much better than competitors) | Adapted from Morgan et al. (2009) |
| | Firm Performance (i.e. Profitability) | 2-items | | |
| Moderators and Environmental Variables | Network Structure (i.e. Size) | Single-item | 7-point Likert | Developed by the present study analogous to Ma et al. (2011) |
| | Network Structure (i.e. Strength) | Single-item | | |
| | Network Structure (i.e. Diversity) | Single-item | | |
| | Competitive intensity | 4-items | 7-point Likert | Adapted from Homburg et al. (2012) and Kohli and Jaworski (1993) |
| | Market turbulence | Single-item | (1 = low 7 = high) | Adapted from Baker and Sinkula (1999) and Narver and Slater (1990) |
| | Market growth | Single-item | | |
| | Technological turbulence | Single-item | | |
| | Supplier power | Single-item | | |
| | Firm size (Primary) | Single-item | Number of employees: Small 1-49 medium 50-499 large ≥500 | N/A |
| | Firm size (Secondary) | Single-item | Annual sales | N/A |
| | Firm size (Secondary) | Single-item | Market share | N/A |
| Control Variables | Firm Age | Single-item | Number of years | N/A |
| | Market type | Single-item | B2B *vs*. B2C | N/A |

**Table 2.** Results of the second-order CFA.

| Indicator | Factor Item | Std. Loading | *t* value | Composite reliability |
|---|---|---|---|---|
| **Performance** | **Firm Performance** | | | .92 |
| PERF1 | Market share growth.[1] | .82 | 19.47 | |
| PERF2 | Growth in sales revenue. | .86 | 20.82 | |
| PERF3 | Business unit profitability. | .79 | 18.30 | |
| PERF4 | Attainment for your financial goals. | .82 | 19.38 | |
| PERF5 | The overall performance of your business unit last year.[2] | .82 | - | |
| PERF6 | Your overall performance relative to your major competitors last year. | .76 | 17.22 | |
| **MO** | **Market Orientation (MO)** | | | |
| CO | Customer orientation | | | .90 |
| MOCO1 | We constantly monitor our level of commitment and orientation to serving customers' needs. | .79 | - | |
| MOCO2 | Our business objectives are driven primarily by customer satisfaction. | .79 | 17.30 | |
| MOCO3 | Our strategy for competitive advantage is based on our understanding of customer needs. | .78 | 16.84 | |
| MOCO4 | Our business strategies are driven by our beliefs about how we can create greater value for customers. | .77 | 16.66 | |
| MOCO5 | We measure customer satisfaction systematically and frequently. | .80 | 17.38 | |
| MOCO6 | We give close attention to after-sales service. | .70 | 14.80 | |
| COM | Competitor orientation | | | .83 |
| MOCOM1 | We rapidly respond to competitive actions that threaten us. | .74 | 13.32 | |
| MOCOM2 | Our salespeople regularly share information within our organization concerning competitors' strategies. | .77 | 13.68 | |
| MOCOM3 | Our top management regularly discusses competitors' strengths and strategies. | .79 | 14.00 | |
| MOCOM4 | We target customers where we have an opportunity for competitive advantage. | .68 | - | |
| IFC | Inter-functional coordination | | | .83 |
| MOIFC1 | All of our business functions (e.g., marketing/sales, manufacturing, research and development [R&D], etc.) are integrated in serving the needs of our target markets. | .75 | 13.68 | |
| MOIFC2 | We share resources with other business units in our firm. | .66 | 12.12 | |
| MOIFC3 | Our top managers from every function regularly visit our current and prospective customers. | .70 | 12.85 | |
| MOIFC4 | We freely communicate information about our successful and unsuccessful customer experiences across all business functions. | .68 | - | |
| MOIFC5 | Our managers understand how everyone in our business can contribute to creating customer value. | .72 | 13.24 | |
| **EO** | **Entrepreneurial Orientation (EO)**[3] | | | |
| IN | Innovativeness | | | .62 |
| EOIN1 | At my business unit, there is - a strong emphasis on: The marketing of true and tried products or services. *Vs*. R&D, technological leadership and innovations. | .41 | 6.77 | |
| EOIN2 | In the past five years we marketed: No new products or services. *Vs*. So many new products or services. | .74 | 10.34 | |
| EOIN3 | The nature of changes made on your products/services during the past five years: Mostly of a minor nature. *Vs*. Have usually been quite dramatic. | .63 | - | |
| PR | Proactiveness | | | .66 |
| EOPR1 | In dealing with its competitors, we typically: Respond to actions that competitors' initiate. *Vs*. Initiate actions that competitors then respond to. | .56 | 8.92 | |
| EOPR2 | In dealing with its competitors, my business unit is: Very seldom the first business to introduce new products/services, administrative techniques, operating technologies, etc. *Vs*. Very often the first business to introduce new products/services, administrative techniques, operating technologies, etc. | .69 | 10.38 | |

(*Continued*)

**Table 2.** (Continued).

| Indicator | Factor Item | Std. Loading | *t* value | Composite reliability |
|---|---|---|---|---|
| EOPR3 | In dealing with its competitors, we typically: Seek to avoid competitive clashes, preferring a "live-and-let-live" posture. *Vs*. Adopt a very competitive, "undo the competitors" posture. | .61 | - | |
| RT | Risk taking | | | .69 |
| EORT1 | My business unit has: A strong proclivity for low-risk projects (with normal and certain rates of return). *Vs*. A strong proclivity for high-risk projects (with chances of very high returns). | .65 | - | |
| EORT2 | My business unit believes that owing to the nature of the environment: It is best to explore it gradually via timid, incremental behavior. *Vs*. Bold, wide-ranging acts are necessary to achieve the firm's objectives. | .61 | 9.60 | |
| EORT3 | When confronted with decision-making situations involving uncertainty, my business unit typically adopts: A cautious, "wait and see" posture in order to minimize the probability of making costly decisions. *Vs*. bold, aggressive posture in order to maximize the probability of exploiting potential opportunities. | .70 | 10.51 | |
| | **Entrepreneurial Marketing (EM)** | | | |
| IM | Innovative marketing | | | .84 |
| EMIM1 | We are known for our innovative marketing programs. | .78 | 15.72 | |
| EMIM2 | Our marketing communications (e.g., ads) are very innovative. | .84 | 16.84 | |
| EMIM3 | Our pricing strategies are very innovative. | .77 | - | |
| PM | Proactive marketing | | | .81 |
| EMPM1 | We are very good at identifying latent customers' needs. | .81 | 16.51 | |
| EMPM2 | We are very good at anticipating our customers' future needs. | .78 | - | |
| EMPM3 | We are more flexible than our competitors in dealing with market uncertainty. | .72 | 14.45 | |
| OF | Opportunity focus | | | .88 |
| EMOF1 | We are so engaged in our market that we can identify new opportunities as they arise. | .82 | 19.35 | |
| EMOF2 | We are recognized as an opportunity-driven organization. | .81 | 19.28 | |
| EMOF3 | We are known for our agility (i.e., flexibility) in adjusting our market offerings to exploit emerging opportunities. | .78 | 18.05 | |
| EMOF4 | We are very good at taking advantage of new opportunities. | .83 | - | |
| RL | Resource leveraging | | | .81 |
| EMRL1 | We collaborate with our partners to maximize the productivity of our collective resources. | .72 | 14.83 | |
| EMRL2 | We are very good at securing the resources we need. | .81 | 16.97 | |
| EMRL3 | We are very good at utilizing our partners' resources. | .78 | - | |
| NA | Network attention | | | .84 |
| EMNA1 | Our competitive advantage is built upon an understanding of our partners' needs. | .74 | 15.63 | |
| EMNA2 | When developing our marketing programs, we seek insights from all stakeholders, including our customers. | .75 | 15.88 | |
| EMNA3 | We are better at making great partnerships with other stakeholders in our environment than our competitors are. | .76 | 16.15 | |
| EMNA4 | We get timely assistance from our network partners when necessary. | .79 | - | |
| AR | Acceptable risk | | | .72 |
| EMAR1 | We always try to balance the potential losses of risky investments with their expected returns. | .66 | - | |
| EMAR2 | We regularly invest resources that we can afford to lose to stay ahead of our competition. | .72 | 11.99 | |
| EMAR3 | When developing our products and/or services, we only invest resources (e.g., capital and labor) that we can afford to lose. | .65 | 10.94 | |
| | **Second order factors** | | | |
| | Second-order EO | | | .93 |
| | Risk-taking | .86 | 8.46 | |
| | Innovativeness | .88 | - | |

(*Continued*)

**Table 2.** (Continued).

| Indicator | Factor Item | | Std. Loading | *t* value | Composite reliability |
|---|---|---|---|---|---|
| | Proactiveness | | .97 | 8.56 | |
| | Second-order MO | | | | .95 |
| | Customer orientation | | .88 | - | |
| | Competitor orientation | | .94 | 12.52 | |
| | Inter-functional coordination | | .98 | 13.01 | |
| | Second-order EM | | | | .97 |
| | Proactive marketing | | .91 | 13.10 | |
| | Resource leveraging | | .93 | 13.43 | |
| | Acceptable risk | | .89 | 11.17 | |
| | Network attention | | .94 | 13.71 | |
| | Opportunity focus | | .94 | 14.36 | |
| | Innovative marketing | | .86 | - | |
| | **Model fit statistics** | | | | |
| | Chi-square (χ2) statistic of the model | 2453.821 | | | |
| | Degrees of freedom (df) | (1249) | | | |
| | χ2/DF | 1.965 | | | |
| | Comparative fit index (CFI) | .903 | | | |
| | Root mean square error of approximation (RMSEA) | .049 | | | |
| | Standardized root mean square residual (SRMR) | .048 | | | |
| | P of Close Fit (PCLOSE) | .692 | | | |
| | Bentler– Bonett non-normed fit index (NNFI) | .897 | | | |

"-" indicates a fixed scaling parameter. Unless stated otherwise, all items are measured using a 7-point Likert scale, where 7= "strongly agree".

[a]First four items of performance scale are anchored on a seven-point scale (1 = much worse than competitors 7 = much better than competitors) and measured with respect to the last year.

[b]Last two items of performance scale are anchored on a seven-point scale (1 = poor 7 = excellent).

[c]EO items are measured using paired statements (1–7).

with less than 4" on the qualification scale were removed from the data set, and the resulting mean response was 6.17, indicating excellent respondent qualification. This brought our final data set to encompass 401 complete responses representing a diverse set of industries and firm sizes (see Table 3). The homogeneity of variance test shows that non-response does not compromise the validity of our conclusions (Armstrong & Overton, 1977; Wu et al., 2006). Moreover, we conducted multiple priori and post hoc methods (e.g. employing a marker variable) to assess the presence of common method bias, and results suggest that it does not pose concern (Hulland et al., 2018).

### *4.2.3. Validity and reliability*

To examine the discriminant and convergent validity of the constructs, a second-order confirmatory factor analysis (CFA) was conducted (Bentler, 1995). We employed structural equation modeling (SEM) and used the maximum likelihood method to fit our model, using AMOS 25.0 software. The results of the second-order CFA of our measurement model and other factors are presented in Table 2. Given the complexity of the second-order CFA, the fit indices indicate excellent model fit. The Chi-square per degree of freedom is 1.965, and fit indices are satisfactory (CFI = .903; NNFI =.897; RMSEA =.049; SRMR =.048). The P of Close Fit (PCLOSE) of the introduced model is .692, which provides further evidence that the model has excellent fit (e.g. Min et al., 2007).

**Table 3.** Sample breakdown by industry, annual revenue, and number of employees.

| Industry | Count | Percent | | | |
|---|---|---|---|---|---|
| Health/Social Care | 63 | 15.7% | Firm annual revenue | Count | Percent |
| Retail | 49 | 12.2% | Less than $1 million | 80 | 20.0% |
| Arts, Entertainment, and Recreation | 44 | 11.0% | $1 - $10 million | 74 | 18.5% |
| Information and Technology | 43 | 10.7% | $11 - $49 million | 36 | 9.0% |
| Finance and Insurance | 40 | 10.0% | $50 - $249 million | 45 | 11.2% |
| Wholesale | 29 | 7.2% | $250 - $499 million | 33 | 8.2% |
| Manufacturing | 26 | 6.5% | $500-$999 million | 52 | 13.0% |
| Other | 27 | 6.7% | More than $1 billion | 81 | 20.2% |
| Professional Services | 18 | 4.5% | Firm size by number of employees | Count | Percent |
| Real Estate and Rental and Leasing | 13 | 3.2% | | | |
| Education | 13 | 3.2% | | | |
| Consumer-packaged Goods | 9 | 2.2% | Small < 50 employees | 114 | 28.4% |
| Construction and Transportation | 9 | 2.2% | | | |
| Hospitality | 6 | 1.5% | Medium 50 - 499 employees | 146 | 36.4% |
| Non-Profit | 6 | 1.5% | | | |
| Agriculture and Mining | 4 | 1.0% | Large => 500 employees | 141 | 35.2% |
| Legal/Law | 2 | 0.5% | | | |

After checking that all factors have loaded onto their respective measures, we extracted the composite reliability. Except for the sub-dimensions of EO, the composite reliabilities of all constructs and their sub-dimensions (first and second-order factors) are higher than (.7), as shown in Table 2, indicating adequate reliability (Nunnally, 1994). Although the composite reliabilities of innovativeness, proactiveness, and risk-taking dimensions of EO are .62, .66, and .69, respectively, the composite reliability of their second-order construct of EO is .93. Therefore, we do not believe that reliability represents a problem for our EO construct, as it was adapted from previous literature, and its reliability and validity have been well-established by earlier studies (Nunnally & Bernstein, 1994).

Table 2 also shows that the items employed have factor loadings that are positive, high in magnitude, and statistically significant. Hence, we conclude that the constructs employed by the current model have strong convergent validity (Anderson, 1987). Similarly, all second-order loadings are positive, large in size, and statistically significant, indicating convergent validity. Following Bagozzi et al. (1991), discriminant validity was also investigated through a series of CFAs. We ran all possible pairs of the main variables employed by the current research (i.e. firm performance; second-order factors of EO, MO, and EM) twice: once with the construct correlations constrained to unity, and second with the correlations unconstrained. Next, a series of chi-square difference tests were performed on the nested models to assess the discriminant validity of the study variables. The chi-squares of the unconstrained models were significantly lower than the chi-squares of the constrained ones for all possible pairs ($\Delta\ \chi 2\ (1) > 3.84$). Therefore, we conclude that the constructs employed have discriminant validity.

EO, MO, and EM constructs are presumed to be multidimensional second-order constructs. We tested the validity of this assumption by generating alternative nested models and comparing the fit of the single-factor model to the multidimensional one. All multidimensional second-order models of EO, MO, and EM demonstrated better fits, as per the chi-squares and fit indices of the alternative models. Therefore, we conclude that EO, MO, and EM are multidimensional constructs (Hull et al., 1995; Wu et al., 2006). Further details of the analyses described in this section are available upon request.

## 5. Results

### 5.1. Main effects

A two-stage data analysis method was followed. After assessing the validity and reliability of our latent constructs, we developed a structural path model using the variance-covariance matrix of the second-order factors to test the hypotheses (see Figure 2). Separation of the measurement model from the structural model is a common practice and has many merits such as increasing the ability to identify model misspecification and reducing the risk of interpretational confounding (e.g. Anderson and Gerbing, 1988; Zou & Cavusgil, 2002). The correlations between the main variables of this study are extracted from the second-order CFA, and are presented along with their means and standard deviations in Table 4. Figure 2 shows the fit statistics of our path model, along with the standardized coefficients of the proposed relationships. Figure 3 shows a revised model of EM and firm performance, incorporating the results of the present study.

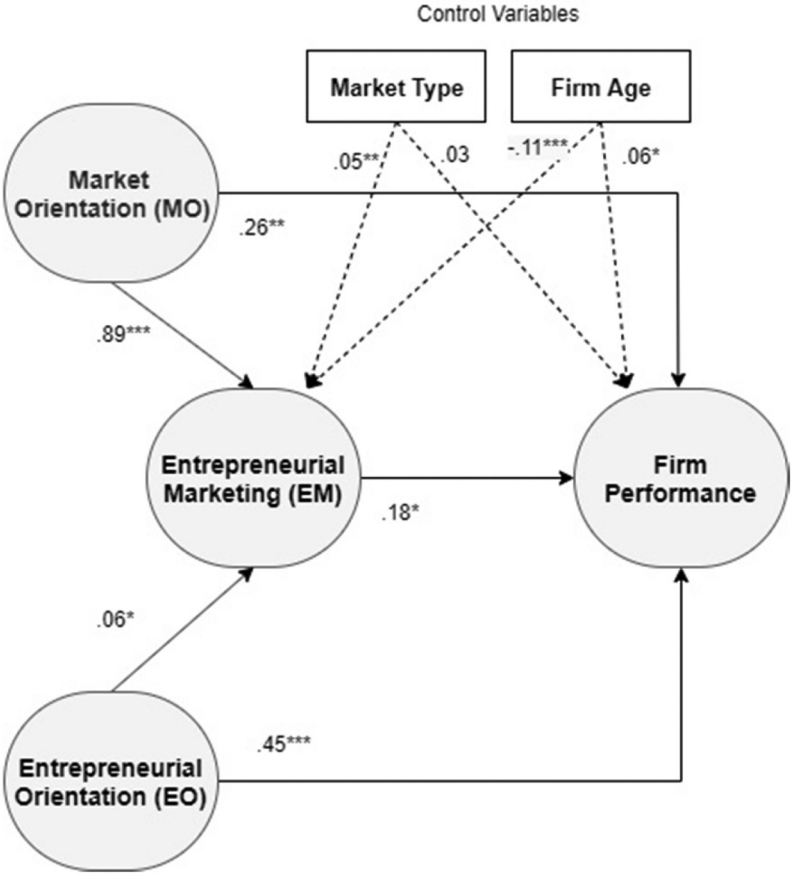


**Figure 2.** Fitted structural model of EM and firm performance[1]. Model fit statistics: $\chi 2 = 4.94$ (df = 4; p = .293); CFI = .999; NNFI = .998; SRMR = .038; RMSEA = .024; PCLOSE = .696 *p < .05; **p < .01; ***p < .001 [1]Based on the path model standardized estimates (Standardized parameters).

**Table 4.** Descriptive statistics.

| | Variable | Mean | Std. Deviation | Correlations | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | 1 | 2 | 3 | 4 | 5 | 6 |
| 1 | MO | 5.432 | 0.876 | 1.000 | | | | | |
| 2 | EO | 4.379 | 0.863 | 0.622 | 1.000 | | | | |
| 3 | EM | 5.473 | 0.937 | 0.894 | 0.618 | 1.000 | | | |
| 4 | Performance | 5.278 | 0.973 | 0.699 | 0.676 | 0.692 | 1.000 | | |
| 5 | Firm Age | 3.020 | 1.279 | -0.037 | -0.077 | -0.148 | -0.014 | 1.000 | |
| 6 | Market Type | 0.450 | 0.498 | 0.057 | 0.019 | 0.104 | 0.076 | -0.010 | 1.000 |

Correlations are extracted from the second-order CFA output, while mean values and standard deviations are based on the average factor scores.

While MO, EM and performance were measured using 7-point Likert scales, where 7= "strongly agree", EO was measured using paired statements (1–7).

Firm age was measured using a 5-point scale, where 1= "less than 5 years", 2= "5–10 years", 3= "11–20 years", 4= "21–30 years", and 5= "more than 30 years."

Market type was measured using a dichotomous variable, where 1= "Business-to-business market (B2B)" and 0= "Business-to-consumer market (B2C)".

The path model indicates an excellent model fit ($\chi 2 = 4.94$, ($df = 4$, $p = .293$), CFI=.999, NNFI=.998, SRMR .038, RMSEA =.024, and PCLOSE=.696). EM was found to have a positive and significant effect on organizational performance ($t = 2.06$, $p < .05$). Therefore, $H_{1a}$ is supported. The direct effects of MO on performance ($t = 2.93$, $p < .01$) and EO on performance ($t = 11.20$, $p < .001$) were also found to be positive and significant, supporting $H_{1b}$ and $H_{1c}$, respectively. Furthermore, our results show that both EO ($t = 2.51$, $p < .05$) and MO ($t = 38.81$, $p < .001$) have a positive and significant effect on EM. Thus, $H_2$ and $H_3$ are both supported.

To test the proposed mediation effect of EM to the relationships between MO, EO, and firm performance, two alternative models, one with EM and without it, were generated (Venkatraman, 1989). As the direct effects of MO and EO on EM and performance, and the direct effect of EM on performance were all positive and significant, we conclude that EO, MO, and firm performance relationships are partially mediated by EM. Thus, $H_{4a}$ and $H_{4b}$ are both supported.

While the effect of the market type (B2C *versus* B2B) control variable on firm performance was not significant, firm age has a positive and significant impact on firm performance ($t = 2.04$, $p < .05$). That is, older firms in our sample tend to have higher performance. Firm age has a negative effect ($t = >-6.55$, $p < .001$) and market type has positive effect ($t = 3.20$, $p < .001$) on EM. In other words, younger firms and those operating in B2B markets have a greater tendency to embrace EM.

### *5.2. Moderation effects*

Multigroup analyses were performed to investigate the moderation effects of the environmental factors, network structure, and firm size on the relationship between EM and firm performance. Moderation was examined by investigating the difference between the chi-square of the nested model as compared to a baseline model, where all paths were freely estimated (Jöreskog & Sörbom, 1989). For each of the following moderating variables $H_{5a}$, $H_{5b}$, $H_{5c}$, $H_{5d}$, $H_{5e}$, $H_{7a}$, $H_{7b}$, and $H_{7c}$, we identified the median, removed median scores, divided the sample into two sub-samples (i.e. high and low), tested the difference between the constrained and the unconstrained

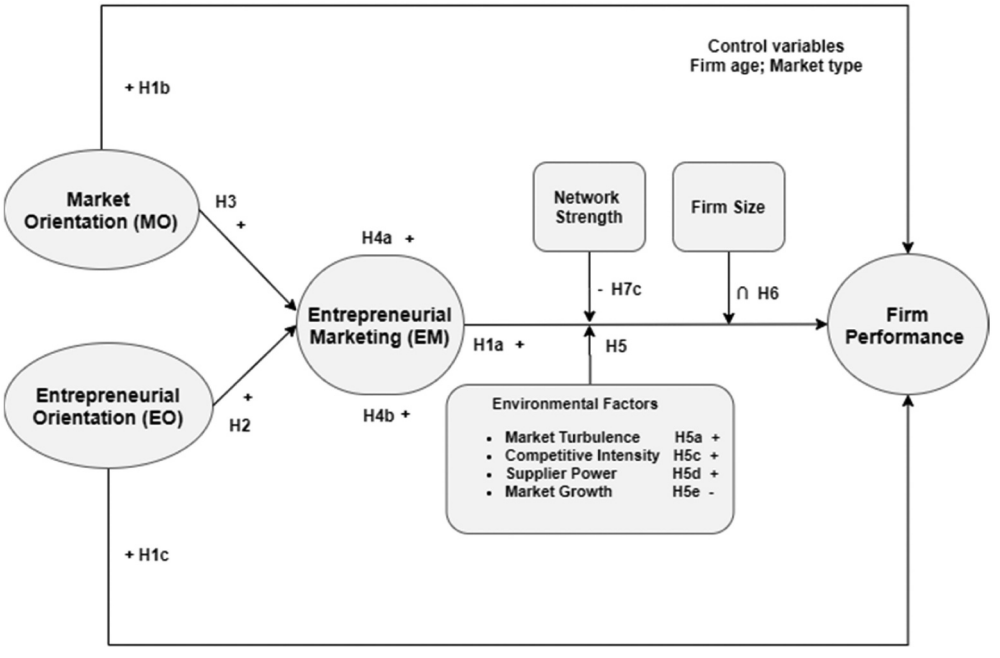


**Figure 3.** Entrepreneurial marketing (EM) and firm performance (Final model).

models, and investigated the path coefficient to draw our conclusions. Accordingly, while $H_{5a}$, $H_{5c}$, $H_{5d}$, $H_{5e}$, and $H_{7c}$ were supported, $H_{5b}$, $H_{7a}$, and $H_{7b}$ were not. Similar approach was used to test $H_6$, but instead of taking the median (because firm size was already predefined as three main categories small, medium, and large), we tested what size is significantly different than the other two sub-categories. We found that medium-sized firms are significantly different from small and large ones, and they perform better when employing EM, providing no support for $H_6$. Table 5 provides further details about the moderation analysis and shows the results of the chi-square difference tests.

## 6. Discussion and managerial implications

Although extant research has proposed that EM enhances performance (e.g. Whalen et al., 2016), this study is among the first to offer generalizable empirical support for that assertion and the first to distinguish it from other constructs in its immediate nomological network. Furthermore, the positive performance impact of EM is not diminished by technological turbulence and becomes even more pronounced under certain conditions. Notably, the performance benefits of EM are robust and extend to organizations of different industries, sizes, and purpose (e.g. nonprofit and socially entrepreneurial organizations). By embracing EM, firms can better locate, create, and take advantage of opportunities that best fit their capabilities, thereby attaining a competitive edge over their competition (Morrish et al., 2010). EM enables more inclusive attention, where entrepreneurial marketers can avoid marketing myopia

**Table 5.** Results of the multigroup path analyses.

| Moderator | Moderation effects on EM →performance path | | | | Hypotheses testing |
|---|---|---|---|---|---|
| Market turbulence (H5a) | High market turbulence | Low market turbulence | Δ χ2 | p-value | *Supported* |
| | .837*** | -.088 | 12.65 | <.001 | |
| Tech turbulence (H5b) | High tech turbulence | Low tech turbulence | Δ χ2 | p-value | *Not supported* |
| | .002 | .339* | 3.322 | .068 | |
| Competitive intensity (H5c) | High competitive intensity | Low competitive intensity | Δ χ2 | p-value | *Supported* |
| | .624*** | .096 | 11.87 | .001 | |
| Suppl Power (H5d) | High supplier Power | Low supplier Power | Δ χ2 | p-value | *Supported* |
| | .335* | -.258 | 8.158 | .004 | |
| Market growth (H5e) | High market growth | Low market growth | Δ χ2 | p-value | *Supported* |
| | -.063 | .360* | 4.352 | .037 | |
| Firm size (H6) | Medium-sized firms | Small and large firms | Δ χ2 | p-value | *Not supported* |
| | .709*** | .026 | 10.354 | .001 | |
| Network size (7a) | Large network size | Small network size | Δ χ2 | p-value | *Not supported* |
| | .326 | .117 | 0.891 | .345 | |
| Network diversity (7B) | High network diversity | Low network diversity | Δ χ2 | p-value | *Not supported* |
| | -.014 | .097 | 0.313 | .579 | |
| Network strength (7c) | High strength networks | Low strength networks | Δ χ2 | p-value | *Supported* |
| | -.218 | 0.525*** | 14.53 | <.001 | |

Standardized parameters estimates; *p < .05 ; **p < .01 ; ***p < .001.

resulting from an exclusive and excessive focus on customers (e.g. Christensen, 2013), and pay attention to partners in their networks (e.g. direct selling) and unlock their collective abilities to innovate and excel in their marketplace. We summarize the key managerial insights as follows:

(a) Firms adopting EM perform even better in markets with high market turbulence and competitive intensity. The qualities empowered by EM (e.g. innovative marketing, opportunity focus, and risk-taking) may help firms to stand out in environments where competition is severely high and margins are detrimentally thin.
(b) The positive effect of EM on performance becomes more salient as the bargaining power of the suppliers increases. Firms that operate in ecosystems with high supplier power incur higher costs, which can be mitigated by adopting EM strategies.
(c) Firms operating in low growth markets benefit from embracing EM the most. Operating in stagnant markets necessitates more differentiation (e.g. Whalen et al., 2016) and, consequently, creates more expedient need for firms to launch proactive and innovative marketing programs.
(d) EM works best for firms with relatively more weak ties. Weak ties provide marketers with further access to new ideas, knowledge, and external opportunities than would stronger and more rigid ones (Johannisson, 2000).
(e) The effect of MO on EM is magnitudes higher than the effect of EO on EM. Firms looking to enhance the prevalence of their EM practices to boost performance should focus on MO more so than EO.
(f) While EM boosts the performance of firms of all sizes, it is especially beneficial when adopted by firms of medium size. Contrary to our expectations, medium-sized organizations appear to benefit from EM the most, because they are stuck in the middle (Uslay et al., 2010). They are neither large enough (i.e. generalists) to exercise control over their markets nor small enough (i.e. specialists) to take ownership of a specific market/product niche. Therefore, they are in desperate need to adopt pioneering approaches (i.e. EM) to disrupt the status quo and better establish themselves in their served markets.

Our findings also suggest that younger and B2B firms are more likely to engage in EM behavior. This can be attributed to the fact that newer organizations are less attached to the standard practices and traditions of their markets and more inclined to try alternatives such as EM to establish themselves. This is also in-line with earlier findings about newer firms having higher adoption rates of EO (e.g. Rauch et al., 2009). Similarly, working with business customers requires firms to pay more attention to their networks.

In conclusion, EM is a viable option for firms to thrive under highly uncertain conditions and the current study introduces a parsimonious scale instrument to measure it. We urge managers to pay attention to EM, its six sub-dimensions, and antecedents to boost organizational performance. For instance, to reap the benefits of embracing EM, practitioners may need to consider employing more innovative pricing strategies such as freemium, pay-what-you-want, or subscription pricing, which are particularly popular among technology firms. For firms engaging in EM, guerrilla or surprise marketing, agile modeling and rapid prototyping may increasingly supplement and in some cases outright

replace traditional advertising or the traditional new product development process, respectively. Entrepreneurial marketers also tend to continuously look out for their customers' latent as well as future needs. While entrepreneurial marketers tend to shy away from relying on traditional marketing research (Read et al., 2009), the availability of big data, analytics-supported decision-making and continuous experimentation may help firms of all sizes to uncover these types of needs.

## 7. Limitations and future research

The current research advances a model of EM and business performance, the ENMAR scale for its measurement, an empirical investigation for its interrelationships with MO, EO, and firm performance, and a detailed examination of various environmental and institutional moderation variables. Nevertheless, future studies are warranted to reinforce this generalizability of the findings to different settings. For example, our sample was limited to the US; and cross-cultural studies that are inclusive of emerging economies (e.g. Hamdan et al., 2021; Harraf et al., 2020) are warranted to enhance the generalizability of the findings. Longitudinal examinations would also be worthwhile to further understand the causality and the direction of the proposed relationships (Noble et al., 2002).

Future studies should consider employing the proposed EM scale or a subset of it akin to the reduced MO scale used by Baker and Sinkula (2005). Furthermore, investigating EM relationships with other strategic orientations, such as learning orientation (LO) and innovation orientation (IO) may be beneficial. The ever-increasing marketplace uncertainty also renders studying the influence of other environmental variables such as market dynamism and consumer bargaining power (Peterson, 2020) or strategic factors such as coopetition (Crick et al., 2021), necessary to advance the field. Finally, the nature of the strategic linkage from EM to financial performance would be worth further exploration (Buccieri et al., 2021). It is out hope that the ENMAR scale will prove useful to other scholars in future research for the above and many other contexts.

## Disclosure statement

No potential conflict of interest was reported by the author(s).

## References

Alqahtani, N., & Uslay, C. (2020). Entrepreneurial marketing and firm performance: Synthesis and conceptual development. *Journal of Business Research*, *113*(May), 62–71. https://doi.org/10.1016/j.jbusres.2018.12.035

Anderson, J. C. (1987). An approach for confirmatory measurement and structural equation modeling of organizational properties. *Management Science*, *33*(4), 525–541. https://doi.org/10.1287/mnsc.33.4.525

Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological bulletin*, *103*(3), 411. https://doi.org/10.1037/0033-2909.103.3.411

Armstrong, J. S., & Overton, T. S. (1977). Estimating nonresponse bias in mail surveys. *Journal of Marketing Research*, *14*(3), 396–402. https://doi.org/10.1177/002224377701400320

Bachmann, J. T., Ohlies, I., & Flatten, T. (2021). Effects of entrepreneurial marketing on new ventures' exploitative and exploratory innovation: The moderating role of competitive intensity and firm size. *Industrial Marketing Management*, *92*, 87–100. https://doi.org/10.1016/j.indmarman.2020.10.002

Bagozzi, R. P., Yi, Y., & Phillips, L. W. (1991). Assessing construct validity in organizational research. *Administrative Science Quarterly*, *36*(3), 421–458. https://doi.org/10.2307/2393203

Baker, W. E., & Sinkula, J. M. (1999). The synergistic effect of market orientation and learning orientation on organizational performance. *Journal of the Academy of Marketing Science*, *27*(4), 411–427. https://doi.org/10.1177/0092070399274002

Baker, W. E., & Sinkula, J. M. (2005). Market orientation and the new product paradox. *Journal of Product Innovation Management*, *22*(6), 483–502. https://doi.org/10.1111/j.1540-5885.2005.00145.x

Baum, J. A., Calabrese, T., & Silverman, B. S. (2000). Don't go it alone: Alliance network composition and startups' performance in Canadian biotechnology. *Strategic Management Journal*, *21*(3), 267–294. http://dx.doi.org/10.1002/(SICI)1097-0266(200003)21:3<267:AID-SMJ89>3.0.CO;2-8

Bentler, P. M. (1995). *EQS structural equations program manual* (Vol. 6). Multivariate software.

Bjerke, B., & Hultman, C. (2004). *Entrepreneurial marketing: The growth of small firms in the new economic era*. Edward Elgar Publishing.

Buccieri, D., Javalgi, R. R. G., & Gross, A. (2021). Innovation and differentiation of emerging market international new ventures the role of entrepreneurial marketing. *Journal of Strategic Marketing*, 1–29. https://doi.org/10.1080/0965254X.2021.1952293

Burt, R. S. (2000). The network structure of social capital. *Research in Organizational Behavior*, *22*, 345–423. https://doi.org/10.1016/S0191-3085(00)22009-1

Capaldo, A. (2007). Network structure and innovation: The leveraging of a dual network as a distinctive relational capability. *Strategic Management Journal*, *28*(6), 585–608. https://doi.org/10.1002/smj.621

Christensen, C. M. (2013). *The innovator's dilemma: When new technologies cause great firms to fail*. Harvard Business Review Press.

Churchill, G. A., Jr. (1979). A paradigm for developing better measures of marketing constructs. *Journal of Marketing Research*, *16*(1), 64–73. https://doi.org/10.1177/002224377901600110

Collinson, E., & Shaw, E. (2001). Entrepreneurial marketing-a historical perspective on development and practice. *Management Decision*, *39*(9), 761–766. https://doi.org/10.1108/EUM0000000006221

Cooper, A. C. (2002). Networks, alliances and entrepreneurship. In M. A. Hitt, R. D. Ireland, S. M. Camp, & D. L. Sexton (Eds.), *Strategic entrepreneurship: Creating a new integrated mindset* (pp. 203–222). Oxford, UK: Blackwell Publishers.

Covin, J. G., & Slevin, D. P. (1989). Strategic management of small firms in hostile and benign environments. *Strategic Management Journal*, *10*(1), 75–87. https://doi.org/10.1002/smj.4250100107

Crick, J. M., Karami, M., & Crick, D. (2021). The impact of the interaction between an entrepreneurial marketing orientation and coopetition on business performance. *International Journal of Entrepreneurial Behavior & Research*, *27*(6), 1423–1447. https://doi.org/10.1108/IJEBR-12-2020-0871

Deku, W. A., Wang, J., & Das, N. (2022). Innovations in entrepreneurial marketing dimensions: Evidence of Halal food SMES in Ghana. *Journal of Islamic Marketing*. https://doi.org/10.1108/JIMA-03-2021-0098

Hamdan, A., Ghura, H., Alareeni, B., & Hamdan, R. K. (2021). Entrepreneurship growth in emerging economies: New insights and approaches. *Journal of Sustainable Finance & Investment*, *12*(1), 1–12. https://doi.org/10.1080/20430795.2021.1944750

Hamel, G., & Prahalad, C. K. (1996). *Competing for the future*. Harvard Business School Press.

Harraf, A., Ghura, H., Hamdan, A., & Li, X. (2020). "Formal institutions and the development of entrepreneurial activity–the contingent role of corruption in emerging economies. *Journal of Entrepreneurship and Public Policy*, *10*(1), 15–37. https://doi.org/10.1108/JEPP-06-2020-0033

Hills, G. E., & Hultman, C. M. (2011). Academic roots: The past and present of entrepreneurial marketing. *Journal of Small Business and Entrepreneurship*, *24*(1), 1–10. https://doi.org/10.1080/08276331.2011.10593521

Hills, G. E., Hultman, C. M., & Miles, M. P. (2008). The evolution and development of entrepreneurial marketing. *Journal of Small Business Management*, *46*(1), 99–112. https://doi.org/10.1111/j.1540-627X.2007.00234.x

Hoang, H., & Antoncic, B. (2003). Network-Based research in entrepreneurship: A critical review. *Journal of Business Venturing*, *18*(2), 165–187. https://doi.org/10.1016/S0883-9026(02)00081-2

Homburg, C., Artz, M., & Wieseke, J. (2012). Marketing performance measurement systems: Does comprehensiveness really improve performance? *Journal of Marketing*, *76*(3), 56–77. https://doi.org/10.1509/jm.09.0487

Hull, J. G., Tedlie, J. C., & Lehn, D. A. (1995). Modeling the relation of personality variables to symptom complaints: The unique role of negative affectivity. In R. H. Hoyle (Ed.), *Structural equation modeling: Concepts, issues, and applications* (pp. 217–235). Sage Publications, Inc.

Hulland, J., Baumgartner, H., & Smith, K. M. (2018). Marketing survey research best practices: Evidence and recommendations from a review of JAMS articles. *Journal of the Academy of Marketing Science*, *46*(1), 92–108. https://doi.org/10.1007/s11747-017-0532-y

Jaworski, B. J., & Kohli, A. K. (1993). Market orientation: Antecedents and consequences. *Journal of Marketing*, *57*(3), 53–70. https://doi.org/10.1177/002224299305700304

Jiang, R. J., Tao, Q. T., & Santoro, M. D. (2010). Alliance portfolio diversity and firm performance. *Strategic Management Journal*, *31*(10), 1136–1144. https://doi.org/10.1002/smj.869

Johannisson, B. (2017). Networking and entrepreneurial growth. In D. L. Sexton & H. Landström (Eds.), *The Blackwell handbook of entrepreneurship* (pp. 368–386). Blackwell.

Jones, R., Suoranta, M., & Rowley, J. (2013). Entrepreneurial marketing: A comparative study. *The Service Industries Journal*, *33*(7–8), 705–719. https://doi.org/10.1080/02642069.2013.740470

Jöreskog, K. G., & Sörbom, D. (1989). *LISREL 7: A guide to the program and applications*. SPSS.

Kilenthong, P., Hultman, C. M., & Hills, G. E. (2016). Entrepreneurial marketing behaviours: Impact of firm age, firm size and firm's founder. *Journal of Research in Marketing and Entrepreneurship*, *18*(1), 127–145. https://doi.org/10.1108/JRME-05-2015-0029

Kirca, A. H., Jayachandran, S., & Bearden, W. O. (2005). Market orientation: A meta-analytic review and assessment of its antecedents and impact on performance. *Journal of Marketing*, *69*(2), 24–41. https://doi.org/10.1509/jmkg.69.2.24.60761

Kohli, A. K., & Jaworski, B. J. (1990). Market orientation: The construct, research propositions, and managerial implications. *Journal of Marketing*, *54*(2), 1–18. https://doi.org/10.1177/002224299005400201

Kumar, N., Stern, L. W., & Anderson, J. C. (1993). Conducting interorganizational research using key informants. *Academy of Management Journal*, *36*(6), 1633–1651. https://doi.org/10.5465/256824

Lawrence, P. R., & Lorsch, J. W. (1967). Differentiation and integration in complex organizations. *Administrative Science Quarterly*, *12*(1), 1–47. https://doi.org/10.2307/2391211

Lopes, J. M., Laurett, R., Antunes, H., & Oliveira, J. (2021). Entrepreneurial marketing: A bibliometric analysis of the second decade of the 21st century and future agenda. *Journal of Research in Marketing & Entrepreneurship*, *23*(2), 295–317. https://doi.org/10.1108/JRME-02-2019-0019

Ma, R., Huang, Y. C., & Shenkar, O. (2011). Social networks and opportunity recognition: A cultural comparison between Taiwan and the United States. *Strategic Management Journal*, *32*(11), 1183–1205. https://doi.org/10.1002/smj.933

Matsuno, K., Mentzer, J. T., & Özsomer, A. (2002). The effects of entrepreneurial proclivity and market orientation on business performance. *Journal of Marketing*, *66*(3), 18–32. https://doi.org/10.1509/jmkg.66.3.18.18507

Miles, M., Gilmore, A., Harrigan, P., Lewis, G., & Sethna, Z. (2015). Exploring entrepreneurial marketing. *Journal of Strategic Marketing*, *23*(2), 94–111. https://doi.org/10.1080/0965254X.2014.914069

Min, S., Mentzer, J. T., & Ladd, R. T. (2007). A market orientation in supply chain management. *Journal of the Academy of Marketing Science*, *35*(4), 507. https://doi.org/10.1007/s11747-007-0020-x

Morgan, N. A., Vorhies, D. W., & Mason, C. H. (2009). Market orientation, marketing capabilities, and firm performance. *Strategic Management Journal*, *30*(8), 909–920. https://doi.org/10.1002/smj.764

Morris, M. H., Schindehutte, M., & LaForge, R. W. (2002). Entrepreneurial marketing: A construct for integrating emerging entrepreneurship and marketing perspectives. *Journal of Marketing Theory and Practice*, *10*(4), 1–19. https://doi.org/10.1080/10696679.2002.11501922

Morrish, S. C., Miles, M. P., & Deacon, J. H. (2010). Entrepreneurial marketing: Acknowledging the entrepreneur and customer-centric interrelationship. *Journal of Strategic Marketing*, *18*(4), 303–316. https://doi.org/10.1080/09652541003768087

Narver, J. C., & Slater, S. F. (1990). The effect of a market orientation on business profitability. *Journal of Marketing*, *54*(4), 20–35. https://doi.org/10.1177/002224299005400403

Narver, J. C., Slater, S. F., & MacLachlan, D. L. (2004). Responsive and proactive market orientation and new-product success. *Journal of Product Innovation Management*, *21*(5), 334–347. https://doi.org/10.1111/j.0737-6782.2004.00086.x

Noble, C. H., Sinha, R. K., & Kumar, A. (2002). Market orientation and alternative strategic orientations: A longitudinal assessment of performance implications. *Journal of Marketing*, *66*(4), 25–39. https://doi.org/10.1509/jmkg.66.4.25.18513

Nunnally, J. C. (1994). *Psychometric theory* (2nd ed.). McGraw-Hill.

Nunnally, J. C., & Bernstein, I. H. (1994). The assessment of reliability. *Psychometric Theory*, *3*(1), 248–292.

O'Cass, A., & Ngo, L. V. (2011). Winning through innovation and marketing: Lessons from Australia and Vietnam. *Industrial Marketing Management*, *40*(8), 1319–1329. https://doi.org/10.1016/j.indmarman.2011.10.004

Peterson, M. (2020). Modeling country entrepreneurial activity to inform entrepreneurial-marketing research. *Journal of Business Research*, *113*, 105–116. https://doi.org/10.1016/j.jbusres.2018.11.042

Rauch, A., Rosenbusch, N., Unger, J., & Frese, M. (2016). The effectiveness of cohesive and diversified networks: A meta-analysis. *Journal of Business Research*, *69*(2), 554–568. https://doi.org/10.1016/j.jbusres.2015.05.011

Rauch, A., Wiklund, J., Lumpkin, G. T., & Frese, M. (2009). Entrepreneurial orientation and business performance: An assessment of past research and suggestions for the future. *Entrepreneurship Theory and Practice*, *33*(3), 761–787. https://doi.org/10.1111/j.1540-6520.2009.00308.x

Read, S., Dew, N., Sarasvathy, S. D., Song, M., & Wiltbank, R. (2009). Marketing under uncertainty: The logic of an effectual approach. *Journal of Marketing*, *73*(3), 1–18. https://doi.org/10.1509/jmkg.73.3.001

Sarasvathy, S. D. (2001). Causation and effectuation: Toward a theoretical shift from economic inevitability to entrepreneurial contingency. *Academy of Management Review*, *26*(2), 243–263. https://doi.org/10.5465/amr.2001.4378020

Sethna Z., R. Jones, & P. Harrigan (Eds.). (2013). *Entrepreneurial marketing: Global perspectives* (1st ed.). Emerald.

Sheth, J. N., & Sisodia, R. S. (2006). *Does marketing need reform?: Fresh perspectives on the future*. ME Sharpe.

Slater, S. F., & Narver, J. C. (1994). Does competitive environment moderate the market orientation-performance relationship? *Journal of Marketing*, *58*(1), 46–55. https://doi.org/10.1177/002224299405800104

Thompson, B. (2004). *Exploratory and confirmatory factor analysis: Understanding concepts and applications*, (1st ed). American Psychological Association.

Tukamuhabwa, B., Mutebi, H., & Kyomuhendo, R. (2021). Competitive advantage in SMEs: Effect of supply chain management practices, logistics capabilities and logistics integration in a developing country. *Journal of Business and Socio-Economic Development*. https://doi.org/10.1108/JBSED-04-2021-0051

Uslay, C., Altintig, Z. A., & Winsor, R. D. (2010). An empirical examination of the "rule of three": Strategy implications for top management, marketers, and investors. *Journal of Marketing*, *74*(2), 20–39. https://doi.org/10.1509/jm.74.2.20

Uzzi, B. (1996). The sources and consequences of embeddedness for the economic performance of organizations: The network effect. *American Sociological Review*, *61*(4), 674–698. https://doi.org/10.2307/2096399

Vargo, S. L., & Lusch, R. F. (2004). Evolving to a new dominant logic for marketing. *Journal of Marketing*, *68*(1), 1–17. https://doi.org/10.1509/jmkg.68.1.1.24036

Venkatraman, N. (1989). The concept of fit in strategy research: Toward verbal and statistical correspondence. *Academy of Management Review*, *14*(3), 423–444. https://doi.org/10.2307/258177

Whalen, P., Uslay, C., Pascal, V. J., Omura, G., McAuley, A., Kasouf, C. J., Jones, R., Hultman, C. M., Hills, G. E., Hansen, D., Gilmore, A., Giglierano, J., Eggers, F., & Deacon, J. (2016). Anatomy of competitive advantage: Towards a contingency theory of entrepreneurial marketing. *Journal of Strategic Marketing*, *24*(1), 5–19. https://doi.org/10.1080/0965254X.2015.1035036

Wu, F., Yeniyurt, S., Kim, D., & Cavusgil, S. T. (2006). The impact of information technology on supply chain capabilities and firm performance: A resource-based view. *Industrial Marketing Management*, *35*(4), 493–504. https://doi.org/10.1016/j.indmarman.2005.05.003

Xie, X., Fang, L., & Zeng, S. (2016). Collaborative innovation network and knowledge transfer performance: A fsQCA approach. *Journal of Business Research*, *69*(11), 5210–5215. https://doi.org/10.1016/j.jbusres.2016.04.114

Zeithaml, V. A., Jaworski, B. J., Kohli, A. K., Tuli, K. R., Ulaga, W., & Zaltman, G. (2020). A theories-in-use approach to building marketing theory. *Journal of Marketing*, *84*(1), 32–51. https://doi.org/10.1177/0022242919888477

Zou, S., & Cavusgil, S. T. (2002). The GMS: A broad conceptualization of global marketing strategy and its effect on firm performance. *Journal of Marketing*, *66*(4), 40–56. https://doi.org/10.1509/jmkg.66.4.40.18519

## Appendix A

**Table A1.** Final Entrepreneurial Marketing (EM) Scale[1]

| Dmension | Entrepreneurial Marketing (EM) Scale[2] |
|---|---|
| **Innovative marketing** | We are known for our innovative marketing programs. |
| | Our marketing communications (e.g., ads) are very innovative. |
| | Our pricing strategies are very innovative. |
| **Proactive marketing** | We are very good at identifying latent customers' needs. |
| | We are very good at anticipating our customers' future needs. |
| | We are more flexible than our competitors in dealing with market uncertainty. |
| **Opportunity focus** | We are so engaged in our market that we can identify new opportunities as they arise. |
| | We are recognized as an opportunity-driven organization. |
| | We are known for our agility (i.e., flexibility) in adjusting our market offerings to exploit emerging opportunities. |
| | We are very good at taking advantage of new opportunities. |
| **Resource leveraging** | We collaborate with our partners to maximize the productivity of our collective resources. |
| | We are very good at securing the resources we need. |
| | We are very good at utilizing our partners' resources. |
| **Network attention** | Our competitive advantage is built upon an understanding of our partners' needs. |
| | When developing our marketing programs, we seek insights from all stakeholders, including our customers. |
| | We are better at making great partnerships with other stakeholders in our environment than our competitors are. |
| | We get timely assistance from our network partners when necessary. |
| **Acceptable risk** | We always try to balance the potential losses of risky investments with their expected returns. |
| | We regularly invest resources that we can afford to lose to stay ahead of our competition. |
| | When developing our products and/or services, we only invest resources (e.g., capital and labor) that we can afford to lose. |

[1]Respondents were provided with a list of definitions for all terminologies/acronyms that may cause any confusion (e.g., value co-creation).
[2]All items are anchored to a seven-point Likert scale with 1 = "strongly disagree" and 7 = "strongly agree".